

Open Space Advisory Board

Agenda

Wednesday, December 14th, 2016

Louisville Public Library

1st Floor Meeting Room

951 Spruce Street

7:00pm

- I. 7:00 pm Call to Order
 - II. Roll Call
 - III. Approval of Agenda
 - IV. Approval of Minutes
 - V. Staff Updates
 - VI. 7:15 pm Board Updates
 - a. The Dog User Group Tiger Team
 - b. Farewell to Christopher Smith Proclamation
 - VII. 7:25 pm Public Comments on Items Not on the Agenda (more time as needed)
 - VIII. 7:30 pm Discussion Item: CSU Proposal for Herbicide Application Plots and Monitoring on Davidson Mesa and Aquarius Open Space Properties:
Extending the Duration of Annual and Biennial Weed Control on City of Louisville Open Space Properties with Esplanade Tank Mixes
Presented by: Dr. Scott Nissen, CSU Professor in the Department of Bioagricultural Sciences & Pest Management and Extension Specialist; Derek Sebastian, CSU Ph.D. Candidate; and Shannon Clark, CSU Ph.D. Candidate (20 minutes)
 - IX. 7:50 pm Discussion Item: Candidate Open Space Property Ranking Scores (10 minutes)
 - X. 8:00 pm Discussion Item: Review & Make Final Recommendations on the Design and Text for the Lake Park Open Space Interpretive Sign (20 minutes)
Presented by: Michelle Wolf, ECOS Communications
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City of Louisville

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- XI. 8:20 pm Discussion Item: Planning Department's Wayfinding Project (20 minutes)

Presented by: Lauren Trice, Planning Department

- XII. 8:40 pm Discussion Item: OSAB Recommendations Regarding Staff Comments on the Clementine Subdivision Preliminary PUD and Plat. (20 minutes)

Presented by: Allan Gill, Parks & Recreation Project Manager and Rob Zuccaro, Planning and Building Safety Director

- XIII. 9:00 pm Discussion Items for Next Meeting on January 11th

a. 2016 Accomplishment & 2017 Goals

- XIV. Adjourn

Open Space Advisory Board Meeting Minutes
Wednesday, November 9th, 2016, 7:00 pm
Louisville Public Library: First Floor Meeting Room
951 Spruce Street

- I. **Call to Order-** Mike, the acting chair, called the meeting to order at 7:03 pm.
- II. **Roll Call-**
Board Members Present: Laura Scott Denton, Linda Smith, Missy Davis, Mike Schantz, Christopher Smith
Board Members Absent: Helen Moshak, Spencer Guthrie, Graeme Patterson
City Council Members Present: none
Staff Members Present: Ember Brignull
- III. **Approval of Agenda-**
Laura moved to approve the agenda as written. Linda seconded. The motion was passed unanimously.
- IV. **Approval of Previous Meeting's Minutes-**
Christopher moved to approve the minutes as written. Missy seconded. The motion was passed, with Mike abstaining.
- V. **Staff Updates-**
 - A. Staff is working on edits to the City's trail map since a new order of maps is needed.
 - B. Staff is helping to revise the maps and brochure for the Rock Creek and Coal Creek regional trails. One result of this process will be a new map at the Aquarius Trailhead kiosk.
 - C. Staff has scheduled a meeting with a team from Colorado State University who are doing field research on cheatgrass management. Ember is hoping to get their support with weed control and monitoring at Davidson Mesa and Aquarius Open Space.
 - D. This year Open Space will advertise its volunteer program in the Rec Center catalog.
 - E. The Open Space Ranger will present to the City Council study session on Nov. 29th.
 - F. Staff is working with a contractor to establish addresses for all entrance points to Open Space, Parks and Golf properties. This will help the Police Department, Ranger and Dispatch in communication efforts.
 - G. The prairie dog contract work is coming to an end. A Russian olive work is being handled in house.
 - H. Staff is beginning a contract to create an educational sign at Lake Park.
 - I. There are two upcoming running events that have received permits to race at Harper Lake. They are "Turkey Trot" and "Run the New Year."
- VI. **Board Updates-**

A. Laura attended the PPLAB (new Parks Board) meeting on October 10, 2016. She reported on her notes from the meeting. Laura reported that PPLAB members are working on a grading sheet for the City's Parks. Missy commented they may want to see other entities' versions of the same exercise and she could forward this information to Ember to pass along to them. Laura shared that PPLAB was skeptical of converting Walnut Park Open Space, currently zoned as a Park, to Open Space, being concerned that such a designation was very difficult to reverse. They did want it to be continued to be managed as an Open Space, as it is now. The summation was: "if it ain't broke, don't fix it." They reiterated their feeling that the public, particularly the immediate neighbors, should be engaged if a land use designation change is ever formally proposed. They nominated PPLAB member Mike Frontczak to work on a Dog Issues Tiger Team with OSAB member Mike Schantz. Laura promised to get them in touch. Finally, Laura reported that PPLAB decided to have OSAB's agenda at each of their monthly meetings so they could decide each month whether to send a PPLAB member as a liaison to the OSAB meeting.

B. Linda (and Helen) attended the Mayhoffer Property public meeting at the Rec Center last week and she reported on her impressions. She estimated that there were at least 200 members of the public there. The developer for the proposed "Kerr Estates" at the property was presenting. Linda summarized that many attendees seemed irate that this was the first time they had heard about the negotiations over the fate of the land, and they felt "ambushed" by this "done deal." The developer wants to subdivide the land into 5 estates and leave a sliver for fracking. Ember passed out a memo from the Boulder County Commissioners and a fact sheet from the City of Louisville that each summarized the entities' positions.

Mike pointed out that this land has been consistently identified as the number one acquisition target by OSAB for well over a decade and the City Council knows how OSAB feels about this parcel. David Belin (Lafayette Open Space Advisory Committee) reported this land has been ranked as Lafayette's second highest acquisition priority a similarly long time and their body met and reiterated that sentiment just last week as a result of the Kerr Estates announcement.

Chris felt that this development proposal is probably a "fake threat." He thought that without water and sewer from the City, this development can't work as proposed. Chris suggested the County should not be manipulated into over-paying for the land, since this proposal is probably flawed. Missy read the County Commissioner's communication and felt like it helped her understand the facts. She asked Linda about the general sentiment in the public meeting. Linda's impression was that the public really, really wants the land to become Open Space. Ember reported that the City Manager also attended the meeting and conveyed to the public that the City (and partners) had made a good, fair offer for the land that had been rejected, and that they didn't want to over-pay for the land as it sets a bad precedent for future landowners to potentially exploit the County/Cities. Mike cautioned that it is hard for the Cities and the County to negotiate for the land "in public." Lynn (LOSAC) agreed that it might be best to give the government "space" to do the job. Ember clarified for Chris that the City of Louisville is taking the formal lead on negotiations, with heavy support from the County.

VII. Public Comments on Items Not on the Agenda-

A. none

VIII. Discussion Item: Brief Louisville & Lafayette Open Space Program Overview (acreage, staff, etc.) — Presented by: Ember & Rob Burdine

Ember passed out the City of Louisville wayfinding trail map and provided some basic facts about the system. It includes 7 square miles of land around the perimeter and within the City, serving 20,000 citizens, including one solely-agricultural property. There are 23 miles of trails with both soft and hard surfaces on Open Space. Open Space staff have been recently tasked with trail planning for the entire City for the Wayfinding program. Open Space is a very popular amenity with citizens. Open Space staff has grown. In 2007 there was only one full-time employee. Now there is a “specialist” position (resources, education), a “maintenance” position, and a full-time ranger (who patrols Open Space, Parks, the Recreation Center, and the Coal Creek Golf Course). Next summer there will be two seasonal employees, not just one. Rob asked if it works better to have Open Space staff doing maintenance rather than general City maintenance. Ember replied that doing mowing “in house” has been helpful for keeping weeds from spreading.

Rob Burdine (City of Lafayette’s Open Space Supervisor) reported that the City of Lafayette has 1300 acres of Open Space land. They have two full-time employees, himself and a maintenance employee. They contract out their education and outreach program. It is run by a contractor, Martin Ogle, who has worked out very well. Staff also supervises Isabelle Farm and its associated operation at the Thomas Open Space, and hire seasonal staff for maintenance and to directly supervise the Boulder County Youth Corp for 8 weeks in the summer. Much of their resource management work is done by contractors under Rob’s supervision. He sees ecosystem management as a key part of his job. Rob also does a lot of work managing citizens’ issues.

Lafayette has applied for a \$4.6 million Nature Play Inspire grant from GOCO, and they are currently one of the highest ranked communities to win it. The idea is to create places for people, especially children, to “play” in natural spaces while “armoring” the Open Space to protect it. The Thorne Nature Experience is spearheading the idea. BVSD is also a partner, as Sanchez Elementary and Pioneer Elementary would be two sites included in the grant. Current Lafayette Open Space staff projects include finishing up the Harney Lastoka flood management program with Boulder County and Louisville, updating their prairie dog management plan, a new sign program contract currently out for design, and working with CDOT and BNSF to improve crossings. Lafayette Open Space recently acquired a property that included a garage where Open Space staff can now keep supplies. They also recently received a grant to create a mobile app for Open Space properties. Mike asked what the time frame on the app’s roll-out would be. Rob was hoping for the end of the year. Ember asked what percent of Lafayette’s City-owned land is zoned agricultural. Rob estimated 25% (mostly jointly owned).

IX. Discussion Item: Louisville Wayfinding Project - Presented by: Laura Scott Denton

Laura presented the City of Louisville’s Wayfinding project (see the packet). The representatives from Lafayette seemed very interested in the project. Lafayette citizens also ask for long regional artery-type trails and they liked the “subway map” logic of the new Louisville trail map. Lafayette received a Walk and Wheel grant from Kaiser to help integrate Public Works bike lanes with Open Space trails into a general system and to stitch together trails into networks across land-owner jurisdictions. Mike remarked that Lafayette has been highly successful in earning interesting grants. Laura asked whether Lafayette has trail names on their Open Space land and was told that they did not. Lafayette are in the process of developing new Parks and Open Space signs, and they admired the Louisville ideas.

X. Discussion Item: Environmental Education - Presented by: Rob & Ember

Martin Ogle, a consultant, runs the Lafayette education and outreach program. It is a robust program: there were 30 programs this year all with good attendance. Rob felt that this is a function of Martin's networking with the local naturalist community; he gets a lot of different organizations to buy in. They have a Lafayette Birds Program that capitalizes on local knowledge and had become very popular. Rob shared a video that the consultant put together on the summer bird programs. They also did a fish electro-shock and identification program with Colorado Parks and Wildlife in Coal Creek at Adler Fingru. Martin would like to do some joint programming with Louisville on the Harney Lastoka property. Lafayette is continuing the contract with Martin in 2017.

Ember spoke about Louisville's Open Space educational program. Louisville does their educational programming in-staff, with a \$1000 budget. There were about 16 programs this year. One highlight was staff's presentation on coyotes to Louisville Elementary School. A change in response to citizen comment was to include more adult programming as an alternative to family/children events. She introduced the upcoming "Walking and Talking with the Mayor" program.

Laura asked why Lafayette and Louisville can't advertise each other's programs. Rob and Ember both seemed willing. Mike asked Rob how much Lafayette spends on its educational contract with Martin Ogle. The answer was \$40,000-50,000 a year.

XI. Discussion Item: Code Enforcement - Presented by: Ember

There are two code enforcement officers in the Louisville Police Department, but there focus is City wide not specific to Open Space. To increase enforcement on Open Space OSAB advocated for an Open Space ranger position. Last year the City hired a ranger for the season. This year the ranger position was made full-time and year-round. There were unanticipated challenges in getting the program off the ground, particularly in developing protocols for a first time program. There is still some philosophical debate about the ranger position: staff wants to see the ranger being a friendly ambassador for following the rules, whereas Council may wants more focus on enforcement and compliance. This issue may be resolved/clarified at the upcoming Ranger presentation to City Council. The biggest code enforcement issues are dogs off-leash, dog waste pickup, aggressive dogs, dogs jumping fences, and encroachment.

Lafayette has an animal control officer in its police department who handles many of these issues. Certain parcels and areas have histories of dog problems, Lafayette police increased their presence there, which has helped. Rob felt they may not have as many issues.

XII. Discussion Item: Thomas Open Space/Isabelle Farm- Presented by: Rob

Lafayette owns the Thomas Open Space and its barn. Isabelle Farm is leasing the agricultural land and renting the barn, and Rob feels that they have been a great tenant. Rob reported that the idea was kick-started by grassroots effort. Isabelle Farm has another property where they grow produce along with the field at Thomas, and they use the barn as a food stand but also as their distribution center. They sell their produce to the public directly at the barn, but also locate their CSA there, distribute to local restaurants, Whole Foods, etc. Water is an issue for the operation: they must have raw water delivered to the property to sustain production. The Organic Food license was hard to get and managing the barn and property generates a lot of work for Open Space staff. There are events (like Farm to Table dinners) held at the barn. The property lease includes stipulations that the City can use the building for public meetings. Rob thinks a good, reliable tenant is critical to the success of a program like this. Linda asked how

Lafayette paid to build the barn. The answer was that the funds came from their Open Space tax fund.

XIII. Discussion Item: Harney Lastoka- Presented by: Ember and Rob

Ember spoke about Harney Lastoka agricultural Open Space, which is co-owned by Boulder County, Louisville, and Lafayette, with the County maintaining the leases. Keith Batemen is the tenant on the farm. The hope is to resuscitate the agricultural buildings, to make them functional for an operation like Isabelle Farm, and also to provide a venue for agriculturally-themed educational programming. The property hosts a popular community garden that has had a waiting list every year since it opened. Rob and Ember spoke a little about the Urban Drainage flood mitigation project which is nearly complete. Ember felt that Urban Drainage has been a good partner over the last five years. Rob pointed out that there is a potential conflict of interest for Lafayette between the farm operation at Harney Lastoka and the farm operation at Thomas, but they are in support of the Harney Lastoka organic farm.

XIV. Discussion Item: Nature Play- Presented by: Rob

Rob presented the Nature Play concept earlier in the meeting, but meeting attendees asked a few questions during this discussion item. Ember asked whether Lafayette was concerned about impacts this program could have on the natural resources of Open Space. The community hasn't seen the plans yet, but the Lafayette representatives do have some concerns about balancing the demand between increased "play" and habitat preservation. They felt that the best way to find this balance will be to identify the best places for the infrastructure. Mike requested that Rob come back if this project comes to fruition, and report to OSAB how it went. Rob was asked about Lafayette's "outdoor classroom" facility. He reported that it's an amphitheater with a wetland area, a trail loop, and education stations with themes like "water" and "earth." There was some discussion of how both cities' risk managers/policies require Open Space staff to remove things like rope swings and tree forts that citizens create on Open Space.

XV. Discussion Item: Joint Acquisition Opportunities- Presented by: Mike & David

Mike shared OSAB's current Louisville target acquisition map. David commented that Lafayette's OSAC uses vague "bubbles" to highlight areas of acquisition interest on their map, rather than specific parcels like Louisville does. He asked whether Louisville gets push-back from landowners when their land is included on the map. Mike replied that OSAB, staff, and the City Council have discussed this issue, but never really reached a consensus on a best practice. Mike pointed out that Louisville's parcels G, H, I, J, K aren't on Lafayette's list, even though they are border properties between the cities. Laura and Missy explained how OSAB made the choice to include more parcels on their map to "cast a larger net." Mike pointed out that some of the parcels are zoned for things like commercial use (e.g. around Davidson Mesa), which makes their acquisition for Open Space unlikely.

David shared Lafayette OSAC's target acquisition map. The Mayhoffer properties are ranked as #2 and #3. Their #1 target area is along the Erie border to the east and is wetland. The best joint purchase opportunity between Louisville and Lafayette are the Mayhoffer properties. Mike pointed out that Harney Lastoka was purchased by Louisville, Lafayette, and Boulder County as a 25/25/50 split. He asked whether the exact allocation of the cost burden would be negotiable for a potential

Mayhoffer property purchase. No one was sure. David related an example where Lafayette was willing to pay more than their partner, Broomfield County, to acquire the “egg farm property” along their border.

Missy asked about the edges of Lafayette’s acquisition target “bubbles” since they aren’t specific parcels. David explained that the idea is to deal with the parcels holistically and with connectivity. OSAB struggles with how to deal with parcels that wouldn’t be desirable in isolation.

David reported that the Lafayette OSAC had a recent meeting with their City Council and had a visioning discussion about the high-level future of Open Space. Lafayette is in the process of updating their land dedication specifications.

XVI. Discussions Items for the Next Meeting on Wednesday, December 14th-

- A. Complete the Acquisition Ranking Discussion
- B. Draft 2017 Accomplishments
- C. Planning wants to come and discuss their wayfinding initiative
- D. Catherine wants to present the Lake Park Open Space education sign before it is finalized

XIII. Adjourn-

The meeting adjourned at 9:30 pm.

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For Immediate Release
Oct. 27, 2016

Boulder County Commissioners' Office
Barb Halpin, Public Information Officer
303-441-3500

Statement from the Board of County Commissioners regarding Mayhoffer property (AKA Kerr Estates)

Commissioners respond to public concerns over potential development of 200-acre farmland parcel located at Colo. Hwy 42 and Empire Road in unincorporated Boulder County between Lafayette and Louisville.

Dear East Boulder County Residents,

We understand there is a great deal of interest (and concern) about the potential for development at the Mayhoffer property (also referred to as "Kerr Estates"), a 200-acre farmland parcel located at the corner of Colo. Hwy 42 and Empire Road in unincorporated Boulder County between the cities of Lafayette and Louisville.

In particular, the meeting at the Louisville Recreation Center on Tuesday, Oct. 25, which was attended by Boulder County staff and local residents, has brought up a lot of questions about the future of the Mayhoffer property. We'd like to address some of those questions as well as assure to you that Boulder County is actively engaged in the matter of how the property might be preserved or developed in the future.

For many years, Boulder County Parks and Open Space has been partnering with the cities of Louisville and Lafayette in an effort to acquire (e.g., purchase) the Mayhoffer property for open space. Louisville is the lead partner. To date, the partners have not reached agreement with the property owner on price.

From the discussion of the Oct. 25 meeting, it appears that the property owner (working through a developer) is exploring development options on the parcel. However, to date, the developer has not submitted any plans or proposals to Boulder County Land Use (the governing planning body for the parcel) for consideration, and the open space partners are still hoping to reach an agreement to acquire the property as open space.

If the property is not purchased as open space, there are a couple of possible options that the owner/developer could pursue under current land use regulations. Under current zoning, the land could be divided up into five 35-acre parcels, each of which could have one home. Additional lots could be created if approved through the county's Non-Urban Planned Unit Development (NUPUD) process, which requires that at least 75% of the land be preserved

through a conservation easement.

Any proposal for new homes on the parcel would be reviewed by Boulder County Land Use using the county's [Site Plan Review Regulations](#). If the land is developed under the NUPUD process, home sizes would be limited to 2,500 sq. ft. If the land is subdivided into lots 35 acres in size or larger, home sizes would be limited to approximately 4,300 sq. ft.

It's important to note that this land is designated as Rural Preservation Area under the [Lafayette/Louisville Buffer Intergovernmental Agreement](#). This ensures the parcel cannot be rezoned or annexed to allow additional development above what is permitted under current county regulations. (This [agreement is in effect until July 2036](#).)

With regard to potential oil and gas development on the parcel, the landowner would need to abide by both state and local regulations. The county is actively engaged in the process of updating our oil and gas development regulations (see: [Oil & Gas Development](#)).

A temporary moratorium on accepting new applications for oil and gas development in unincorporated Boulder County is in place until Nov. 18, 2016. Recent efforts by northern Front Range cities to limit oil and gas drilling in the form of hydraulic fracturing within their city limits have been overturned by the Colorado Supreme Court. However, Boulder County is in the process of adopting new regulations that will provide the strongest possible protections for public health, safety, and the environment with regards to fracking.

Further comments regarding the Mayhoffer property may be emailed to planner@bouldercounty.org where they will be collected and stored in association with any future application for development on that property.

Sincerely,

The Board of County Commissioners
Cindy Domenico, Deb Gardner, and Elise Jones

[View Commissioners' Meeting Documents and Records >>](#)

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**Extending the Duration of Annual and Biennial Weed Control on City of
Louisville Open Space Properties with Esplanade Tank Mixes**
City of Louisville Open Space Grant Proposal
November 2016

Submitted by:
Ph.D. Candidates: Shannon Clark and Derek Sebastian
Professor and Extension Specialist: Dr. Scott Nissen



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Section 1: Abstract

Abstract:

Invasive species management on non-crop and rangeland remains a constant challenge throughout many regions of the United States. While there are over 300 rangeland weeds, downy brome (*Bromus tectorum* L.), Dalmatian toadflax (*Linaria dalmatica*), musk thistle (*Carduus nutans*), common mullein (*Verbascum thapsis*), and diffuse knapweed (*Centaurea diffusa*) have emerged as some of the most invasive and problematic. Downy brome (*Bromus tectorum* L.) is a competitive winter annual grass that is considered one of the most problematic invasive species in rangeland. It has been estimated the western United States rangeland is infested with over 22 million hectares of downy brome. While glyphosate, imazapic, and rimsulfuron are the current industry standards for annual grass control, all of these restoration options provide inconsistent control or cause injury to desirable perennial species. The increasing spread of biennial species is a result of their adaptability, life cycle, and prolific seed production. Weeds compete for moisture and can spread by seed or vegetatively into undisturbed areas, outcompeting native grass, forb and shrub species. Herbicides with both foliar and soil-residual activity (2,4-D, aminocyclopyrachlor, aminopyralid, chlorsulfuron, clopyralid, dicamba, fluroxypyr, metsulfuron, and picloram) are most commonly used, yet these control options lack residual seedling control resulting in rapid re-invasions. A study is proposed to evaluate the efficacy of indaziflam (Esplanade), a new EPA approved herbicide that has the potential to extend the duration of annual, biennial, and perennial invasive weed control by eliminating re-establishment from the soil seed bank. Our proposed study will evaluate the efficacy of currently recommended herbicides alone and in combination with indaziflam. We also would like to establish a study comparing areas treated after prescribed burns with non-burned sites. The efficacy of herbicides such as Plateau (imazapic) have greatly increased in use in conjunction with prescribed burns, and we would like to evaluate the impact of burning on indaziflam treatments. Research at Colorado State University has shown that indaziflam treatments result in significantly longer downy brome (88-100%) control four years after treatment, and has residual activity on a suite of invasive biennial species without negatively impacting co-occurring native species. For this proposed study, vegetative surveys will be conducted after treatments are applied to evaluate plant cover and control of weed species, and release of desirable perennial grasses and forbs. All data will be analyzed in SAS by analysis of variance and by regression, to determine optimum treatments. This research could ultimately provide a new, long-term control option for controlling noxious weed species on City of Louisville Open Space properties including Aquarius and Davidson Mesa Open Space. Educational opportunities including field tours and volunteering will be made available to weed control practitioners and Louisville citizens during and after completion of the study.

Section 2: Introduction

Objective:

Objective 1: To demonstrate that indaziflam (Esplanade™, Bayer CropScience) can be used as a new chemical treatment for successfully restoring Open Space lands invaded by downy brome and other invasive weeds such as common mullein.

Objective 2: To better understand which herbicides alone, and in combination, provide long-lasting invasive weed seedling control without injuring perennial species.

Objective 3: To evaluate how desirable native grass, forb, and shrub species respond to herbicide treatments.

Objective 4: Compare the efficacy of herbicide treatments using a prescribed burn management approach as compared to non-burned sites

Hypothesis:

Research Hypothesis: Treatments including indaziflam provide significantly longer weed control preventing re-establishment, as compared to currently recommended herbicides applied alone (excluding indaziflam).

Section 2: Anticipated Value of the Proposed Research/Contribution to Management Needs:

Annual, biennial, and perennial weeds including downy brome, common mullein, diffuse knapweed, and musk thistle are often present on similar rangeland, roadside, and disturbed sites along the Front Range of Colorado. These species are found on City of Louisville Open Space properties including Aquarius and Davidson Mesa Open Space. These highly invasive species compete with desirable native species for early spring moisture and have the capability to spread from disturbed to undisturbed areas. Downy brome also germinates in the fall and early spring, exploiting moisture and nutrients before native plant communities begin active growth in the spring. Downy brome seeds are tolerant to temperature and moisture stress and can remain viable for up to 5 years. Land managers have been faced with the problem of selectively controlling biennial invasive species with broadleaf herbicides, and current chemical control options for downy brome include imazapic, rimsulfuron, and glyphosate; however, these herbicides lack consistency beyond the initial year of application and have been shown to injure desirable plant communities.

Indaziflam (Esplanade™, Bayer CropScience) is a relatively new herbicide that is currently registered for annual weed control in turf, orchards, and noncropland. Indaziflam is used at rates between 3.5 and 7 oz/A and has excellent preemergence activity on many annual weed species (Fig. A1). Indaziflam has several attributes that make it an ideal candidate to control non-crop weeds that reproduce primarily by seed production, 1) long soil-residual activity and 2) no injury to perennial grasses, forbs, and shrubs (Figs. A2-9). This combination would increase the opportunity for successful restoration of City of Louisville Open Space properties. Because indaziflam is a root inhibiting herbicide this allows for increased safety on desirable perennial plants, that have roots below the layer where the herbicide is active (Fig. A1). The emerged plants at the time of application would be initially controlled by the tank mix partner (picloram, aminocyclopyrachlor, etc.), while indaziflam would provide the long-term control of subsequent seedlings. Field studies at CSU have demonstrated that indaziflam has excellent long term downy brome control (3+ years) with minimal injury to native perennial species (Figs. A2-6). A greenhouse study has shown indaziflam can control downy brome, diffuse knapweed, common mullein, and several other biennial seedlings at rates as low as 1 oz/A.

Our proposed research will ultimately provide additional management options for long-term control of invasive annual and biennial weeds where treatments in the past have provided inconsistent, short-term control. Fewer herbicide applications would mean additional years for native species to respond and recover, a lighter load of herbicides sprayed on managed properties, and the financial/labor savings from yearly herbicide treatments or mowing operations. This research will also provide an insight into the effect of herbicide treatments used

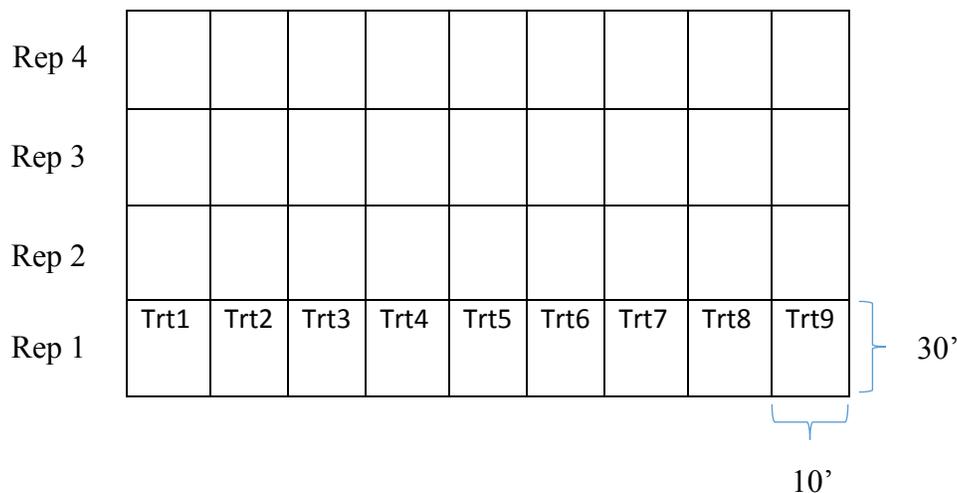
for invasive weed control, on desirable grass, forb, and shrub species. In addition, this research would provide insight into the beneficial effects of incorporating prescribed burning in a weed management approach.

Section 3: Methodology

Study Methods

1) Controlling Downy Brome and Common Mullein with Esplanade Tank-Mixes

The sites for this project will be on the Aquarius and Davidson Mesa Open Space Properties located in the City of Louisville municipality. The Davidson Mesa site has a mixture of downy brome and common mullein, while Aquarius has primarily downy brome. We propose to conduct a study to test the hypothesis that herbicide treatments that include Esplanade will provide increased residual control compared to treatments without Esplanade. Within this study we will also evaluate herbicide treatments effect on desirable grass, forb, and shrub species. Treatments will be applied to 10 x 30 ft plots with four replications for each treatment, arranged in a randomized complete block design (see below). The study will be repeated at two research sites at the Davidson property and two at the Aquarius property. Signage will be posted next to the studies to provide educational information to recreational users of the property and adjacent homeowners. All treatments will be applied with a CO₂ pressurized backpack sprayer at 207 kPa using 11002LP flat fan nozzles at 187 L·ha⁻¹. The two studies at Aquarius will target downy brome and will have 9 treatments with two application timings (total area per study=90' by 120'); December and February post-emergence, while the two studies at Davidson will target downy brome and common mullein and have 13 treatments and one application timing (total area per study=130' by 120'). The Aquarius studies are initially proposed for only downy brome control; however, if there are other target weeds such as diffuse knapweed and musk thistle we could adjust the protocol and add Milestone 7 oz. Cover and control evaluations will be conducted in 2017. All data will be subject to analysis of variance and treatment means separated using Fisher's Protected LSD. This study is designed to be conducted for 2-3 years with additional long-term evaluations in 2017-2019, but results will be available after the first set of treatments are invoked (summer 2017).



Aquarius Downy Brome Protocol (2 Studies- 2 Application Timings)

(Will adjust protocol if needing to target additional species, could add Milestone 7 oz, as written this is a protocol to evaluate downy brome control)

Trt No.	Treatment	Rate	Rate Unit	Volume/Plot	Growth
1	Esplanade	3.5	OZ/A	0.02 oz	December 2016
	Accord XRT II	24	OZ/A	0.17 oz	December 2016
	NIS	0.25	% V/V		December 2016
2	Esplanade	5	OZ/A	0.03 oz	December 2016
	Accord XRT II	24	OZ/A	0.17 oz	December 2016
	NIS	0.25	% V/V		December 2016
3	Esplanade	7	OZ/A	0.05 oz	December 2016
	Accord XRT II	24	OZ/A	0.17 oz	December 2016
	NIS	0.25	% V/V		December 2016
4	Plateau	7	OZ/A	0.05 oz	December 2016
	Accord XRT II	24	OZ/A	0.17 oz	December 2016
	NIS	0.25	% V/V		December 2016
5	Esplanade	3.5	OZ/A	0.02 oz	February 2017
	Accord XRT II	24	OZ/A	0.17 oz	February 2017
	NIS	0.25	% V/V		February 2017
6	Esplanade	5	OZ/A	0.03 oz	February 2017
	Accord XRT II	24	OZ/A	0.17 oz	February 2017
	NIS	0.25	% V/V		February 2017
7	Esplanade	7	OZ/A	0.05 oz	February 2017
	Accord XRT II	24	OZ/A	0.17 oz	February 2017
	NIS	0.25	% V/V		February 2017
8	Plateau	7	OZ/A	0.05 oz	February 2017
	Accord XRT II	24	OZ/A	0.17 oz	February 2017
	NIS	0.25	% V/V		February 2017
9	Non-treated				

Davidson Downy Brome/Common Mullein Protocol (2 Studies- 1 Application Timings)

Trt No.	Treatment	Rate	Rate Unit	Volume/Plot	Growth
1	Esplanade	7	OZ/A	0.05 oz	December 2016
	Accord XRT II	24	OZ/A	0.17 oz	December 2016
	NIS	0.25	% V/V		December 2016
2	Imazapic	7	OZ/A	0.05 oz	December 2016
	Accord XRT II	24	OZ/A	0.17 oz	December 2016
	NIS	0.25	% V/V		December 2016
3	Method	8	OZ/A	0.06 oz	December 2016
	Esplanade	7	OZ/A	0.05 oz	December 2016
	Accord XRT II	24	OZ/A	0.17 oz	December 2016
	NIS	0.25	% V/V		December 2016
4	Method	8	OZ/A	0.06 oz	December 2016
	Plateau	7	OZ/A	0.05 oz	December 2016
	Accord XRT II	24	OZ/A	0.17 oz	December 2016
	NIS	0.25	% V/V		December 2016
5	Tordon	1	QT/A	0.22 oz	December 2016
	Esplanade	7	OZ/A	0.05 oz	December 2016
	Accord XRT II	24	OZ/A	0.17 oz	December 2016
	NIS	0.25	% V/V		December 2016

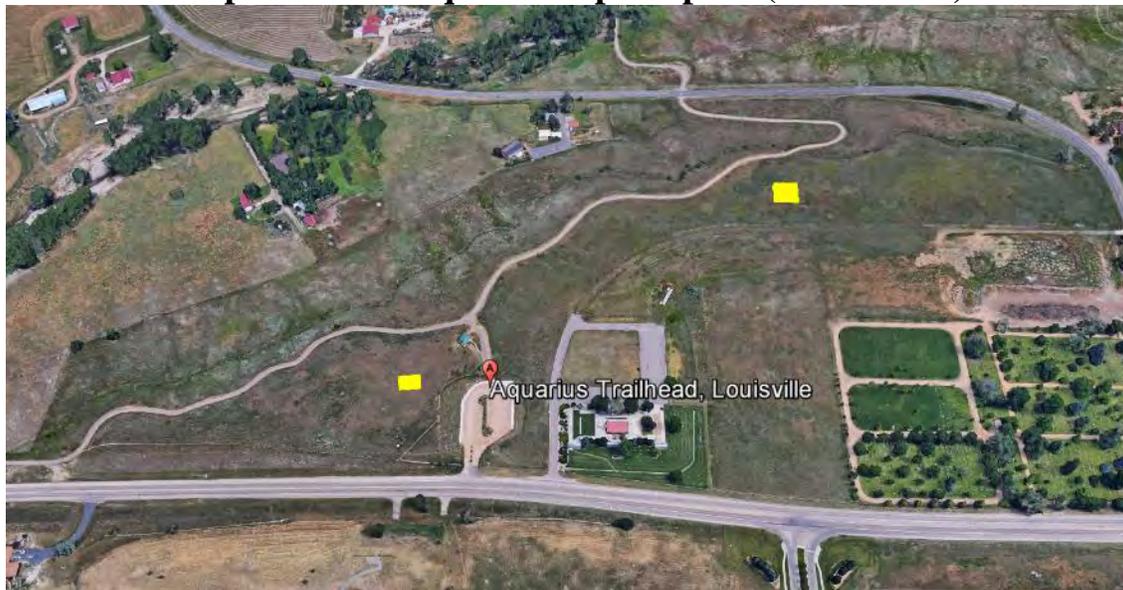
6	Tordon	1	QT/A	0.22 oz	December 2016
	Plateau	7	OZ/A	0.05 oz	December 2016
	Accord XRT II	24	OZ/A	0.17 oz	December 2016
	NIS	0.25	% V/V		December 2016
7	Opensight	2.5	OZ/A	0.49 g	December 2016
	Esplanade	7	OZ/A	0.05 oz	December 2016
	Accord XRT II	24	OZ/A	0.17 oz	December 2016
	NIS	0.25	% V/V		December 2016
8	Opensight	2.5	OZ/A	0.49 g	December 2016
	Plateau	7	OZ/A	0.05 oz	December 2016
	Accord XRT II	24	OZ/A	0.17 oz	December 2016
	NIS	0.25	% V/V		December 2016
9	Method	8	OZ/A	0.06 oz	December 2016
	Telar	1	OZ/A	0.19 g	December 2016
	Esplanade	7	OZ/A	0.05 oz	December 2016
	Accord XRT II	24	OZ/A	0.17 oz	December 2016
10	NIS	0.25	% V/V		December 2016
	Method	8	OZ/A	0.06 oz	December 2016
	Telar	1	OZ/A	0.19 g	December 2016
	Plateau	7	OZ/A	0.05 oz	December 2016
11	Accord XRT II	24	OZ/A	0.17 oz	December 2016
	NIS	0.25	% V/V		December 2016
	Tordon	1	Qt/A	0.22 oz	December 2016
	Telar	1	OZ/A	0.19 g	December 2016
12	Esplanade	7	OZ/A	0.05 oz	December 2016
	Plateau	7	OZ/A	0.05 oz	December 2016
	Accord XRT II	24	OZ/A	0.17 oz	December 2016
	NIS	0.25	% V/V		December 2016
13	Untreated				December 2016

**Aminocyclopyrachlor (Method, Bayer CropScience)
 Indaziflam (Esplanade, Bayer CropScience)
 Picloram (Tordon, Dow AgroSciences)
 Imazapic (Plateau, BASF)
 Chlorsulfuron (Telar, Bayer CropScience)
 Glyphosate (Accord XRTII, Dow AgroSciences)
 Aminopyralid + Metsulfuron (Opensight, Dow AgroSciences)
 Non-ionic Surfactant (NIS)

Proposed Sites Davidson Mesa Open Space (not to scale)



Proposed Sites Aquarius Open Space (not to scale)



Schedule of Events

Year 1 Activities (2016-2017)	Dec	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Plot Setup	X												
Treatment Applications	X		X										
Cover and Control Eval.					X		X		X		X		
Data Analysis											X	X	
Report Prep./Submission													X
Prescribed Burn Plot Setup										X	X		
Prescribed Burn Trt Appl.										X	X		

Section 4: Budget

Two Ph.D. students (D. Sebastian and S. Clark) and PI (S. Nissen) will oversee operation of the study. Treatment applications will be conducted in 2016 across all study sites, and funding is being requested for treatment application, evaluations, and data analyses (2016-2017). Funding is being requested for graduate student funding, required travel, hourly hires, and materials (herbicide, flags, etc.).

Item	Cost 2016 (Year 1 Studies)	Estimated Costs 2017 (Year 2 Treatment Evaluations and Prescribed Burn Studies)
Graduate student stipend	\$2,000	\$2,000
Hourly Hire Help (@\$12/hr)	\$1,000	\$1,000
Overhead (0.00%)	\$0	\$0
Travel	\$1,000	\$1,000
Materials (Flags, Herbicide, etc.)	\$1,000	\$1,000
Total	\$5,000	\$5,000

Appendix:



Figure A1: Indaziflam seedling dose response showing root inhibition

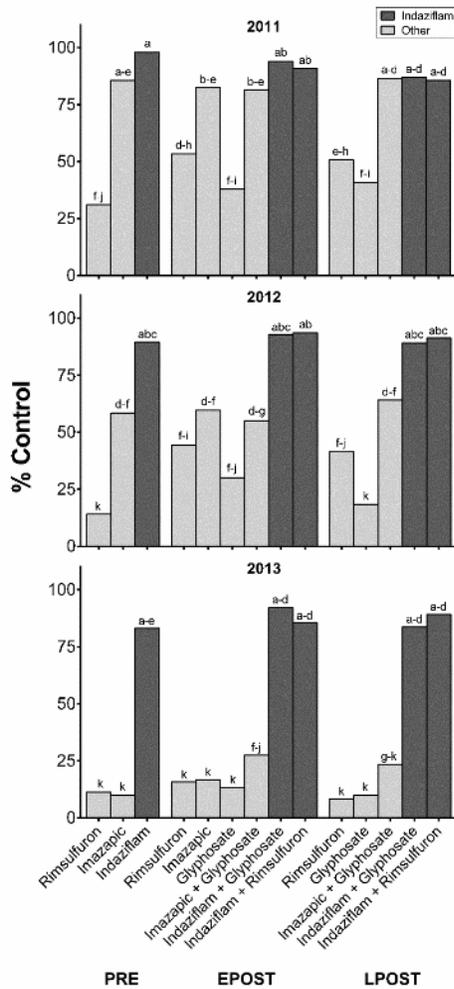


Figure A2: Downy Brome Control 1, 2, and 3 years after treatment averaged across to sites

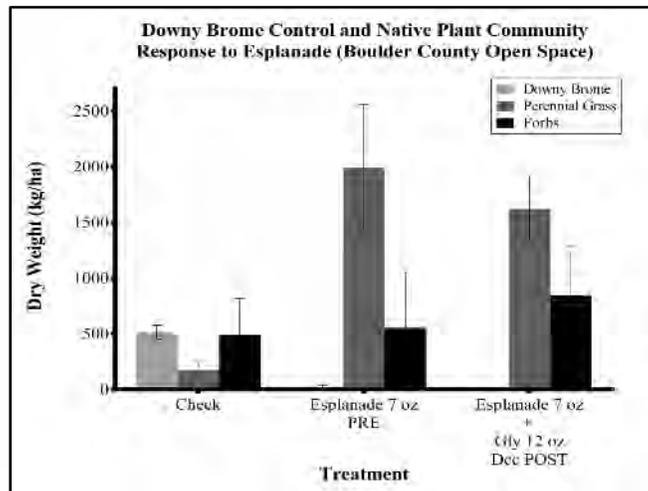


Figure A3: Downy brome control and native plants response at Rabbit Mountain Open Space, 1 YAT

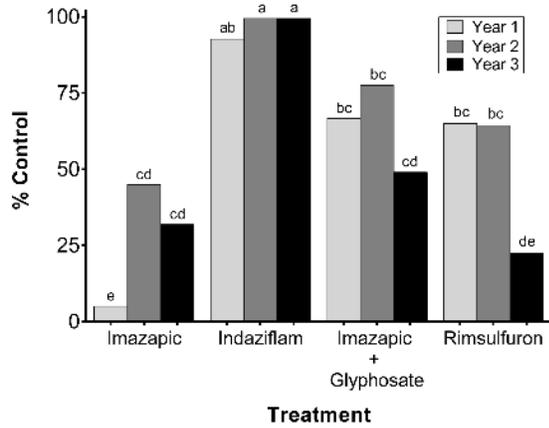


Figure A4: Downy Brome Control 1, 2, and 3 years after treatment at Rifle, CO site



Figure A5: Rifle, CO site response to treatments A) Check, B) Imazapic, C) rimsulfuron, D) indaziflam

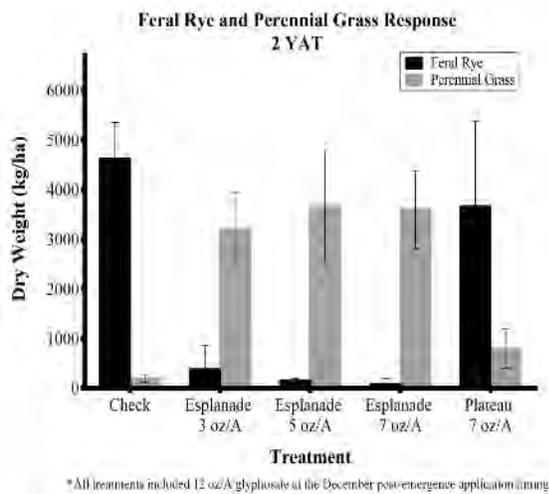


Figure A6: Downy Brome Control comparing Esplanade and Plateau at Devil's Backbone Open Space, 2 YAT.

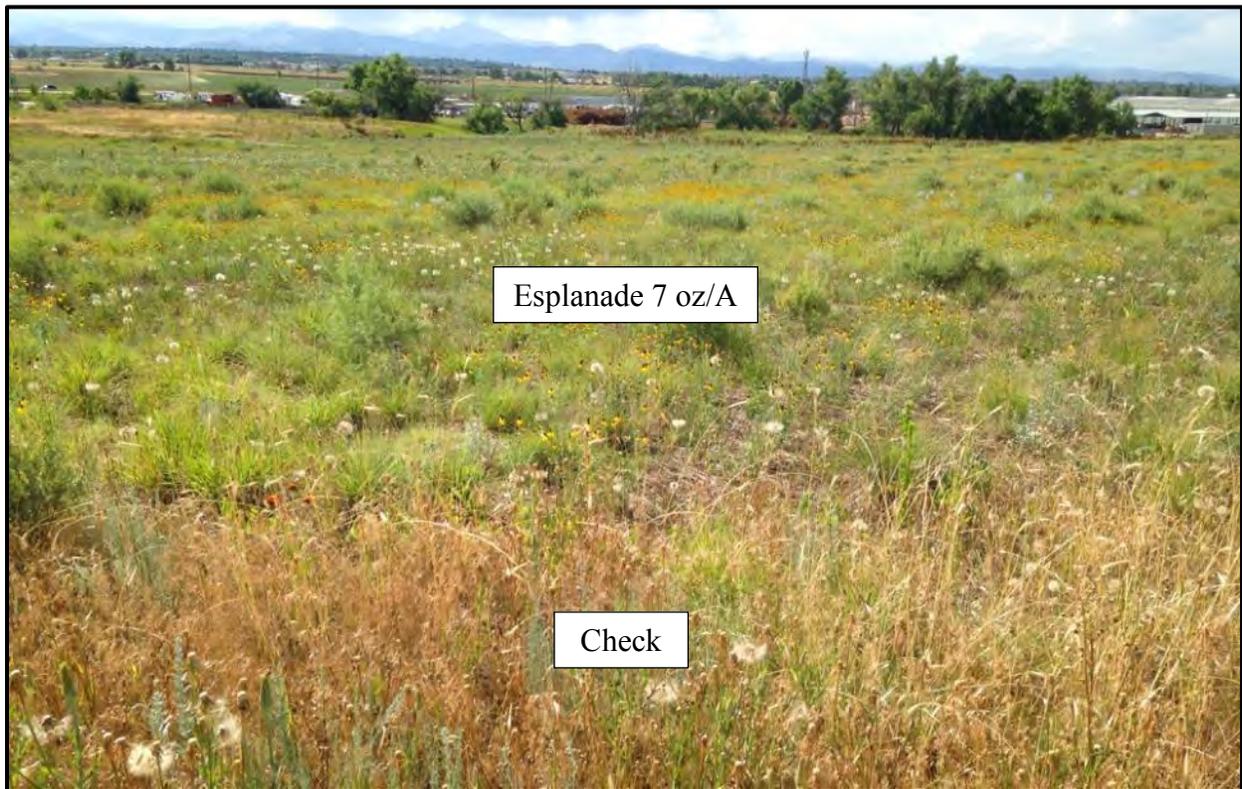
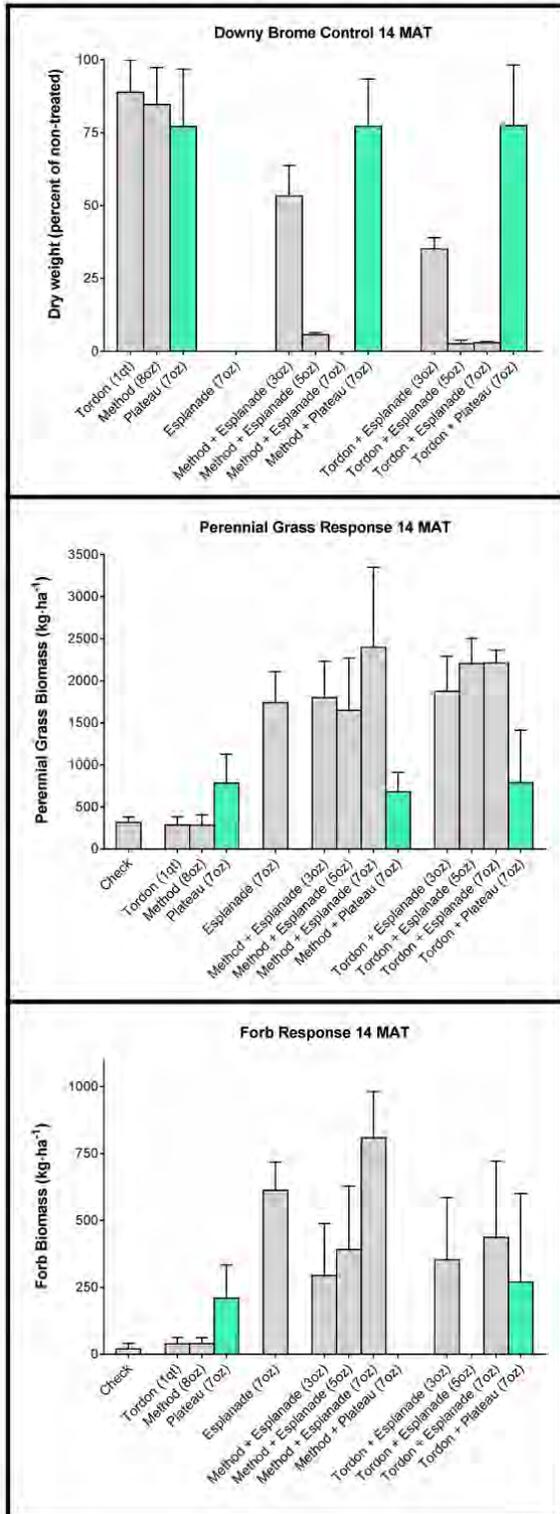


Figure A7

Additional Esplanade Research in Collaboration with Jefferson County Open Space

Hildebrand Ranch Park (Chatfield)



South Table Mountain

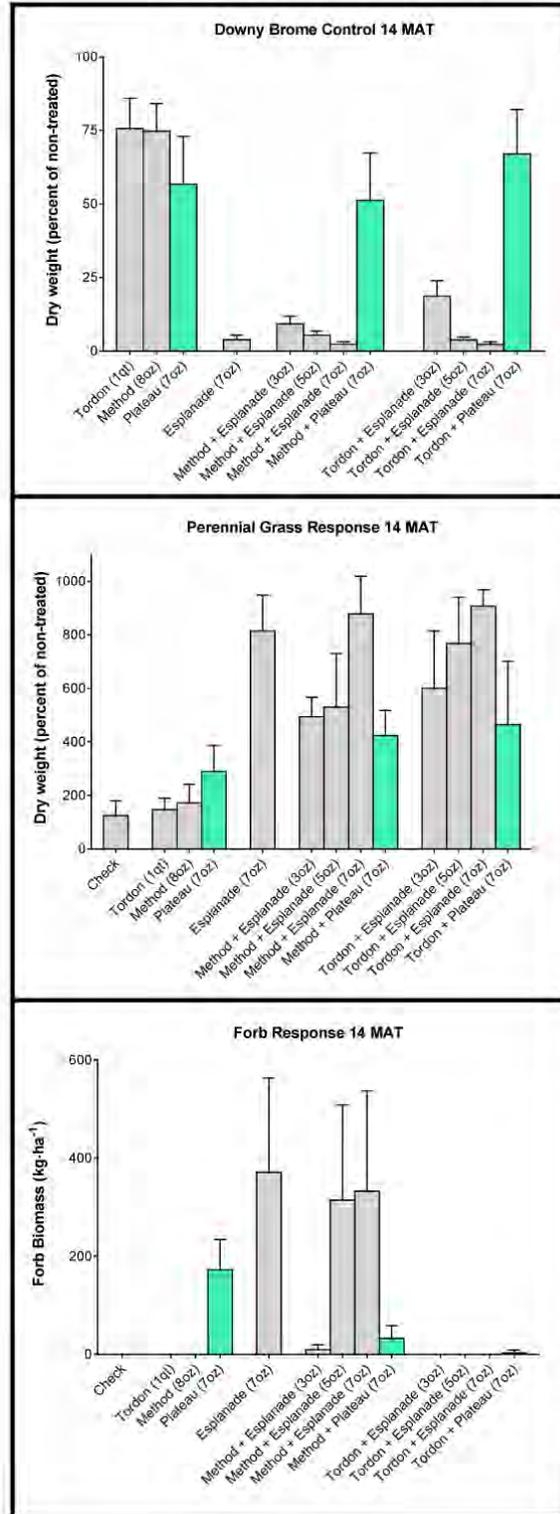
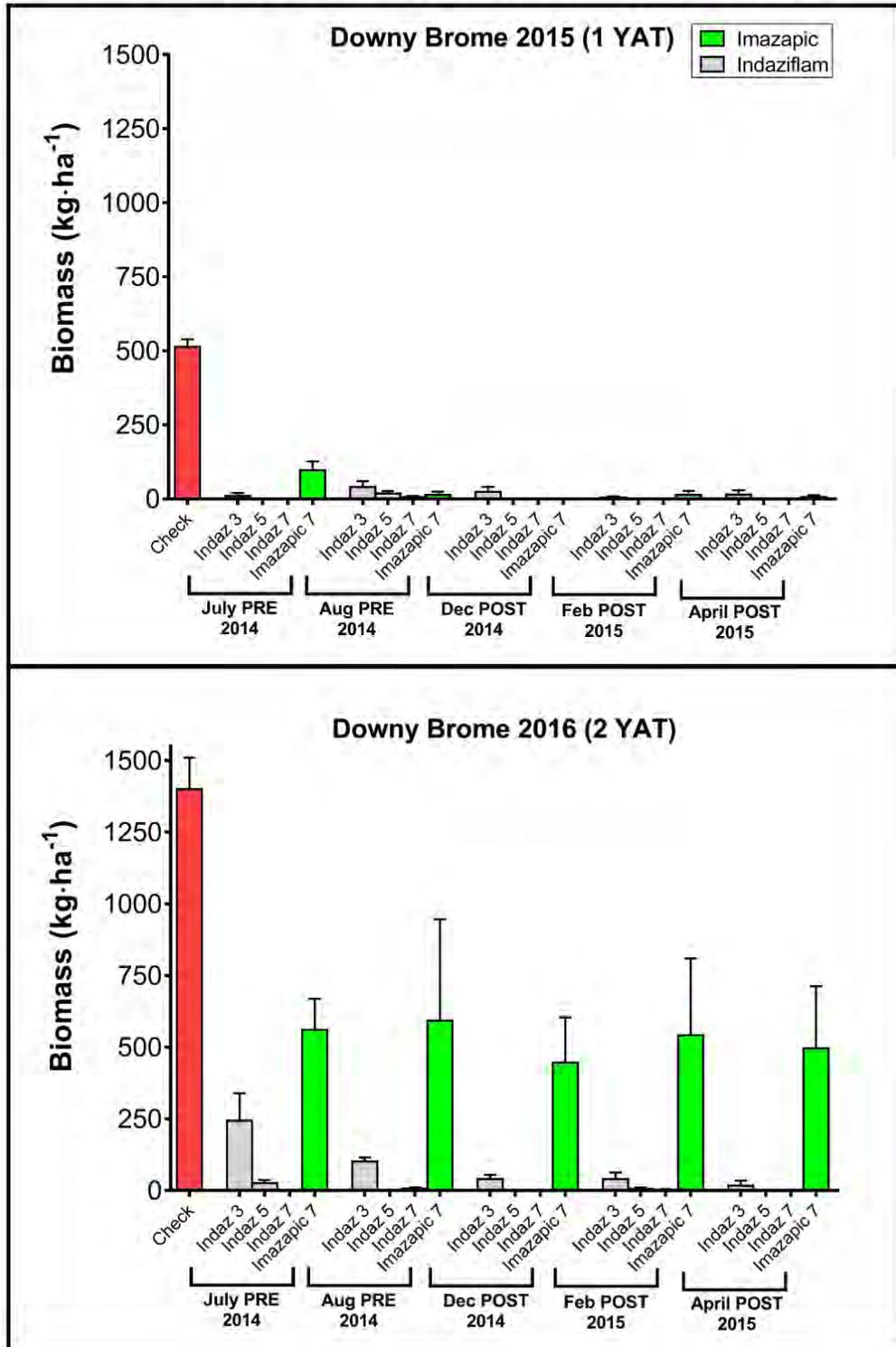
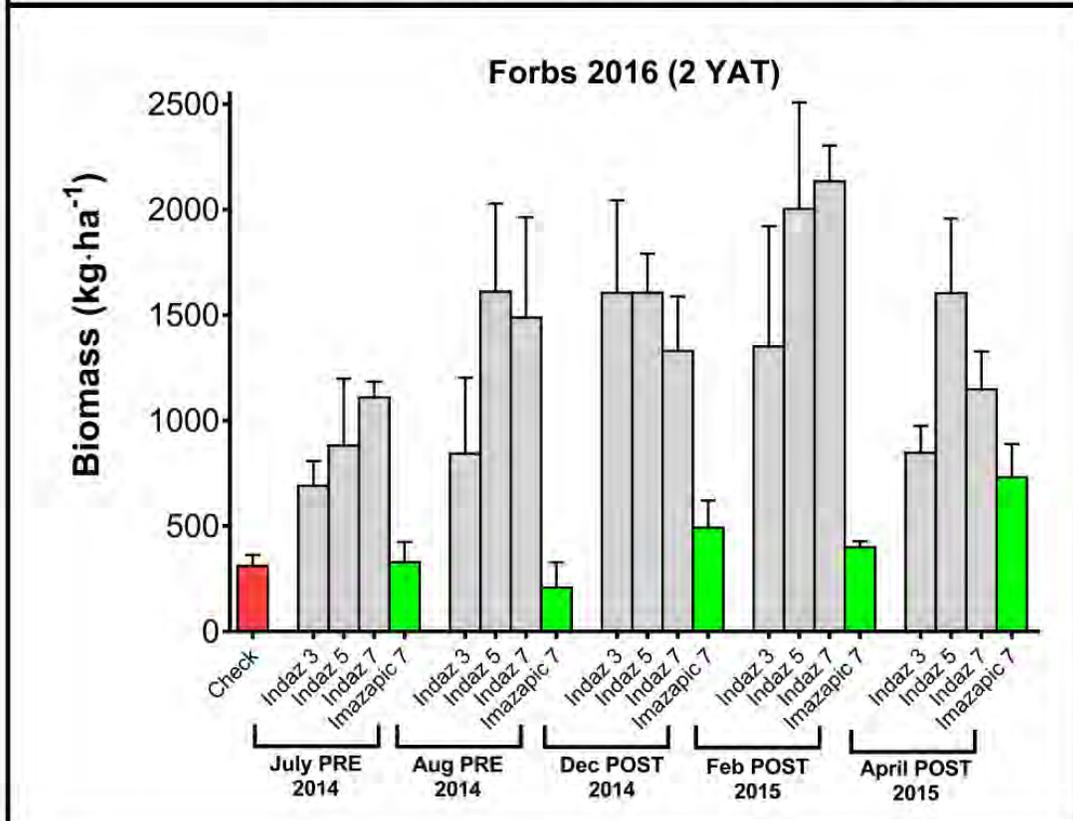
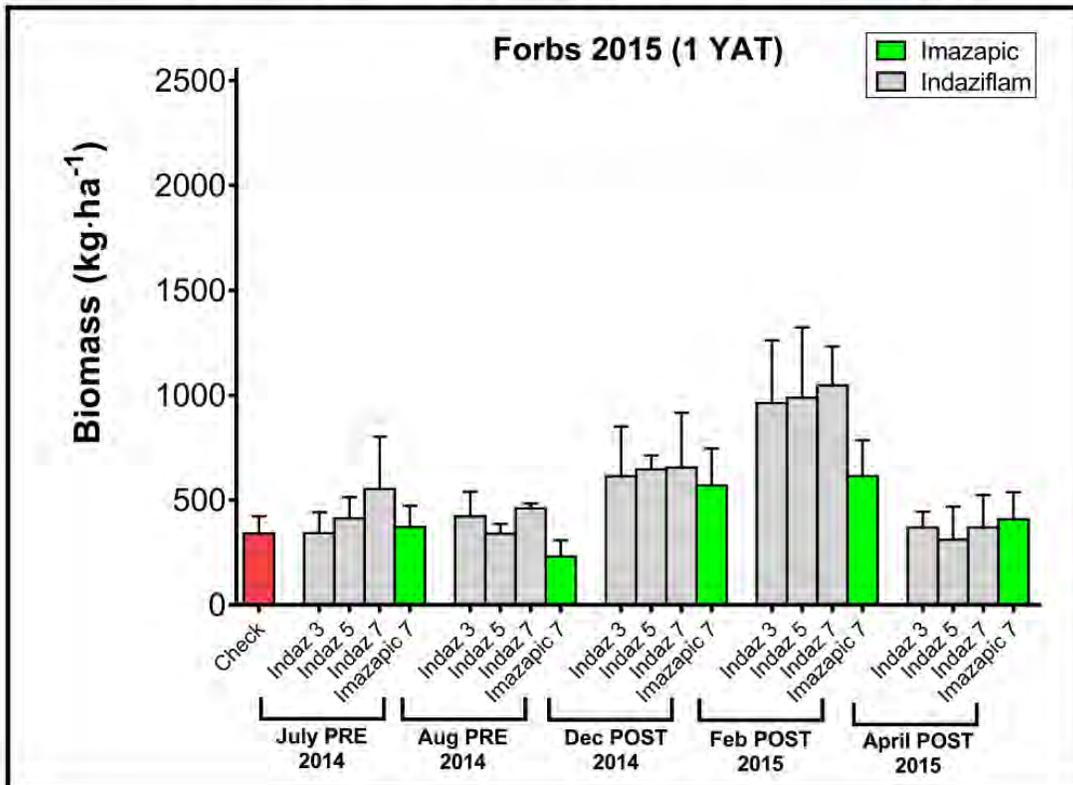


Figure A8

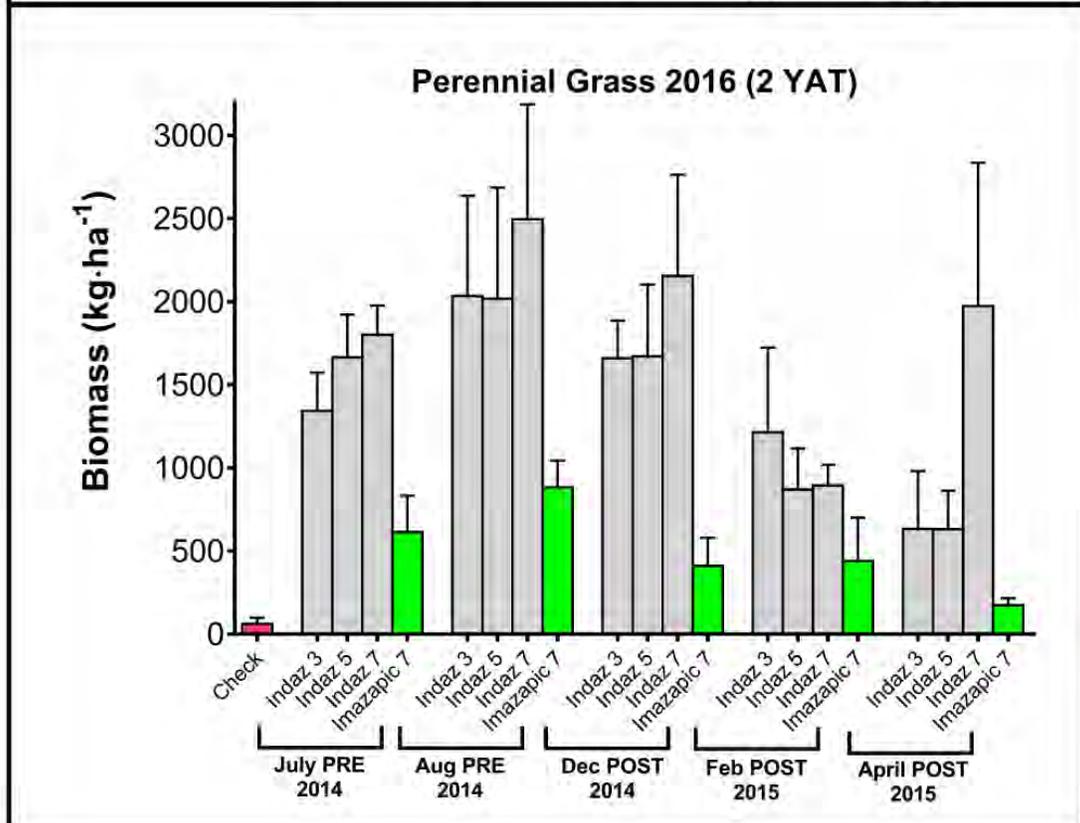
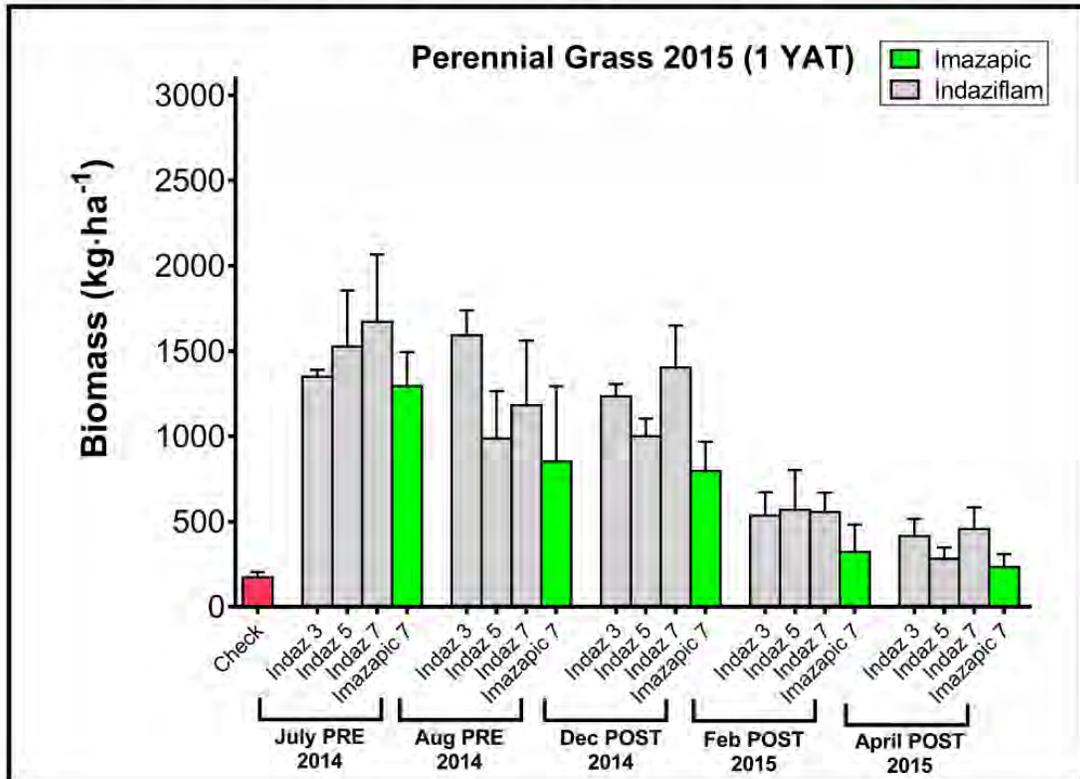
Rabbit Mountain (5 Application Timings)



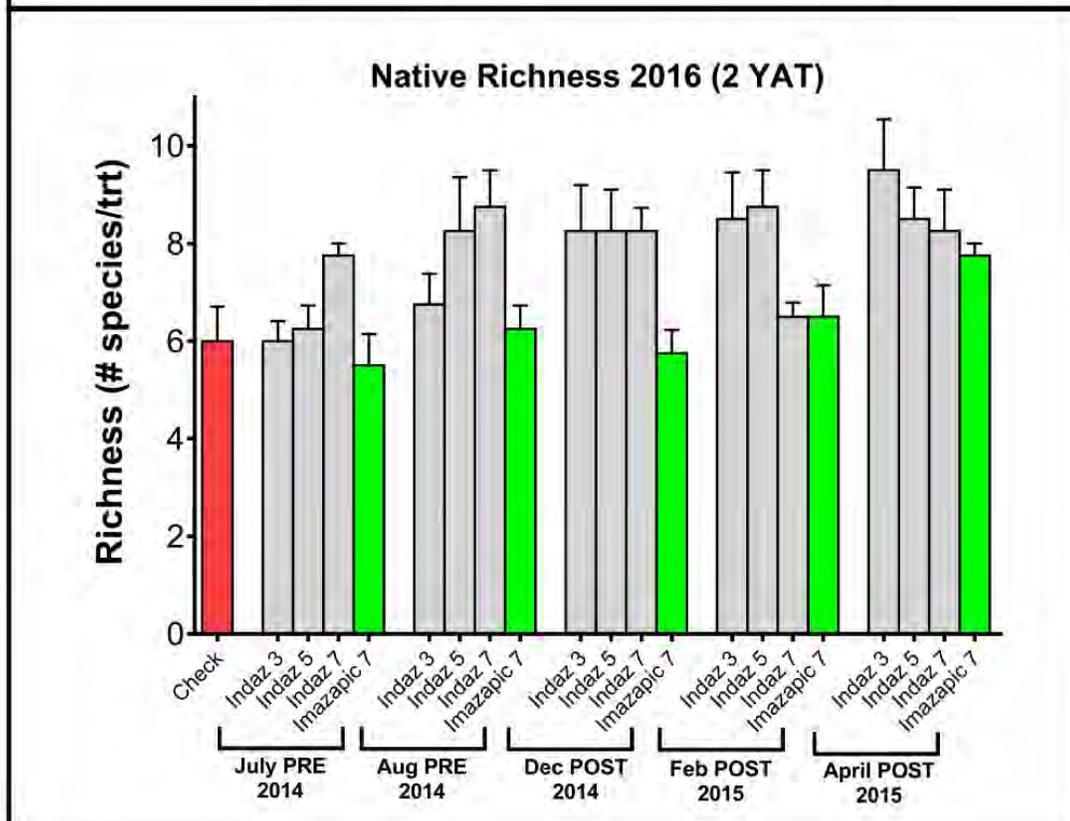
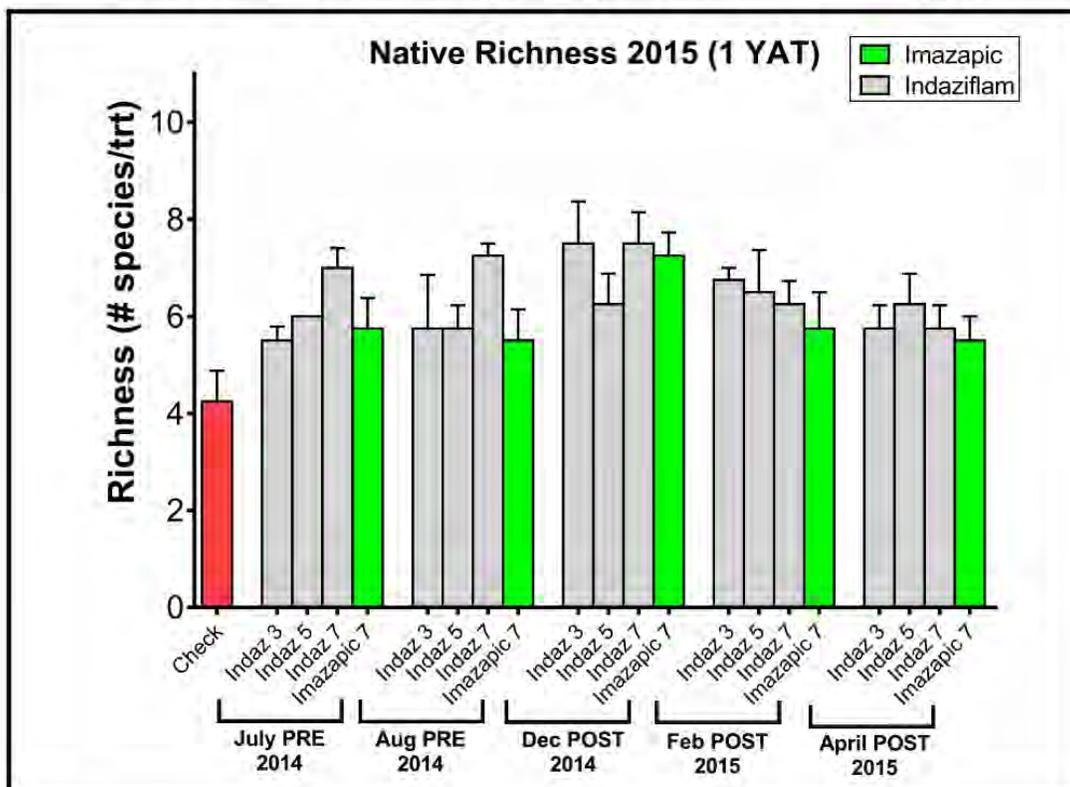
Rabbit Mountain (5 Application Timings)



Rabbit Mountain (5 Application Timings)



Rabbit Mountain (5 Application Timings)



Specimen Label



Dow AgroSciences



HERBICIDE

®Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

- A non-selective broad spectrum systemic herbicide for control of annual and perennial weeds and woody plants in
- Conservation Reserve Program (CRP), rangeland and permanent grass pastures
- forest sites, conifer plantations;- airports, barrow ditches, communication transmission lines, electrical power and utility rights-of-way, fencerows, gravel pits, industrial sites, military lands, mining and drilling areas, non-irrigation ditch banks, oil and gas pads, ornamental sites, parking lots, petroleum tank farms, pipelines, railroads, roadsides, storage areas, storm water retention areas, substations, unimproved rough turf grasses, sod or turfgrass seed farms, vacant lots and other non-crop residential areas;
- natural areas (open space) for example, campgrounds, parks, prairie management, trails and trailheads, recreation areas, wildlife openings and wildlife habitat and management areas;
- in and around seasonally dry wetlands;
- including grazed areas on all of these listed sites

Avoid contact of herbicide with foliage, green stems, exposed non-woody roots or fruit of crops, desirable plants and trees, because severe injury or destruction may result.

Group	9	HERBICIDE
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Active Ingredient:

glyphosate: N-(phosphonomethyl)glycine, dimethylamine salt.....	50.2%
Other Ingredients.....	49.8%
Total.....	100.0%

Contains 5.07 lb per gallon glyphosate, dimethylamine salt (4 lb per gallon glyphosate acid).

Precautionary Statements

Hazards to Humans and Domestic Animals

EPA Reg. No. 62719-556

CAUTION

Causes Moderate Eye Irritation • Prolonged Or Frequently Repeated Skin Contact May Cause Allergic Reactions In Some Individuals

Avoid contact with eyes or clothing.

Personal Protective Equipment (PPE)

Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants

- Chemical-resistant gloves made of any waterproof material such as natural rubber
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exists, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

- Users should:
- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
 - Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

First Aid

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.
If on skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

Domestic Animals: This product is considered to be relatively nontoxic to dogs and other domestic animals; however, ingestion of this product or large amounts of freshly sprayed vegetation may result in temporary gastrointestinal irritation (vomiting, diarrhea, colic, etc.). If such symptoms are observed, provide the animal with plenty of fluids to prevent dehydration. Call a veterinarian if symptoms persist for more than 24 hours.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

Physical or Chemical Hazards

Spray solutions of this product should be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers.

Do not mix, store or apply this product or spray solutions of this product in galvanized steel or unlined steel (except stainless steel) containers or spray tanks. This product, or spray solutions of this product react with such containers and tanks to produce hydrogen gas that may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
 Read all Directions for Use carefully before applying.

This is an end-use product. Dow AgroSciences does not intend and has not registered it for reformulation.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

Agricultural Use Requirements (Cont.)

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material such as natural rubber
- Shoes plus socks

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Keep people and pets off treated areas until spray solution has dried.

Storage and Disposal

Pesticide Storage: Do not contaminate water, food, feed or seed by storage or disposal.

Pesticide Disposal: Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures. Emptied container contains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed.

Nonrefillable containers 5 gallons or less:

Container Handling: Nonrefillable container. Do not reuse or refill this container.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Refillable containers larger than 5 gallons:

Container Handling: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Nonrefillable containers 5 gallons or larger:

Container Handling: Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Product Information

Accord® XRT II herbicide is a broad spectrum, systemic, postemergence herbicide with no soil residual activity. It is intended for control of annual and perennial weeds and woody plants and brush. It is formulated as a water soluble liquid containing surfactant; no additional surfactant is needed.

Time to Symptoms: The active ingredient in this product moves through the plant from the point of foliage contact into the root system. Visible effects on most annual weeds occur within two to four days, but on most perennial weeds visible effects may not occur for seven days or more. Extremely cool or cloudy weather following treatment may slow activity of this product and delay development of visual symptoms. Visible effects are a gradual wilting and yellowing of the plant that advances to complete browning of above ground growth and deterioration of underground plant parts.

Stage of Weeds: Annual weeds are easiest to control when they are small. Best control of most perennial weeds is obtained when treatment is made at late growth stages approaching maturity or when translocation is mostly down to the roots, i.e. autumn for perennial plants or woody plants.

Mode of Action: The active ingredient in this product inhibits an enzyme. This enzyme is found only in plants and microorganisms that are essential to forming specific amino acids.

Cultural Considerations: Reduced control may result when applications are made to annual or perennial weeds that have been mowed, grazed, or cut, and have not been allowed to regrow to the specified stage for treatment.

Rainfastness: Heavy rainfall soon after application may wash off this product from the foliage and a repeat application may be required for adequate control.

No Soil Activity: Weeds must be emerged at the time of application to be controlled by this product. Weeds germinating from seed after application will not be controlled. Unemerged plants arising from unattached underground rhizomes or rootstocks of perennials will not be affected by the herbicide and will continue to grow.

Maximum Application Rates: The maximum application rates specified in this label are given in units of volume, either fluid ounces, pints or quarts, of this product per acre. The maximum allowed application rates apply to this product combined with the use of any and all other glyphosate-containing herbicides, either applied separately or in a tank mix, on the basis of total pounds of glyphosate (acid equivalents) per acre. If more than one glyphosate-containing product is applied to the same site within the same year, ensure that the total of pounds acid equivalent glyphosate does not exceed the maximum allowed. Do not apply more than a total of 8 quarts (8 lb glyphosate acid) of this product per acre per year.

Herbicide Resistance Management

Glyphosate, the active ingredient in this product, is a Group 9 herbicide (inhibitor of EPSP synthase enzyme). Some naturally occurring weed biotypes that are tolerant (resistant) to glyphosate may exist due to genetic variability in a weed population. Where resistant biotypes exist, the repeated use of herbicides with the same mode of action can lead to the selection for resistant weeds. Certain agronomic practices reduce the likelihood that resistant weed populations will develop, and can be utilized to manage weed resistance once it occurs.

To delay the selection for glyphosate resistant weeds, use the following practices:

- Scout fields before and after application to detect weed escapes or shifts in weed species.
- Start with a clean field by applying a burndown herbicide or by tillage.
- Control weeds early when they are small.
- Add other herbicides, such as a selective and/or a residual herbicide, and cultural practices, such as tillage or crop rotation, where appropriate.
- Use the application rate for the most difficult to control weed in the field. Do not tank mix with other herbicides that reduce this product's efficacy through antagonism or with ones that encourage application rates of this product below those specified on this label.
- Control weed escapes and prevent weeds from setting seeds.
- Before moving from one site to another, clean equipment to minimize the spread of weed seeds or plant parts.
- Use new commercial seed that is as free of weed seed as possible.
- Report any incidence of repeated non-performance of this product against a particular weed species to the local retailer, county extension agent, or Dow AgroSciences representative.

Appropriate testing is needed to determine if a weed is resistant to glyphosate. The following good agronomic practices can reduce the spread of confirmed glyphosate-resistant biotypes:

- Tank mix this product or apply it sequentially with an appropriately labeled herbicide with a different mode of action to achieve control if a naturally occurring resistant biotype is present in the field.
- Cultural and mechanical control practices, such as crop rotation or tillage, may also be used.
- To control weed escapes, including resistant biotypes, before they set seed, scout treated fields after applying this product.
- Thoroughly clean equipment before leaving any site known to contain resistant biotypes.

Because the presence of glyphosate resistance in weed populations is difficult to detect prior to use, Dow AgroSciences accepts no liability for any losses that may result from the failure of this product to control glyphosate-resistant weeds.

Glyphosate-Resistant Ryegrass (Not for Use in California)

Preemergence: To control other emerged weeds, apply this product in a tank mix with a preemergence herbicide labeled for control of ryegrass.

Preemergence and Postemergence: To control other emerged weeds, apply this product in a tank mix with a residual preemergence herbicide and a postemergence herbicide (other than glyphosate) labeled for control of ryegrass. Apply according to the herbicide label directions for optimum control of ryegrass.

Postemergence: To control other emerged weeds, apply this product in a tank mix with another postemergence herbicide labeled for control of ryegrass. Apply according to the herbicide label directions for optimum control of ryegrass.

Attention

Avoid contact of herbicide with foliage, green stems, exposed non-woody roots or fruit of crops, desirable plants and trees, because severe injury or destruction may result.

AVOID DRIFT. Use extreme care when applying this product to prevent injury to desirable plants and crops.

Do not allow the herbicide solution to mist, drip, drift or splash onto desirable vegetation since minute quantities of this product can cause severe damage or destruction to the crop, plants or other areas on which treatment was not intended. The likelihood of injury occurring from the use of this product increases when winds are gusty, as wind velocity increases, when wind direction is constantly changing or when there are other meteorological conditions that favor spray drift. When spraying, avoid combinations of pressure and nozzle type that will result in splatter or fine particles (mist) which are likely to drift. **Avoid applying at excessive speed or pressure.**

NOTE: Use of this product in any manner not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences. Keep container closed to prevent spills and contamination.

Spray Drift Management

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
- Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they must be observed.

The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory.

Aerial Drift Reduction Advisory

This section is advisory in nature and does not supercede the mandatory label requirements.

Importance of Droplet Size: The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent adverse effects from drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

Controlling Droplet Size:

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

- **Pressure** - Do not exceed the nozzle manufacturer's recommended pressures. Use the lower spray pressures for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle orientation** - Orienting nozzles so that the spray is parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Length: For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height: Applications must not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment: When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

Wind: Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity: When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions: Applications must not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas: The pesticide must only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

Mixing Directions

Use only clean, stainless steel, fiberglass, plastic or plastic-lined steel containers to mix, store and apply spray solutions of this product.

Eliminate any risk of siphoning the contents of the tank mix back into the carrier source while mixing. Use approved anti-back-siphoning devices where required by state or local regulations.

Note: Reduced results may occur if water containing soil is used, such as visibly muddy water or water from ponds and ditches that is not clear.

Accord® XRT II – Alone

This product mixes readily with water. Mix spray solutions of this product as follows:

1. Fill the mixing or spray tank with the required amount of clean water.
2. Add the specified amount of this product near the end of the filling process and mix well.
3. During mixing and application, foaming of the spray solution may occur. To prevent or minimize foaming, avoid the use of mechanical agitators, terminate by-pass and return lines at the bottom of the tank and, if needed, use an approved anti-foam or defoaming agent.

Accord® XRT II – Tank Mixing for use on any site listed on this label
 This product does not provide residual weed control. For residual weed control or to broaden the weed control spectrum, tank mix this product with other herbicides. Refer to the label of the tank mix partner for use sites and application rates. Read and carefully observe the precautionary statements and all other information on the labels of all herbicides used. Use according to the most restrictive label directions of any product in the mixture. A compatibility test may be done prior to using a product that has not been tank mixed before with Accord XRT II in your program. See testing procedure below.

The user is responsible for ensuring that the specific application being made is included on the label of the product used in the tank mix and is compatible with Accord XRT II, especially if using a generic product with active ingredients, such as 2,4-D, atrazine, dicamba, diuron, pendimethalin or other herbicide, is listed in the label.

Add the tank mix product to the tank as directed by the label. Maintain agitation and add the required amount of this product. Maintain good agitation at all times until the contents in the tank are sprayed. If the mixture is allowed to settle, thorough agitation is required to resuspend the mixture before spraying resumes. Keep the bypass line on or near the bottom of the tank to minimize foaming. The screen size in the nozzle or line strainers should be no finer than 50 mesh.

Tank Mix Compatibility Testing: Perform a jar test prior to mixing in a spray tank to ensure compatibility of Accord XRT II and other pesticides or carriers. Use a clear glass jar with lid and mix ingredients in the same order and proportions as will be used in the spray tank. The mixture is compatible if the materials mix readily when the jar is inverted several times. The mixture should remain stable after standing for 1/2 hour or, if separation occurs, should readily remix if agitated. An incompatible mixture is indicated by separation into distinct layers that do not readily remix when agitated and/or the presence of flakes, precipitates, gels, or heavy oily film in the jar. Use of an appropriate compatibility aid may resolve mix incompatibility. If the mixture is incompatible do not use that tank mix partner in tank mixtures.

Note: If tank mixing with a product containing triclopyr amine, such as Garlon® 3A herbicide or Capstone, ensure that the triclopyr amine product is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility.

To the extent consistent with applicable law, buyer and all users are responsible for all loss or damage in connection with the use or handling of mixtures of this product with herbicides or other materials that are not expressly specified in this labeling. Mixing this product with herbicides or other materials not specified on this label may result in reduced performance.

Handheld Sprayers

Prepare the desired volume of spray solution by mixing the amount of this product in water as shown in the following table:

Spray Concentration (percent)	Amount of This Product for Desired Volume		
	1 gal	25 gal	100 gal
0.5	2/3 fl oz	1 pt	2 qt
0.75	1 fl oz	24 fl oz	3 qt
1	1 1/3 fl oz	1 qt	1 gal
1.5	2 fl oz	1 1/2 qt	1 1/2 gal
2	2 2/3 fl oz	2 qt	2 gal
3.75	5 fl oz	3 3/4 qt	3 3/4 gal
5	6 1/2 fl oz	5 qt	5 gal
10	13 fl oz	10 qt	10 gal

For best results when using knapsack sprayers, mix the specified amount of this product with water in a larger container. Fill sprayer with the mixed solution.

Colorants or Dyes

Agriculturally-approved colorants or marking dyes may be added to this product. Colorants or dyes used in spray solutions of this product may reduce performance, especially at lower rates or dilutions. Use colorants or dyes according to the manufacturer's directions.

Application Equipment and Application Methods

Chemigation: Do not apply this product through any type of irrigation system.

This product may be applied with the following application equipment. Apply spray solutions in properly maintained and calibrated equipment capable of delivering desired volumes.

Aerial Application in All States Except California (see below for California aerial application information)

Apply this product using aerial spray equipment only under conditions as specified within this label.

Avoid drift. Do not apply when winds are gusty or under any other condition which favors drift. Drift may cause damage to any vegetation contacted to which treatment is not intended. To prevent injury to adjacent desirable vegetation, maintain appropriate buffer zones.

Do not directly apply to any body of water.

Use the specified rates of this herbicide in 3 to 25 gpa of water unless otherwise specified on this label. Refer to the specific use directions of this label for volumes and application rates.

Coarse sprays are less likely to drift; therefore, do not use nozzles or nozzle configurations that dispense spray as fine spray droplets. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure. A drift control additive may be used. When a drift control additive is used, carefully read and observe the precautionary statements and all other information specified on the additive label.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. **Prolonged exposure of this product to uncoated steel surfaces may result in corrosion and possible failure of the part. Landing gear components are most susceptible.** The maintenance of an organic coating (paint), which meets aerospace specification MIL-C-38413, may prevent corrosion.

Aerial Application in California Only

Use the following guidelines when aerial applications are made near crops or desirable perennial vegetation after bud break and before total leaf drop, and/or near other desirable vegetation or annual crops:

- Do not apply within 100 feet of all desirable vegetation or crop(s).
- If wind up to 5 miles per hour is blowing toward desirable vegetation or crop(s), do not apply within 500 feet of the desirable vegetation or crop(s).
- Winds blowing from 5 to 10 miles per hour toward desirable vegetation or crop(s) may require buffer zones in excess of 500 feet.
- Do not apply when winds are in excess of 10 miles per hour or when inversion conditions exist.

When this product is applied under the conditions described, it controls annual and perennial weeds listed in the label affixed to the container.

Only 2,4-D amine formulations may be used for aerial applications in California. Tank mixes with 2,4-D amine formulations may be applied by air in California for fallow and reduced tillage systems, and for alfalfa and pasture renovation applications only. Do not aerially apply any tank mixes with dicamba in California.

Additional Information for Fresno County, California: Within the boundaries of Fresno County, California, the following information applies only from February 15 through March 31:

- North: Fresno County line
- South: Fresno County line
- East: State Highway 99
- West: Fresno County line

Always read and follow the label directions and precautionary statements for all products used in the aerial application. Observe the following directions to minimize off-site movement during aerial applications of this product. Minimizing off-site movement is the responsibility of the grower, pest control advisor and aerial applicator.

Written Directions: A written direction **must** be submitted by or on behalf of the applicator to the Fresno County Agricultural Commissioner 24 hours prior to application. The written direction **must** state the proximity of surrounding crops and that conditions of each manufacturer's product label and this label have been satisfied.

Aerial Applicator Training and Equipment: Aerially applying this product is limited to pilots who have successfully completed a Fresno County Agricultural Commissioner and California Department of Pesticide Regulation approved training program for aerial application of herbicides. All aircraft must be inspected, critiqued in flight and certified at a Fresno County Agricultural Commissioner approved fly-in. To insure that proper rates of herbicides and adjuvants are being applied during commercial use, test and calibrate the spray equipment at appropriate intervals. Demonstration of performance at Fresno County Agricultural Commissioner approved fly-ins constitutes such documentation, or other written records showing calculations and measurement of flight and spray parameters acceptable to the Fresno County Agricultural Commissioner.

Applications at Night: Do not aerially apply this product earlier than 30 minutes prior to sunrise and/or later than 30 minutes after sunset. Doing so requires prior permission from the Fresno County Agricultural Commissioner.

Ground Application

Apply the specified rates of this product in 3 to 40 gpa of water as a broadcast spray unless otherwise specified on this label. Increase the spray volume within the rate range as density of weeds increases to ensure complete coverage. In order not to spray a fine mist, carefully select proper nozzles. Use flat fan nozzles for best results with ground application equipment. Check spray pattern for uniform distribution of spray droplets.

Handheld and Backpack Application

Apply to foliage of vegetation to be controlled. Do not spray to the point of runoff for applications made on a spray to wet basis. Use coarse sprays only. For low volume directed spray applications, spray coverage should be uniform with at least 50 percent of the foliage contacted. For best results, cover the top one-half of the plant. To ensure adequate spray coverage, spray both sides of large or tall woody brush and trees, when foliage is thick and dense, or where there are multiple sprouts.

Selective Equipment

This product may be diluted with water and applied through shielded applicators, hooded sprayers, wiper applicators or sponge bars to weeds listed on this label. Avoid contact of herbicide with desirable vegetation as serious injury or death is likely to occur.

Adjust application equipment used above desired vegetation so that the lowest spray stream or wiper contact is at least 2 inches above the desirable vegetation. Droplets, mist, foam, or splatter of the herbicide settling on desirable vegetation is likely to result in discoloration, stunting or destruction.

Better results are obtained when more of the weed is exposed to the herbicide solution. Weeds not contacted by the herbicide solution will not be affected. This may occur in dense clumps, severe infestations, or when the height of weeds varies so that not all weeds are contacted. If this occurs, repeat treatment may be necessary.

Shielded and Hooded Applicators

A shielded or hooded applicator directs the herbicide solution onto weeds while shielding desirable vegetation from the herbicide. A hooded sprayer is a shielded sprayer in which the spray pattern is totally enclosed, including the top, sides, front, and back. Use nozzles that provide uniform coverage within the treated area. Keep shields on these sprayers adjusted to protect desirable vegetation. **Exercise extreme care to avoid contact of herbicide with desirable vegetation.**

Wiper Applicators

Wiper applicators are devices that physically wipe appropriate amounts of this product directly onto the weed. Equipment must be designed, maintained and operated to prevent the herbicide solution from contacting desirable vegetation.

Adjust application equipment used over the top of desirable vegetation so that the wiper contact point is at least 2 inches above the desirable vegetation. Better results are obtained when more of the weed is exposed to the herbicide solution. Weeds should be a minimum of 6 inches above the desirable vegetation. Adjust the applicator height to ensure adequate contact with weeds as weeds not contacted by the herbicide solution will not be affected. Poor contact may occur when weeds are growing in dense clumps, in severe weed infestations, or when weed height varies dramatically. If this occurs, repeat treatment may be necessary.

Operate this equipment at ground speeds no more than 5 mph. Performance may be improved by reducing speed in areas of heavy weed infestations to ensure adequate wiper saturation. Better results may be obtained if two applications are made in opposite directions.

Droplets, mist, foam, or splatter of the herbicide settling onto desirable vegetation may result in discoloration, stunting or destruction. Avoid leakage or dripping onto desirable vegetation. Adjust height of applicator to ensure adequate contact with weeds. Keep wiping surfaces clean. Be aware that on sloping ground the herbicide solution may migrate, causing dripping on the lower end and drying of the wicks on the upper end of a wiper applicator.

Do not use wiper equipment when weeds are wet.

Mix only the amount of solution to be used during a one-day period as reduced activity may result from use of leftover solutions. Clean wiper parts by thoroughly flushing with water immediately after using this product.

Rope or Sponge Wick Applicators

Use 25 to 70 percent solutions of this product in water.

Panel Applicators and Pressure Feed Systems

Solutions ranging from 25 to 100 percent of this product in water may be used.

This product controls the following weeds when applied as directed:

corn, volunteer	sicklepod
panicum, Texas	Spanish needles
rye, common	starbur, bristly
shattercane	

This product suppresses the following weeds when applied as directed:

beggarweed, Florida	ragweed, common
bermudagrass	ragweed, giant
dogbane, hemp	smutgrass
dogfennel	sunflower
guineagrass	thistle, Canada
johnsongrass	thistle, musk
milkweed	vaseygrass
nightshade, silverleaf	velvetleaf
pigweed, redroot	

Injection Systems

This product may be used in aerial or ground injection spray systems. It may be used as a liquid concentrate or diluted prior to injecting into the spray stream. Do not mix this product with the concentrate of other products when using injection systems.

CDA Equipment

The rate of this product applied per acre by vehicle-mounted controlled droplet application (CDA) equipment must not be less than the amount specified in this label when applied by conventional broadcast equipment. For vehicle-mounted and handheld CDA equipment, apply in 2 to 15 gpa of water.

Controlled droplet application equipment produces a spray pattern that is not easily visible. Exercise extreme care to avoid spray or drift contacting the foliage or any other green tissue of desirable vegetation, as damage or destruction may result.

Application Directions

- Conservation Reserve Program (CRP), rangeland and permanent grass pastures;
- forest sites, conifer plantations;
- airports, barrow ditches, communication transmission lines, electrical power and utility rights-of-way, fencerows, gravel pits, industrial sites, military lands, mining and drilling areas, non-irrigation ditch banks, oil pads, ornamental sties, parking lots, petroleum tank farms, pipelines, railroads, roadsides, storage areas, storm water retention areas, substations, unimproved rough turf grasses, sod or turfgrass seed farms, vacant lots and other non-crop residential areas; and
- natural areas (open space) for example, campgrounds, parks, prairie management, trails and trailheads, recreation areas, wildlife openings and wildlife habitat and management areas;
- in and around seasonally dry wetlands;
- including grazed areas on all of these listed sites

This product may also be used in non-food crop sites, such as Christmas tree farms, plant nurseries, and sod or turfgrass seed farms.

Apply this product to control any weeds listed in the Weeds Controlled section of the label unless otherwise specified.

Cut Stump

This product will control regrowth of cut stumps and resprouts of many types of woody brush and tree species, some of which are listed below. Apply this product using suitable equipment to ensure coverage of the entire cambium. Cut trees or resprouts close to the soil surface. Apply a 50 percent solution with 50 percent water or 100 percent solution of this product to the freshly cut surface immediately after cutting. Delays in application may result in reduced performance. The cambium area next to the bark is the most vital area to wet but be sure to apply the herbicide solution to a complete ring of exposed cambium including when the bark may have torn down the side of the stump. For best results, make applications during periods of active growth and full leaf expansion.

alder	reed, giant
eucalyptus	saltcedar
madrone	sweetgum
oak	tan oak
pepper, Brazilian	willow
pine, Austrian	

Restrictions:

- Do not make cut stump applications when the roots of desirable woody brush or trees may be grafted to the roots of the cut stump. Some sprouts, stems, or trees may share the same root system.
- Adjacent trees that are of a similar age, height and spacing may indicate shared roots.

- Injury is likely to occur to non-treated stems or trees when one tree or more that shares a common root is treated.

Forestry Management

This product is for the control or partial control of woody brush, trees and herbaceous weeds in forestry. This product is also for use in preparing or establishing wildlife openings within these sites and maintaining logging roads.

See Tank Mixing section above for more information.

Note: For forestry site preparation, make sure the tank mix product is approved for use prior to planting the desired species. Observe planting interval restrictions.

Note: If tank mixing with a product containing triclopyr amine, such as Garlon® 3A herbicide or Capstone, ensure that the triclopyr amine product is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility. Site Preparation

In forestry sites, use this product in site preparation prior to planting any tree species including Christmas trees, eucalyptus, hybrid tree cultivars, and establishing silvicultural nursery sites.

For optimum results, use 4 – 8 quarts of this product per acre. Use a higher rate in the rate range for control or partial control of woody brush, trees and hard to control perennial herbaceous weeds. For best results, apply to actively growing woody brush and trees after full leaf expansion and before fall color and leaf drop. Use increased rates within the rate range to control perennial herbaceous weeds. Use a lower rate in the rate range to control annual herbaceous weeds. Apply to foliage of actively growing annual herbaceous weeds anytime after emergence.

Restrictions:

- Do not apply this product as an over the top broadcast spray for forestry conifer or hardwood release unless otherwise specified on this label.

Conifer Release, Mid-Rotation Conifer Release, and Hardwood Release

Apply this product as a directed spray, with selective equipment, and as an individual plant treatment for woody and herbaceous weeds in conifer plantations and hardwood sites, Christmas tree plantations and silvicultural nurseries for conifer release or mid-rotation release applications around conifers and hardwoods.

Make applications using application techniques that prevent or minimize direct contact to the foliage of crop trees (including in stands of pine, other conifers, or hardwood). Avoid contact of spray drift, mist or drips with foliage, green bark or non-woody surface roots of desirable plant species. Use directed sprays and ground equipment with nozzles oriented to target only undesirable understory vegetation below the crop tree canopy.

Mid-Rotation Conifer Release and Spot Treatments for Crop Tree Release and Timber Stand Improvement

Apply this product as a ground broadcast or directed spray application for mid-rotation release applications under the canopy of pines, other conifers and hardwoods. Make applications using application techniques that prevent or minimize direct contact to the foliage of crop trees (including in stands of pine, other conifers, or hardwoods). Use directed sprays and ground equipment with nozzles oriented to target only undesirable understory vegetation below the crop tree canopy. When making spot applications for woody and herbaceous weeds, do not allow spray to contact the foliage of desirable crop trees.

Unimproved rough turf and Ornamental Sites

See Tank Mixing section above for more information.

Note: If tank mixing with a product containing triclopyr amine, such as Garlon® 3A herbicide or Capstone, ensure that the triclopyr amine product is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility.

Spot Treatment, Trim and Edge, and Bareground (can be used on any site on this label)

This product may be on any industrial turfgrass and ornamental site listed on the label for spot treatment of unwanted vegetation, for trim and edge application around objects, and to eliminate unwanted weeds before a construction project begins or asphalt or other material is laid for a road. This product may be used prior to planting an area to ornamentals, flowers, or turfgrass (sod or seed) to remove unwanted weeds growing in established shrub beds or ornamental plantings.

To maintain bareground, repeated applications of this product may be used.

This product provides control of emerged annual weeds and control or partial control of emerged perennial weeds, woody brush and trees when applied in a tank mix to bareground.

See Tank Mixing section above for more information.

Note: If tank mixing with a product containing triclopyr amine, such as Garlon® 3A herbicide or Capstone, ensure that the triclopyr amine product is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility.

To control or partially control the following perennial weeds, apply 1.5 to 3 pints of this product plus 2 to 4 oz of Oust XP per acre.

bahiagrass	fescue, tall
bermudagrass	johnsongrass
broomsedge	poorjoe
dallisgrass	quackgrass
dock, curly	vaseygrass
dogfennel	vervain, blue

Chemical Mowing

This product suppresses perennial and annual grasses listed in this section to serve as a substitute for mowing.

Perennials: Apply this product at a rate of 6 fl oz per acre to suppress tall fescue, fine fescue, orchardgrass, quackgrass or reed canarygrass covers. Use 4.6 fl oz of this product per acre for suppression of Kentucky bluegrass. Apply treatments in 10 to 40 gpa. Use only in areas where some temporary injury or discoloration of perennial grasses can be tolerated.

Annuals: For growth suppression of annual ryegrass, wild barley and wild oats growing in coarse turfgrass on roadsides or other industrial areas, apply 3 to 3.75 fl oz of this product in 10 to 40 gpa. Apply when annual grasses are actively growing and before the seedheads are in the boot stage of development. Treatments may cause injury to the desired grasses.

Dormant Bermudagrass and Bahiagrass: This product may be used to control or partially control many winter annual weeds and tall fescue for effective release of dormant bermudagrass and bahiagrass. Treat only when turfgrass is dormant and prior to spring greenup.

Apply 6 fl oz to 1.5 quarts of this product per acre in 10 to 40 gpa of water. Use only in areas where bermudagrass or bahiagrass are desirable groundcovers and where some temporary injury or discoloration can be tolerated. For best control of winter annuals, apply when plants are less than 6 inches tall in an early growth stage, and after most of them have germinated. For best control of tall fescue, apply when the tall fescue is at or beyond the 4 to 6 leaf stage.

Treatments in excess of 12 fl oz of this product per acre may result in injury or delayed greenup in highly maintained areas, such as golf courses and lawns.

Restrictions:

- Do not apply tank mixes of this product plus Oust XP in highly maintained turfgrass areas where grass selectively is desired.

Actively Growing Bermudagrass: This product may be used to control or partially control many annual and perennial weeds for effective release of actively growing bermudagrass. Injury of some bermudagrass could occur from applying this product, but the bermudagrass will recover under moist conditions after the effects of the product wear off. Use only in areas where some temporary injury or discoloration can be tolerated.

Apply 12 to 35 fl oz of this product in 10 to 40 gpa to control or partially control many annual and perennial weeds in order to effectively release actively growing bermudagrass. Use a lower rate in the rate range to control weeds less than 6 inches tall (or runner length). Use a higher rate in the rate range as weeds increase in size or as the flower or seed head forms. This product provides partial control of the following perennial species in actively growing bermudagrass.

bahiagrass	johnsongrass
bluestem, silver	trumpetcreeper
fescue, tall	vaseygrass

Restrictions:

- Do not apply more than 12 fl oz of this product per acre in highly maintained turfgrass areas where grass selectively is desired.

Tank Mixes: Tank mix this product with Outrider or Oust XP for a broader weed control spectrum in actively growing bermudagrass. Apply the tank mixes only on well established bermudagrass where some temporary injury or discoloration can be tolerated.

Apply 6 fl oz to 1.5 pints of this product per acre with 0.75 to 1.33 oz of Outrider to control or partially control johnsongrass and other weeds listed on the Outrider label. Use the higher rate in the rate range of both products to control annual or perennial weeds more than 6 inches tall.

Apply 12 fl oz to 1.5 pints of this product per acre with 1 to 2 oz of Oust XP for enhanced control of weeds listed on the Oust XP label. Use the lower rate in the rate range to control annual weeds less than 6 inches tall (or runner length) listed on the labels. Use a higher rate in the rate

range as annual weeds increase in size and as the flower or seed head forms. This tank mix provides partial control of the following perennial weeds in actively growing bermudagrass.

bahiagrass	fescue, tall
blackberry	johnsongrass
bluestem, silver	poorjoe
broomsedge	raspberry
dallisgrass	trumpetcreeper
dewberry	vaseygrass
dock, curly	vervain, blue
dogfennel	

Restrictions:

- Do not apply tank mixtures of this product plus Oust XP in highly maintained bermudagrass where grass selectively is desired.

Actively Growing Bahiagrass: To suppress vegetative growth and seed head inhibition of bahiagrass for approximately 45 days, apply 4.6 fl oz of this product in 10 to 40 gpa of water. Apply one to two weeks after full greenup or after mowing to a uniform height of 3 to 4 inches and prior to seed head emergence.

To suppress growth of bahiagrass up to 120 days, apply 3.5 fl oz of this product per acre and follow it with an application of 2 to 3.5 fl oz per acre approximately 45 days later. Do not make more than two growth suppression applications per year unless otherwise directed.

Tank Mixes: Tank mix this product with Outrider or Oust XP for a broader week control spectrum in actively growing bermudagrass. Apply the tank mixes only on well established bahiagrass where some temporary injury or discoloration can be tolerated.

Apply 4.6 fl oz of this product per acre with 0.75 to 2 oz of Outrider per acre to control or partially control johnsongrass and other weeds listed on the Outrider label. Use the higher rate in the rate range for Outrider to control annual and perennial weeds more than 6 inches tall.

Apply 4.6 fl oz of this product per acre with 0.25 oz of Oust XP per acre for enhanced control of weeds listed on the Oust XP label in actively growing bahiagrass one to two weeks following an initial spring mowing. Do not apply this tank mix more than once per year.

Turfgrass Renovation, Seed, or Sod Production

This product controls most existing vegetation prior to renovating turfgrass areas or establishing turfgrass grown for seed or sod. For maximum control of existing vegetation, delay planting or sodding to determine if any regrowth from escaped underground plant parts occurs. When repeat treatments are necessary, sufficient regrowth must be attained prior to application. For warm season turfgrass, such as bermudagrass, summer or fall applications provide the best control. Where existing vegetation is growing under mowed turfgrass management, apply this product after omitting at least one regular mowing to allow sufficient growth for good interception of the spray.

Desirable turfgrass may be planted following the above procedures.

Handheld equipment may be used for spot treatment of unwanted vegetation growing in existing turfgrass. Use broadcast or handheld equipment to control sod remnants or other unwanted vegetation after sod is harvested.

Restrictions:

- Do not disturb soil or underground plant parts before treatment.
- Delay tillage or renovation techniques, such as vertical mowing, coring or slicing, for seven days after application to allow translocation into underground plant parts.
- If the application rate used is 2 quarts or less per acre, no waiting period is required between treatment and feeding or grazing livestock.
- If the application rate used is more than 2 quarts per acre, remove livestock before applying this product and wait 8 weeks after applying before resuming grazing or harvesting.

Glyphosate-Resistant Horseweed

(Not for Use in California)

Use this product to control and manage glyphosate-resistant horseweed (marehail, *Conyza canadensis*). Apply 1.5 pints of this product per acre before marehail is more than 6 inches in height. Make applications when horseweed is still in the rosette stage of growth to enhance control.

See Tank Mixing section above for more information.

Natural Areas and Wildlife Habitat Management

See Tank Mixing section above for more information.

Habitat Restoration and Management

This product may be used to control exotic and other undesirable vegetation in habitat management and natural areas, including rangeland and wildlife refuges. Apply to allow recovery of native plant species, prior to planting desirable native species, and for similar broad spectrum vegetation control requirements. Apply spot treatments to selectively remove unwanted plants for habitat maintenance and enhancement.

Wildlife Food Plots

This product may be used as a site preparation treatment to control annual and perennial weeds prior to planting wildlife food plots. Any wildlife food species may be planted after applying this product, or native species may be allowed to repopulate the area. If tillage is needed to prepare a seedbed, wait 7 days after application before tillage to allow translocation into underground plant parts.

Hollow Stem Injection

Apply this product through handheld injection devices that deliver the specified amount of this product into targeted hollow stem plants growing in any site listed on this label. To control the following hollow stem plants, follow the use directions below:

Target Plants		Use Directions
Common Name	Scientific Name	
castorbean	<i>Ricinus communis</i>	Inject 4 mL of this product per plant into the lower portion of the main stem
hemlock, poison	<i>Conium maculatum</i>	Inject one leaf cane per plant, 10 to 12 inches above the root crown, with 5 mL of a 5 percent by volume solution of this product.
hogweed, giant	<i>Heracleum mantegazzianum</i>	Inject one leaf cane per plant 12 inches above the root crown with 5 mL of a 5 percent by volume solution of this product.
horsetail, field	<i>Equisetum arvense</i>	Inject one segment above the root crown with 0.5 mL of this product per stem using a low volume syringe capable of accurately delivering this amount of product.
knotweed, bohemian and other species	<i>Polygonum bohemicum</i>	Inject 5 mL of this product per stem between the second and third internode.
knotweed, giant	<i>Polygonum sachalinense</i>	
knotweed, Japanese	<i>Polygonum cuspidatum</i>	
reed, giant	<i>Arundo donax</i>	Inject 6 mL of this product per stem between the second and third internode.
thistle, Canada	<i>Cirsium arvense</i>	Cut 8 to 9 of the tallest plants at bud stage in a clump with clippers. Use a cavity needle pushed into the stem center and then slowly removed as 0.5 mL of this product per stem is injected into the stem.

Restrictions:

- Do not apply more than a total of 2 gallons of this product per acre for all treatments combined. At 5 mL per stem, 2 gallons will treat approximately 1300 stems per acre.

Injection and Frill (Woody Brush and Trees)

This product may be used to control woody brush and trees by injection or frill applications. Apply this product using suitable equipment that penetrates into the living tissue. Apply the equivalent of 1 mL (0.04 fl oz) of this product per each two to three inches of trunk diameter at breast height (DBH). This is best achieved by applying a 50 to 100 percent

concentration of this product either to a continuous frill around the tree or as cuts evenly spaced around the tree below all branches. As tree diameter increases in size, better results are achieved by applying diluted material to a continuous frill or more closely spaced cuttings. Do not make any applications that allow runoff to occur from frilled or cut areas in species that exude sap freely. In species such as this, make the frill or cuts at an oblique angle to produce a cupping effect and use a 100 percent undiluted concentration of this product. For best results, apply during periods of active growth and after full leaf expansion. This product controls many species; some of these species are listed below.

Control
oak
poplar
sweetgum
sycamore

Partial Control
black gum
dogwood
hickory
maple, red

Non-Food Tree, Shrub, or Vine Production Sites (Not for Use in California)

Types of Applications: Site preparation, post-directed trim and edge, wiper application

This product may be used for general weed control prior to the planting of and around established ornamentals or any woody tree, shrub, or vine species, including arborvitae, azalea, boxwood, crabapple, eucalyptus, euonymus, fir, Douglas- fir, joboba, hollies, lilac, magnolia, maple, oak, poplar, privet, pine, spruce, and yew, growing in plant nurseries, on Christmas tree farms, or on other non-food tree production sites.

Use this product to control weeds growing in and around greenhouses and shadehouses. During application, desirable vegetation must not be present. Air circulation fans must be turned off until after the application has dried.

Do not use this product as an over the top broadcast spray in ornamentals and Christmas trees unless otherwise directed. Take care to avoid contact of spray, drift, or mist with foliage or green bark of desirable ornamental species.

See Tank Mixing section above for more information.

Site Preparation

Use this product prior to planting any tree, shrub, or vine, including Christmas tree species, in a nursery or production setting.

Post-Directed Trim and Edge

Use this product as a post-directed spray around established woody ornamental species or to trim and edge around trees, buildings, sidewalks, roads, potted plants, and other objects in a production setting. Protect desirable plants from the spray solution by using shields or coverings made of cardboard or other impermeable material.

Wiper Application

Use this product through wick or other suitable wiper applicators to control or partially control undesirable vegetation around established trees, shrubs, or vines. See Selective Equipment section of this label for further information about the proper use of wiper applicators.

Parks, Recreational, and Residential Areas

Use this product in parks, recreational, and residential areas. Apply it with any application equipment described in this label. Use this product to trim and edge around trees, fences, paths, around buildings, sidewalks, and other objects in these areas. This product may be used for spot treatment of unwanted vegetation, eliminate unwanted weeds growing in established shrub beds or ornamental plantings, and prior to planting an area to ornamentals, flowers, turfgrass (sod or seed), or prior to laying asphalt or other road material, or beginning construction projects.

See Tank Mixing section above for more information.

Poplar (*Populus* spp.) Production

Types of Applications: Preplant, in-crop, wiper applicator

Preplant

This product is for use prior to planting *Populus* species, including hybrid poplars and hybrid cottonwoods.

In-Crop

Use a 1.5 percent spray solution as a spray to wet application for the control of undesirable woody brush and trees. To control herbaceous weeds, use a 0.75 to 1.5 percent solution. Avoid contact of spray, drift, or mist with foliage, green bark or non-woody surface roots of poplar trees.

Wiper Applicator

This product may be used through wick or other suitable applicators for control or partial control of grass and broadleaf weeds listed on the label.

For wick applicators, mix 2.75 quarts of this product with 2 gallons of water to make a 25 percent solution. For wiper systems that can handle thicker solutions, such as force fed systems, a solution containing 25 to 100 percent of this product may be used.

For best results, allow the herbicide solution to contact the maximum amount of leaf surface. As weed density increases, decrease equipment speed to allow sufficient herbicide to flow to wet all surfaces contacted. Weeds not contacted will be unaffected.

To avoid injury or death of desirable plants, prevent contact of herbicide with non-target vegetation, including foliage, green stems, exposed non-woody roots or fruit.

Railroads

All of the instructions in the Industrial Sites and Unimproved rough turf and Ornamental Sites sections apply to railroads.

Bareground, Ballast and Shoulders, Crossings, and Spot Treatment

Use this product to maintain bare ground on railroad ballast and shoulders. Repeat applications of this product may be used as weeds emerge to maintain bare ground. Use this product to control tall growing weeds to improve line of sight at railroad crossings and reduce the need for mowing along rights-of-way. For crossing applications, use up to 80 gpa of spray solution.

See Tank Mixing section above for more information.

Note: If tank mixing with a product containing triclopyr amine, such as Garlon® 3A herbicide or Capstone, ensure that the triclopyr amine product is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility.

Brush Control

Use this product to control woody brush and trees on railroad rights-of-way. Apply 3 quarts to 2 gallons of this product per acre as a broadcast spray, using boom-type or boomless nozzles. Applications up to 80 gpa of spray solution may be used. Apply a 3/4 to 1.5 percent solution of this product when using high volume spray to wet applications. Apply a 4 to 7 percent solution of this product when using low volume directed sprays for spot treatment.

See Tank Mixing section above for more information.

Note: If tank mixing with Garlon® 3A herbicide, ensure that Garlon 3A is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility.

Note: If tank mixing with a product containing triclopyr amine, such as Garlon® 3A herbicide or Capstone, ensure that the triclopyr amine product is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility.

Pasture Management

Types of Applications: Preplant, preemergence, pasture renovation, spot treatment, wiper applicator, selective weed control in dormant pastures

Preplant, Preemergence, Pasture Renovation

Apply this product to control weeds prior to planting or prior to the emergence of forage grasses. This product may also be applied postemergence to any pasture grass (other than food crops in the *Gramineae* family), including bahiagrass, bermudagrass, bluegrass, brome, fescue, guineagrass, kikuyugrass, orchardgrass, pangola grass, ryegrass, timothy, and wheatgrass, to control these species prior to replanting.

Restrictions:

- If the application rate used is 2.25 quarts or less per acre, no waiting period is required between treatment and feeding or grazing livestock.
- If the application rate used is more than 2.25 quarts per acre, remove livestock before applying this product and wait 8 weeks after applying before resuming grazing or harvesting.

Spot Treatment and Wiper Applicator

To control tall weeds, apply this product in pastures as a spot treatment or over the top of desirable grasses using a wiper applicator. Repeat applications may be made in the same area every 30 days.

Restrictions:

- The entire pasture or any portion of it may be treated when using 2.25 quarts or less of this product per acre for spot treatments or wiper applications.
- No more than 10 percent of the total pasture may be treated at any one time when using more than 2.25 quarts of this product per acre for spot treatments or wiper applications.
- To achieve maximum performance, remove domestic livestock before application and wait 7 days after application before grazing livestock or harvesting for feed.

Selective Weed Control in Dormant Pastures

Apply this product to dormant pastures to suppress competitive growth and seed production of annual weeds and undesirable vegetation. Apply 9 to 12 fl oz of this product per acre by broadcast application equipment. Apply in early spring before desirable perennial grasses break dormancy and initiate green growth, or in late fall after desirable perennial grasses have reached dormancy.

Restrictions:

- If this product is applied when plants are not dormant, some stunting of perennial grasses will occur.
- Using a higher rate in the rate range could cause stand reduction.
- Do not apply more than a total of 2.25 quarts of this product per acre per year to pasture grasses except for renovation use.

There is no waiting period between application and grazing or harvesting

Rangelands

Apply 2.5 lb ai per acre to control or suppress many annual weeds growing in perennial cool and warm season grass rangelands, pastures, and grassy industrial sites. Preventing weed seed production is critical to the successful control of annual grassy weeds invading these perennial grass sites. Eliminate most of the viable seeds with follow up applications in sequential years. Delay grazing of treated areas to encourage growth of desirable perennials. Allowing desirable perennials to flower and reseed in the treated area will encourage successful transition.

Bromus: Use this product to control or suppress downy brome (*Bromus tectorum*), Japanese brome (*Bromus japonicus*), soft chess (*Bromus mollis*), cheatgrass (*Bromus secalinus*), cereal rye and jointed goatgrass found in rangelands, pastures and grassy industrial sites. Apply 6 to 12 fl oz of this product per acre as a broadcast treatment.

For best results, coincide treatments with early seedhead emergence of the most mature plants. Delaying the application until this growth stage maximizes the emergence of other weedy grass flushes. Make applications to the same site each year until seed banks are depleted and the desirable perennial grasses become established on the site.

Medusahead: Apply 12 fl oz of this product per acre to control or suppress medusahead at the 3-leaf stage when plants are actively growing. Delaying applications beyond this stage results in reduced or unacceptable control. Repeat applications in subsequent years to eliminate the seedbank before reestablishing desirable perennial grasses. Apply in the fall or spring.

Apply by ground or air. Make aerial applications for these uses with fixed wing or helicopter equipment. For aerial applications, apply in 2 to 10 gpa of water. For ground applications, apply in 10 to 20 gpa of water.

Spot Treatment Wiper Application

Apply this product in rangeland, pastures, or industrial sites as a spot treatment or over the top of desirable grasses using wiper applicators to control tall weeds. Make repeat applications in the same area at 30-day intervals.

Restrictions:

- The entire site or any portion of it may be treated when using 2.25 quarts or less of this product per acre for spot treatments or wiper applications.
- No more than 10 percent of the total site may be treated at any one time when using more than 2.25 quarts of this product per acre for spot treatments or wiper applications.
- To achieve maximum performance, remove domestic livestock before application and wait 7 days after application before grazing livestock or harvesting for feed.

Roadsides

All of the instructions in the Industrial sites and Unimproved rough turf and Ornamental Sites section apply to roadsides.

See Tank Mixing section above for more information.

Note: If tank mixing with a product containing triclopyr amine, such as Garlon® 3A herbicide or Capstone, ensure that the triclopyr amine product is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility.

Roadside Shoulder Treatments

Use this product on road shoulders. Apply it with boom sprayers, shielded boom sprayers, high volume off-center nozzles, handheld equipment, and similar equipment.

Guardrails and Other Obstacles to Mowing

Use this product to control weeds growing under guardrails and around signposts and other objects along the roadside.

Spot Treatment

Use this product as a spot treatment to control unwanted vegetation growing along roadsides.

Release of Bermudagrass or Bahiagrass

Dormant Applications: Use this product to control or partially control many winter annual weeds and tall fescue for effective release of dormant bermudagrass or bahiagrass. Treat along roadsides only when turfgrass is dormant and prior to spring greenup. See Unimproved rough turf Management section for use directions to control weeds in dormant bermudagrass and bahiagrass.

Actively Growing Bermudagrass

Use this product to control or partially control many annual and perennial weeds for effective release of actively growing bermudagrass. See Unimproved rough turf Management section for use directions to control weeds in actively growing bermudagrass.

Actively Growing Bahiagrass

Use this product for suppression of vegetable growth and seedhead inhibition of bahiagrass, and to control or partially control many annual

and perennial weeds for effective release of actively growing bahiagrass along roadsides. See Turfgrass Management section for use directions to control weeds in actively growing bahiagrass.

Turfgrass Seed and Sod Production

Types of Applications: Preplant, at-planting, preemergence, removal of established stands, renovation, site preparation, shielded sprayer, wiper applicator, spot treatment, creating rows in annual ryegrass

Preplant, At-Planting, Preemergence, Removal of Established Stands, Renovation, and Site Preparation

Applying this product eliminates most existing vegetation for the purpose of renovating turfgrass or forage grass seed areas, and for establishing turfgrass grown for sod. Using this product also destroys any remaining undesired grass vegetation when a production field is converted to an alternate crop or species. This product must be applied before, during, or after planting or for renovation purposes, and, to avoid crop injury, must be applied prior to crop emergence.

For the maximum control of existing vegetation, delay planting in order to determine if any regrowth from underground plant parts occur. If existing vegetation is growing under mowed turfgrass management, apply this product after eliminating at least one regular mowing. This allows sufficient turfgrass growth for good interception of the herbicide spray. If a repeat application is necessary, there must be sufficient regrowth prior to reapplication.

For warm season turfgrass, such as bermudagrass, a summer or fall application provides the best control. After the sod is harvested, broadcast application equipment may be used to control sod remnants or other unwanted vegetation. Up to 1 gallon per acre may be used to totally remove established stands of tough to kill turfgrass species.

Restrictions:

- Do not disturb soil or underground plant parts before application.
- Delay tillage or renovation techniques, such as vertical mowing, coring, and slicing, for 7 days after application to allow translocation of this product into underground plant parts.
- If the application rate used is 2 quarts or less per acre, no waiting period is required between treatment and feeding or grazing livestock.
- If the application rate used is more than 2 quarts per acre, remove livestock before applying this product and wait 8 weeks after applying before resuming grazing or harvesting.

Shielded Sprayer

Apply 1.5 pints to 2 quarts of this product in 10 to 20 gpa to control weeds growing between turfgrass seed rows. Planting in uniform, straight rows aids this type of application. For best results, apply when the turfgrass seed plants are small enough to easily pass by the protective shields of the sprayer. Any contact of this product with desirable vegetation may result in discoloration, stunting, or destruction. Any such damage is the sole responsibility of the applicator.

Wiper Applicator

Apply this product over the top of desirable turfgrass using a wiper applicator to control tall weeds. Any contact of this product with desirable vegetation may result in discoloration, stunting, or destruction. Any such damage is the sole responsibility of the applicator.

Spot Treatment

Apply this product in a 1 percent solution with a handheld sprayer to control weeds within established vegetation prior to heading of turfgrass grown for seed. After sod is harvested, handheld equipment may be used to control sod remnants or other unwanted vegetation. Spraying this product on turfgrass will kill it along with the weeds. Use care to not spray or allow the spray to drift outside of the target area in order to avoid unwanted turfgrass injury or destruction.

Creating Rows in Annual Ryegrass

Apply 12 fl oz to 1.5 pints of this product per acre to create rows in annual ryegrass. For best results, apply before ryegrass reaches 6 inches in height. Use a higher rate in the rate range when ryegrass is more than 6 inches tall.

Set the nozzle height to establish the desired row spacing. For best results, use low pressure nozzles or drop nozzles designed to target the application over a narrow band. Use care to not spray or allow the spray to drift outside of the target area in order to avoid unwanted turfgrass destruction.

Utility Sites

Use this product along electrical power, pipeline, and telephone rights-of-way, and other sites associated with these utility rights-of-way, such as substations, access roads, railroads, or similar rights-of-way that run in conjunction with utilities.

Use this product for bare ground, trim and edge around objects, spot treatment of unwanted vegetation, and to eliminate unwanted weeds growing in established shrub beds or ornamental plantings. Use this

product prior to planting a utility site to ornamentals, flowers, turfgrass (sod or seed), or beginning construction projects. As weeds emerge, make a repeat application of this product to maintain bare ground.

Use this product in preparing or establishing wildlife openings within these sites, maintaining access roads, and side trimming along utility rights-of-way. To control herbaceous weeds, use a lower rate in the rate range. Use a higher rate in the rate range to control dense stands or tough to control woody brush and trees.

See Tank Mixing section above for more information.

Note: If tank mixing with a product containing triclopyr amine, such as Garlon® 3A herbicide or Capstone, ensure that the triclopyr amine product is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility.

Weeds

Use a higher rate in the rate range when weed growth is heavy, dense, or growing in an undisturbed (non-cultivated) area. The performance of this product may be reduced when applying to weeds heavily covered with dust. If weeds have been mowed, grazed, or cut, allow regrowth to occur before applying this product.

If a handheld sprayer is used to apply this product on a spray to wet technique, ensure that the spray coverage is uniform and complete, and at least 50 percent of the foliage, or the top one-half of the plant, is sprayed. Spray both sides of large or tall weeds, thick or dense foliage, or multiple sprouts in order to ensure complete coverage.

After applying this product, if the soil must be tilled or the weeds mowed, wait 7 days before tilling, mowing, or removing residual vegetation to allow translocation of this product into underground plant parts.

Apply 1 to 1.75 gallons of this product per acre for enhanced results to control tough to control perennial weeds, woody brush and trees, plants growing under stressed conditions, or in areas of dense vegetation.

See Tank Mixing section above for more information.

Note: If tank mixing with a product containing triclopyr amine, such as Garlon® 3A herbicide or Capstone, ensure that the triclopyr amine product is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility.

Annual Weeds

Apply 1.5 pints of this product per acre if weeds are less than 6 inches in height or runner length. Use 1.25 to 3 quarts of this product per acre if weeds are more than 6 inches in height or runner length, or when weeds are growing under stressed conditions. Use a higher rate in the rate range for tough to control species regardless of the size of the weed at the time of application. Treat tough to control weeds early when they are relatively small.

Apply a 0.4 percent solution of this product as a spray to wet application to weeds less than 6 inches in height or runner length. Use a 0.7 to 1.5 percent solution for annual weeds more than 6 inches tall or for any weeds growing under stressed conditions. Use the higher concentration for tough to control species or for weeds more than 24 inches tall. Apply prior to seedhead formation in grass or bud formation in broadleaf weeds.

Use a 4 to 7 percent solution of this product for low volume directed spray applications.

Rate Table

Weed Species

annoda, spurred	dwarf dandelion
barley	eastern manna grass
barnyard grass	eclipta
bassia, fivehook	fall panicum
bittercress	false dandelion
bluegrass, annual	false flax, smallseed
bluegrass, bulbous	fiddleneck
brome, downy	field pennycress
brome, Japanese	filaree
browntop panicum	fleabane, annual
buttercup	fleabane, hairy (<i>Conyza bonariensis</i>)
Carolina foxtail	fleabane, rough
Carolina geranium	Florida pusley
castorbean	foxtail
cheatgrass	goatgrass, jointed
cheeseweed (<i>Malva parviflora</i>)	goosegrass
chervil	grain sorghum (milo)
chickweed	groundsel, common
cocklebur	hemp sesbania
copperleaf, hophornbeam	henbit
corn	horseweed/marestail (<i>Conyza canadensis</i>)
corn speedwell	itchgrass
crabgrass	

johnsongrass (seedling)	sandbur, field
jungerlice	shattercane
knotweed	shepherd's-purse
kochia	sicklepod
lambsquarters	signalgrass, broadleaf
little barley	smartweed, ladysthumb
London rocket	smartweed, Pennsylvania
mayweed	sowthistle, annual
medusahead	Spanish needles
morningglory (<i>Ipomoea</i> spp.)	speedwell, purslane
mustard, blue	sprangletop
mustard, tansy	spurge, annual
mustard, tumble	spurge, prostrate
mustard, wild	spurge, spotted
nightshade, black	spurry, umbrella
oats	stinkgrass
pigweed	sunflower
plains/tickseed coreopsis	teaweed/prickly sida
prickly lettuce	Texas panicum
puncturevine	velvetleaf
purslane, common	Virginia copperleaf
ragweed, common	Virginia pepperweed
ragweed, giant	wheat
red rice	wild oats
Russian thistle	witchgrass
rye	woolly cupgrass
ryegrass	yellow rocket

Perennial Weeds

Best results are obtained when perennial weeds are treated after they reach the reproductive stage of growth (seedhead initiation in grasses and bud formation in broadleaves). Best results are obtained when non-flowering plants are treated when they reach a mature stage of growth. In many situations, applications are required prior to these growth stages. Under these conditions, use a higher rate in the rate range.

When using spray to wet treatments with handheld equipment, ensure thorough coverage of the plant. For best results, use a 1.5 percent solution on harder to control perennials, such as bermudagrass, dock, field bindweed, hemp dogbane, milkweed and Canada thistle.

Use a 4 to 7 percent solution of this product in low volume directed spray applications.

Rate Table

Weed Species	Rate (pt/acre)	Handheld (% Solution)
alfalfa	1.5 - 3	1.5
partial control		
alligatorweed	6	1
partial control		
anise (fennel)	1.5 - 6.5	1 - 1.5
bahiagrass	4.5 - 7.5	1.5
beechgrass, European (<i>Ammophila arenaria</i>)	--	3.5
bentgrass	2.25	1.5
partial control		
bermudagrass	4.5 - 7.5	1.5
bermudagrass, water (knotgrass)	1.5	
bindweed, field	0.75 - 7.5	
bluegrass, Kentucky	3	
blueweed, Texas	4.5 - 7.5	
brackenfern	4.5 - 6	1
bromegrass, smooth	1.5 - 3	1.5
bursage, woolly-leaf	--	
canarygrass, reed	3 - 4.5	
cattail	4.5 - 7.5	
clover, red, white		
cogongrass		
dallisgrass		
dandelion		
dock, curly		
dogbane, hemp	6	
fescue (except tall)	4.5 - 7.5	
fescue, tall	1.5 - 4.5	

Rate Table (Cont.)

Weed Species	Rate (pt/acre)	Handheld (% Solution)
German ivy	1.75 - 3.25	1 - 1.5
guineagrass	4.5	1
horsenettle	4.5 - 7.5	1.5
horseradish	6	
iceplant	1.75	1.5 - 2
Japanese knotweed	4.5	2
Jerusalem artichoke	4.5 - 7.5	1.5
johnsongrass	0.75 - 4.5	1
kikuyugrass	3 - 4.5	1.5
knapweed	6	
lantana	-	1
lespedeza	4.5 - 7.5	1.5
milkweed, common	4.5	
muhly, wirestem	1.5 - 3	
mullein, common	4.5 - 7.5	
napierrgrass		
nightshade, silverleaf	3	
nutsedge, purple, yellow	0.75 - 4.5	1 - 1.5
orchardgrass	1.5 - 3	1.5
oriental bittersweet	4.5	1.5
pampasgrass	4.5 - 7.5	1 - 1.5
paragrass	4.5 - 7.5	1.5
pepperweed, perennial	5.4	1.5
phragmites	4.5 - 7.5	1 - 1.5
partial control		
poison hemlock	1.5 - 5.4	1 - 1.5
quackgrass	1.5 - 4.5	1.5
redvine	1.25 - 3	
partial control		
reed, giant	6 - 7.5	1.5
ryegrass, perennial	1.5 - 4.5	1
smartweed, swamp	4.5 - 7.5	1.5
sowthistle, perennial	3 - 4.5	
spurge, leafy	--	
partial control		
starthistle, yellow	3	1.5
sweet potato, wild	--	
partial control		
thistle, artichoke	1.5 - 4.5	1 - 1.5
thistle, Canada	3 - 4.5	1.5
timothy	3 - 4.5	
torpedograss	6 - 7.5	
partial control		
trumpet creeper	3	1.5
partial control		
vaseygrass	4.5 - 7.5	1.5
velvetgrass		
wheatgrass, western	3 - 4.5	1.5

Tank Mixtures for Improved Control of Bentgrass (*Agrostis* spp.) (Not for Use in California)

For improved control of bentgrass (*Agrostis* spp.), the following products may be tank mixed with this product: Envoy, Fusion, Fusilade II, Vantage. When tank mixing products, read and carefully observe label directions, precautionary statements and all information on the labels of each product in the mixture. Refer to each product label for the approved use sites.

Dry ammonium sulfate, at 1 to 2 percent by weight, may also be added to the spray solution. The equivalent rate of ammonium sulfate in a liquid formulation may also be used. Completely dissolve the ammonium sulfate in the spray tank before adding herbicides. Thoroughly rinse the spray system with clean water after use to reduce corrosion.

Broadcast Application: Apply 2 to 2.5 quarts of this product per acre plus

- 34 fl oz of Envoy per acre in 20 to 40 gpa of spray solution.
- 1.5 pints of Fusilade II per acre in 20 to 40 gpa of spray solution.
- 3.75 pints of Vantage per acre in 20 to 40 gpa of spray solution.
- 9 fl oz of Fusion per acre in 20 to 40 gpa of spray solution.

In the event of incomplete control, re-treatment may be necessary.

Spot Treatment: Mix 2 fl oz of this product with

- 1.3 fl oz of Envoy in 1 gallon of water and spray to wet.
- 0.75 fl oz of Fusilade II in 1 gallon of water and spray to wet.
- 3 fl oz of Vantage in 1 gallon of water and spray to wet.
- 0.25 fl oz of Fusion in 1 gallon of water and spray to wet.

Attention: Avoid drift. Use extreme care when applying this product to prevent injury to desirable plants and crops.

Woody Brush and Trees

Apply this product after full leaf expansion unless otherwise directed. Use the higher rate in the rate range for larger plants and/or dense areas of growth. On vines, use the higher rate in the rate range for plants that have reached the woody stage of growth. Best results are obtained when application is made in late summer or fall after fruit formation.

In arid areas, best results are obtained when applications are made in the spring to early summer when brush species are at high moisture content and are flowering.

Use a 1.5 percent solution when applying this product using a spray to wet technique with a handheld sprayer on harder to control woody brush and trees.

Apply a 4 to 7 percent solution of this product for low volume directed spray applications.

Some autumn colors on undesirable deciduous species are acceptable provided no major leaf drop has occurred. Reduced performance may result if fall treatments are made following a frost. Herbicidal symptoms might not appear prior to frost or senescence following a fall application.

Repeat treatments may be necessary to control plants regenerating from underground parts or seed.

See Tank Mixing section above for more information.

Note: If tank mixing with a product containing triclopyr amine, such as Garlon® 3A herbicide or Capstone, ensure that the triclopyr amine product is well mixed with at least 75 percent of the total spray volume before adding this product to the spray tank to avoid incompatibility.

Rate Table

Weed Species	Rate (pt/acre)	Handheld Spray to Wet (% Solution)
alder	4.5 - 6	1
ash	3 - 7.5	1 - 1.5
partial control		
aspen, quaking	3 - 4.5	1
bearmat (bearclover)	3 - 7.5	1 - 1.5
beech		
partial control		
birch	3 - 4.5	1
blackberry	4.5 - 6	
blackgum	3 - 7.5	
bracken		
broom, French, Scotch	1.75 - 7.5	1 - 1.5
buckwheat, California	1.75 - 6	
partial control		
casacara	3 - 7.5	1 - 1.5
partial control		
catsclaw	--	1
partial control		
ceanothus	3 - 7.5	1 - 1.5
partial control		
chamise	1.75 - 7.5	1
partial control		
cherry, bitter, black, pin	3 - 4.5	1
coyote brush	4.5 - 6	1 - 1.5

Rate Table (Cont.)

Weed Species	Rate (pt/acre)	Handheld Spray to Wet (% Solution)
deerweed	1.75 - 4.25	1
dogwood	3 - 7.5	1 - 1.5
partial control		
elderberry	3 - 4	1
elm	3 - 7.5	1 - 1.5
partial control		
eucalyptus	--	1.5
gorse	3 - 7.5	1 - 1.5
partial control		
hasardia	1.75 - 6	1 - 1.5
partial control		
hawthorn	3 - 4.5	1
hazel		
hickory	3 - 7.5	1 - 1.5
partial control		
honeysuckle	3 - 6	1
hornbeam, American	3 - 7.5	1 - 1.5
partial control		
kudzu	6 - 7.5	1.5
locust, black	3 - 6	1 - 1.5
partial control		
madrone resprouts	--	1.5
partial control		
manzanita	3 - 7.5	1 - 1.5
partial control		
maple, red	3 - 6	1
maple, sugar	--	
monkey flower	1.75 - 6	1 - 1.5
partial control		
oak, black, white	3 - 6	1 - 1.5
partial control		
oak, northern, pin	1.75 - 6	1
oak, post	4.5 - 6	
oak, scrub	1.75 - 6	
oak, southern red	3 - 4.5	1
peppertree, Brazilian (Florida holly)	3 - 7.5	1 - 1.5
for suppression		
persimmon	3 - 7.5	1 - 1.5
partial control		
pine	3 - 7.5	1 - 1.5
poison ivy/poison oak	6 - 7.5	1.5
poplar, yellow	3 - 7.5	1 - 1.5
partial control		
redbud, eastern	3 - 7.5	1 - 1.5
rose, multiflora	3	1
Russian olive	3 - 7.5	1 - 1.5
partial control		
sage, black	1.75 - 6	1
sage, white	3 - 7.5	1 - 1.5
partial control		
sagebrush, California	3 - 6	1
salmonberry	3 - 4.5	
saltcedar	3 - 7.5	1 - 1.5
partial control		

Rate Table (Cont.)

Weed Species	Rate (pt/acre)	Handheld Spray to Wet (% Solution)
sassafras	3 - 7.5	1 - 1.5
sourwood		
partial control		
sumac, laurel, poison, smooth, sugarbush, winged	3 - 6	1 - 1.5
partial control		
sweetgum	3 - 4.5	1
swordfern	3 - 7.5	1 - 1.5
partial control		
tallowtree, Chinese	--	1
tan oak resprouts		1.5
partial control		
thimbleberry	3 - 4	1
control		
tobacco, tree	1.75 - 6	1 - 1.5
partial control		
toyon	--	1.5
trumpet creeper	3 - 4.5	1 - 1.5
vine maple	3 - 7.5	
partial control		
Virginia creeper	3 - 7.5	1 - 1.5
waxmyrtle, southern		
partial control		
willow	4.5 - 6	1
yerba santa	--	1.5
partial control		

Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. To the extent permitted by law, otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies.

Warranty Disclaimer

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT PERMITTED BY LAW, Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. To the extent permitted by law, all such risks shall be assumed by buyer.

Limitation of Remedies

To the extent permitted by law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used.

To the extent permitted by law, Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. To the extent permitted by law, in no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or Limitation of Remedies in any manner.

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Produced for
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

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Replaces Label: D02-351-003
LOES Number: 010-02164
EPA accepted 12/13/13

Revisions:

1. Updated trademark information
2. Added resistance management group
3. Incorporate all supplemental labels into the main label
4. Separate Precautions and Restrictions into different sections throughout
5. Replaced "gallons of water per acre" with "gpa of water" throughout
6. Changed units from oz to quarts or quarts to gallons (where applicable) throughout
7. Tank mixes added and deleted where appropriate
8. Correct the maximum application rate from 7 to 8 quarts
9. Corrections to add back approved crop uses (Sub-Label A) from previously approved stamped



EsplAnade[®] 200 SC

Preemergent Herbicide for the Control of Annual Grasses and Broadleaf Weeds in Non-Residential Non-Crop Areas, Railroad and Rail Yards, Managed Roadsides, Fence Rows, Utilities, Hardscapes, Industrial, Municipal, and Government Sites

ACTIVE INGREDIENT:

Indaziflam (CAS No. 730979-19-8) 19.06%

OTHER INGREDIENTS: 80.94%

TOTAL: 100.00%

EPA Reg. No. 432-1516

Contains 1.67 pounds of indaziflam per gallon

**KEEP OUT OF REACH
OF CHILDREN
CAUTION**

For **MEDICAL** and **TRANSPORTATION**
Emergencies **ONLY** Call 24 Hours A Day
1-800-334-7577

For **PRODUCT USE** Information Call
1-800-331-2867

See inside leaflet for complete First Aid
Instructions, Precautionary Statements,
Directions for Use and Storage and
Disposal Instructions.

Net Contents
2.5 Gallons

80878486
61380637A 140117AV1

FIRST AID	
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person
If on skin:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
<p>For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577 Have the product container or label with you when calling a poison control center or doctor or going for treatment.</p>	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed, absorbed through the skin or inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. All mixers, loaders, applicators and other handlers must wear long-sleeved shirt, long pants, shoes plus socks, and waterproof gloves. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using toilet. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

This Product is toxic to fish, aquatic invertebrates, and plants. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean watermark. Do not contaminate water when disposing of rinsate or washwater. This product may impact water through spray drift or runoff. Follow directions for use to avoid spray drift and runoff. A level well maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential of this product entering water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

Ground Water Advisory: This pesticide has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory: This pesticide may impact water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read the entire label before using this product .

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

SHAKE CONTAINER WELL BEFORE USING.

PRODUCT INFORMATION

Esplanade® 200 SC is a selective, preemergent, alkylazine herbicide for control of many annual grasses and broadleaf weeds in railroad, roadside, hardscapes, industrial areas, utilities, airports, government and military installations, managed areas (petroleum tank farms, pumping stations, storage areas, rail and utility rights-of-way, utility substations, lumberyards, around farm buildings, non-irrigation ditch banks, fence rows, manufacturing sites, office buildings, educational facilities, parking lots, and under asphalt or concrete as part of site preparation).

Esplanade 200 SC controls weeds by reducing the emergence of seedlings through inhibition of cellulose biosynthesis (CB Inhibitor). Necrosis or yellowing may also be observed if the herbicide is applied to herbaceous tissue such as leaves and green stems of susceptible plants. The herbicide needs to be activated prior to weed germination for most effective control. For maximum activity against germinating weeds, Esplanade 200 SC requires rainfall (minimum 0.25 inches) within several weeks after application to activate the herbicide.

Esplanade 200 SC has minimal post emergent activity and generally does not control weeds that have emerged. A post emergent herbicide such as Finale® Herbicide may be mixed with Esplanade 200 SC to control existing weeds. Esplanade 200 SC does not control tubers, rhizomes, and woody vegetation.

Esplanade 200 SC can be applied to terrestrial non-crop sites and unimproved turf sites that contain areas of casual water of a temporary nature as a result of surface water collecting in equipment wheel ruts or in other depressions created by management activities.

Esplanade 200 SC may only be applied by ground equipment only.

USE RESTRICTIONS

- Do not apply directly to water or to soil where standing water is present except as specified on this label.
- Do not apply in or on irrigation ditches/canals including the outer banks.
- Do not contaminate water intended for irrigation and domestic use.
- Do not treat or allow spray drift or runoff to fall into irrigation ditches/canals or other channels that carry water that may be used for irrigation purposes.
- Do not exceed 7 fl oz per acre of Esplanade 200 SC in a single application for all Industrial Vegetation Management.
- Do not exceed 10 fl oz per acre of Esplanade 200 SC for all Industrial Vegetation Management applications within a calendar year or in a 12-month period from the previous application.
- Do not apply Esplanade 200 SC to newly seeded turf.
- Do not apply Esplanade 200 SC through an irrigation or chemigation system.
- Do not apply by air.
- Do not apply or otherwise permit this product or sprays containing this product to come into contact with any non-target crop or desirable plants.
- Do not make applications when circumstances favor movement from treatment sites.
- Do not apply to frozen or snow covered ground.
- Do not graze or feed forage, hay, or straw from treated areas to livestock.
- Do not use on residential lawns, golf courses, sod farms, or production and landscape ornamentals.
- Esplanade 200 SC is not for sale, distribution, or use in Nassau County or Suffolk County in New York State.

USE PRECAUTIONS

- Applications made to areas where runoff water flows onto agricultural land may injure crops.

- Applications made during periods of intense rainfall, to soils saturated with water, or soils through which rainfall will not readily penetrate may result in runoff and movement of Esplanade 200 SC.
- Treated soil should be left undisturbed to reduce the potential for Esplanade 200 SC movement by soil erosion, by wind, or water.
- Applications should be made only when there is little or no risk of spray drift or movement of applied product into sensitive areas. Sensitive areas are defined as bodies of water (ponds, lakes, rivers, and streams), habitats of endangered species and non-labeled agricultural crop areas. Refer to the Spray Drift Management section of this label for more details.

APPLICATION INFORMATION

Apply Esplanade 200 SC with a properly calibrated sprayer according to the manufacturer's directions and check periodically to be certain that the equipment is working properly prior to each use. Uniform application is essential for satisfactory weed control. Avoid overlap. Shut off spray booms while starting, turning, slowing, or stopping to avoid off-target application.

When spraying close or next to ponds, lakes, rivers, and streams be cognizant of keeping the spray solution from reaching the water. For all applications, follow these guidelines: use spray volumes of 10-100 gallons per acre, spray boom height and spray pressures as low as practical, use coarse droplet producing nozzle tips, use drift control additives and shielded sprayers where practical, and spray when wind speed is low. See the Spray Drift Management section for more details. The use of a hand-held or backpack sprayer is allowed, especially when treating smaller areas. The water volume and use rates are the same on a given area as if treating with a much larger boom sprayer. When using a hand-held or backpack sprayer, do not exceed the use rate restrictions stated on this label.

MIXING INSTRUCTIONS

Ensure that the application equipment has been thoroughly cleaned from previous use before using to apply Esplanade 200 SC. Fill the spray tank with 1/2 of the required volume of water prior to the addition of Esplanade 200 SC. Add the proper amount of Esplanade 200 SC, and then add the rest of the water. Maintain sufficient agitation to ensure an adequate spray mixture during application. If Esplanade 200 SC is to be applied in a tank mixture with other pesticides, add the appropriate amounts of the tank mix partners in the following order: (a) products in water-soluble packaging (WSP), (b) WP, (c) WG or other dry flowables, (d) fertilizers, (e) Esplanade 200 SC, (f) other aqueous suspension products (SC), (g) liquid flowables, (h) emulsifiable concentrates and other organic-solvent based formulations. Continue to fill the tank with water to the desired volume while agitating. **Maintain sufficient agitation during application to ensure a uniform spray mixture.**

Resuspending Esplanade 200 SC in Spray Solution: Like other suspension concentrates (SC), Esplanade 200 SC will settle if left standing without agitation. Re-agitate the spray solution before application.

COMPATIBILITY TESTING WITH OTHER PESTICIDES

A compatibility test must be conducted with any potential tank mix partner with Esplanade 200 SC. Using a clear container, conduct the test as described below:

Fill the container three-quarters full with water.

1. Add the appropriate amount of tank mix partner in the following order: (a) WP (b) dry flowable (c) Esplanade 200 SC (d) aqueous suspensions, (e) flowables, (f) liquids and (g) solutions and emulsifiable or liquid concentrates. Shake or gently stir after each addition to mix thoroughly.
2. After adding all ingredients, let the mixture stand for 15 minutes and look for separation, large flakes, precipitates, gels, and heavy oily film or other signs of incompatibility.
3. If the compatibility test shows signs of incompatibility, do not tank mix the product tested with Esplanade 200 SC.

Spray Drift Management

Spray equipment and weather affect spray drift. Consider all factors when making application decisions. Where states have more stringent regulations, they must be observed. Avoiding spray drift is the responsibility of the applicator. To reduce the potential for drift, the ground application equipment must be set to apply coarse or greater droplets (i.e., ASABE Standard 572.1) with corresponding spray pressure. Use high flow rate nozzles to apply the highest practical spray volume. With most nozzle types, narrower spray angles produce larger droplets. Follow the nozzle manufacturer's directions on pressure, orientation, spray volume, etc., in order to minimize drift and optimize coverage and control.

Sensitive Areas

Sensitive areas are defined as bodies of water (ponds, lakes, rivers, and streams), wetlands, habitats of endangered species and non-labeled agricultural crop areas. Applicators must take all precautions necessary to keep spray drift from reaching sensitive areas.

Only apply this product when the potential for drift to adjacent sensitive areas is minimal (e.g. when wind is blowing away from the sensitive areas). The applicator is responsible for considering all these factors when making decisions.

Wind

Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing. Many factors influence spray drift potential including droplet size, equipment type, and local terrain. Drift potential increases if wind is in excess of 10 mph, gusty, or below 2 mph (due to inversion potential). Always make applications when there is some air movement to determine the direction and distance of possible spray drift. The applicator should be familiar with local conditions and how it may influence spray drift.

Temperature Inversion

A surface temperature inversion (i.e., increasing temperature with increasing altitude) greatly increases the potential for drift. Avoid application when conditions are favorable to inversion. Presence of ground fog is a good indicator of a surface temperature inversion.

Controlling Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that still provide sufficient coverage and control. Uniform spray coverage is important to maximize weed control. Applying larger droplets will reduce drift potential, but will not prevent drift if applications are made improperly or under unfavorable environmental conditions such as wind speed, temperature and humidity, and temperature inversion situations.

Spray volume, pressure, and nozzle selection are all important for reducing drift. Select a high flow rate nozzle to apply the highest practical spray volume. High flow rate nozzles produce larger droplets. Use lower spray pressures within the recommended range for the nozzle. If a higher flow rate is needed, increase the nozzle size instead of increasing pressure. Lower spray pressures produce larger droplets. Also, consider using low-drift nozzles.

Set the boom and make applications at the lowest height that safely permits uniform coverage of the soil and minimizes droplet evaporation. Avoid application if wind conditions are gusty. Local terrain may influence wind patterns. The applicator should be familiar with local conditions and understand how they may impact spray drift.

Drift Control Additive

Drift control additive may also be used with most spray equipment to reduce the potential for drift. When using a drift control additive, read and follow all directions on the additive label.

Shielded Sprayers

Shielding the boom or individual nozzles may also reduce the potential for drift. However, it is the responsibility of the applicator to verify that the shield does not interfere with uniform spray coverage.

Vegetation Management Information

Timings, Use Rates, and Maximum Seasonal Rate for Esplanade 200 SC

Apply Esplanade 200 SC prior to weed seed germination. Esplanade 200 SC does not generally control weeds that have emerged. For maximum weed control, the herbicide needs to reach the soil surface and be activated by rainfall or adequate soil moisture. Apply Esplanade 200 SC in the spring for control of spring and summer germinating weeds and apply in the fall for control of winter weeds.

The desired rate of Esplanade 200 SC depends on the residual weed activity required and restrictions on the maximum amount of Esplanade 200 SC per season. Esplanade 200 SC may be applied at 3.5-7 fl oz per acre. Do not exceed 7 fl oz of Esplanade 200 SC for a single application. Applications of Esplanade 200 SC must not exceed the maximum label rate (10 fl oz per acre) in a 12-month period

after the previous application.

Factors including soil type, rainfall, and the amount of vegetation at the time of treatment may affect weed control. Lower rates of Esplanade 200 SC may be effective for sandy soils, whereas organic soils may require higher rates. If the herbicide is not activated by rainfall prior to weed germination, control may be reduced.

For late fall applications, apply Esplanade 200 SC prior to when the ground freezes.

Tank Mix Combinations

Tank-mix combinations of Esplanade 200 SC plus a non-selective herbicide such as Finale® Herbicide or glyphosate will control existing undesirable vegetation in dormant warm season grasses. Applied as a broadcast spray, Esplanade 200 SC plus a non-selective herbicide such as Finale® Herbicide or glyphosate will provide pre and postemergent control of susceptible species listed on the respective labels of the herbicides in the tank mixture.

Esplanade 200 SC may be tank mixed with following herbicide active ingredients but not limited to: [2,4-D, aminopyralid, bromacil, dicamba, flumioxazin, fosamine, glufosinate ammonium (Finale® Herbicide), glyphosate, hexazinone, metsulfuron, picloram, simazine, sulfometuron, and triclopyr].

Follow all use restrictions on this label and for all tank mix partners and use the most restrictive use pattern for the labels of all products in a tank mixture.

Apply mixtures so that the spray solution covers the soil surface in a uniform manner. If uniform coverage is not achieved, preemergent activity will be inconsistent.

Resistance Management Guidelines

Continual use of herbicides with a single mode of action encourages the development of resistant weeds. Esplanade 200 SC is a Group 29 Herbicide that contains the active ingredient indaziflam. Esplanade 200 SC may be used in programs with other preemergence herbicides with different modes of action. No known resistance to Esplanade 200 SC exists, and there are no known instances of cross-resistance between this product and other classes of herbicides, or modes of action. Performance of this product is not affected by the presence of biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action. When resistance of a specific weed is confirmed, rotation of Esplanade 200 SC in one season followed by a preemergent herbicide with another mode of action in the subsequent season, for example, will reduce existing populations and minimize further development of resistant weeds. Contact a Bayer Environmental Sciences representative for the latest information on resistance management guidelines for this product.

Weeds Controlled or Suppressed by Esplanade 200SC			
Broadleaf Weeds Controlled			
American black nightshade	<i>Solanum americanum</i>	Kochia	<i>Kochia scoparia</i>
Bittercress	<i>Cardamine</i> sp.	Lambsquarters, common	<i>Chenopodium album</i>
California burclover	<i>Medicago polymorpha</i>	Lawn burweed	<i>Siliva pterosperma</i>
Canada thistle, common (seedlings)	<i>Cirsium arvense</i>	Little mallow	<i>Malva parviflora</i>
Carpetweed	<i>Mollugo verticillata</i>	Long-stalk phyllanthus	<i>Phyllanthus tenellus</i>
Chickweed, common	<i>Stellaria media</i>	Panicle willowweed	<i>Epilobium paniculatum</i>
Chickweed, Mouse-ear	<i>Cerastium vulgatum</i>	Plantain, Buckhorn	<i>Plantago lanceolata</i>
Clover, White	<i>Trifolium repens</i>	Plantain, Paleseed	<i>Plantago virginica</i>
Corn speedwell	<i>Veronica arvensis</i>	Prostrate knotweed	<i>Polygonum aviculare</i>
Cudweed, Linear-leaf/purple	<i>Gnaphalium purpureum</i>	Prostrate pigweed	<i>Amaranthus blitoides</i>
Curly dock (seedlings)	<i>Rumex crispus</i>	Prostrate spurge	<i>Euphorbia humifusa</i>
Cutleaf evening primrose	<i>Oenothera laciniata</i>	Purslane, common	<i>Portulaca oleracea</i>
Dandelion, cat's ear	<i>Hypochoeris radicata</i>	Ragweed, common	<i>Ambrosia artemisiifolia</i>
Dandelion, common (seedlings)	<i>Taraxacum officinale</i>	Red tasselflower	<i>Emilia sonchifolia</i>
Doveweed	<i>Murdannia nudiflora</i>	Redmaids	<i>Calandrinia caulescens</i>
Eclipta	<i>Eclipta alba</i>	Redroot pigweed	<i>Amaranthus retroflexus</i>
Evening primrose, common	<i>Oenothera biennis</i>	Redstem fleabane/Storksbill	<i>Erodium cicutarium</i>
Evening primrose, cutleaf	<i>Oenothera laciniata</i>	Russian Thistle	<i>Salsola tragus</i>
Filaree, redstem	<i>Erodium cicutarium</i>	Shepherd's-purse	<i>Capsella bursa-pastoris</i>
Fleabane, blackleaved	<i>Conza bonariensis</i>	Sowthistle, annual	<i>Sonchus olerachus</i>
Florida pusley	<i>Richardia scabra</i>	Spotted catsear	<i>Hypochoeris radica</i>
Gromwell, Yellow	<i>Amsinckia calycina</i>	Swinecress	<i>Coronopus didymus</i>
Groundsel, common	<i>Senecio vulgaris</i>	Tropic ageratum	<i>Ageratum conyzoides</i>
Hairy fleabane	<i>Erigeron bonariensis</i>	Velvetleaf	<i>Abutilon theophrasti</i>
Hairy nightshade	<i>Solanum sarrachoides</i>	Wild buckwheat (seedlings)	<i>Polygonum convolvulus</i>
Henbit	<i>Lamium amplexicaule</i>	Wild mustard	<i>Sinapis arvensis</i>
Horseweed/Marestail	<i>Erigeron canadensis</i>	Yellow starthistle	<i>Centaurea solstitialis</i>
Grasses and Sedges Controlled			
Annual bluegrass	<i>Poa annua</i>	Foxtail, Yellow	<i>Pennisetum glaucum</i>
Annual bromegrass	<i>Bromus</i> spp.	Goosegrass	<i>Eleusine indica</i>
Barnyardgrass, common	<i>Echinochloa crus-galli</i>	Guineagrass	<i>Panicum maximum</i>
Cheatgrass	<i>Bromus secalinus</i>	Medusahead	<i>Taeniatherum caput-medusae</i>
Crabgrass	<i>Digitaria</i> species	Mouse barley	<i>Hordeum murinum</i>
Crabgrass, Henry	<i>Digitaria adscendens</i>	Rice flatsedge	<i>Cyperus iria</i>
Crabgrass, Large/Hairy	<i>Digitaria sanguinalis</i>	Ryegrass, Italian	<i>Lolium multiflorum</i>
Crabgrass, Smooth	<i>Digitaria ischaemum</i>	Ryegrass, Perennial	<i>Lolium perenne</i>
Foxtail brome	<i>Bromus rubens</i>	Sedge, annual	<i>Cyperus</i> spp.
Foxtail, Giant	<i>Setaria faberi</i>	Sprangletop	<i>Leptochloa</i> spp.
Foxtail, Green	<i>Setaria viridis</i>	Tufted lovegrass	<i>Eragrostis pectinacea</i>
Weeds Suppressed			
Black medic	<i>Medicago lupulina</i>	Southern brassbuttons	<i>Cotula australis</i>
Black mustard	<i>Brassica nigra</i>	Sunflower, common	<i>Helianthus</i> spp.
False chamomile	<i>Matricaria maritima</i>	Vetch, purple	<i>Vicia benghalensis</i>
London rocket	<i>Sisymbrium irio</i>	Wild carrot	<i>Daucus carota</i>
Prickly lettuce	<i>Lactuca serriola</i>	Woodsorrell, yellow	<i>Oxalis stricta</i>
Sesbania, hemp	<i>Sesbania exaltata</i>	Woodsorrel/Oxalis	<i>Oxalis</i> species
Sida, prickly/teaweed	<i>Sida spinosa</i>		

Use Sites for Esplanade 200 SC	Rate Range (fl oz/A)	Maximum Single Use Rate (fl oz/A)	Maximum Total Yearly Rate (fl oz/A)
Rail and Rail Yards	3.5*-7	7	10
Managed Roadsides	3.5-7	7	10
Warm Season Turf Release	3.5-5	5	10
All other use sites listed	3.5-7	7	10

*In Rail and Rail yard use sites, the 3.5 oz rate of Esplanade 200 SC should only be applied under low weed pressure in combination with another approved herbicide. This rate is not intended for stand-alone treatments.

Bareground Applications for Non-Residential Non-Crop Sites

Bareground is desired at many non-crop sites for reducing fire hazards, maintaining appropriate lines-of-site, and aesthetic considerations. Examples of sites include but are not limited to guardrails and some median strips near highways, hardscapes, parks, airports, utilities, government and military installations, around farm buildings, manufacturing sites, office buildings, educational facilities, parking lots, and managed areas. Esplanade 200 SC may be used alone for residual weed control or in tank mixture. Tank mixtures with post emergent herbicides help to control existing weeds. Observe use restrictions for all herbicides if a tank mixture is applied. Use-rates for bareground applications depend on the duration of weed control desired and the weed species listed on this label. Apply Esplanade 200 SC at 5-7 fl oz per acre. A repeat application can be made but not to exceed a total amount of 10 fl oz per acre per year.

Restriction: Applications to hardscapes (e.g. patios, paved parking lots, and walkways) may be made by spot application only.

Railroads and Rail Yards

Esplanade 200 SC may be used for preemergent residual control of certain weeds near railroad tracks, ballasts, and rail yards. Follow application instructions under Bareground Applications where bareground is the desired result. In situations where warm season turfgrass coverage is desired, such as at railroad crossings, follow use directions under the Warm Season Turf Release section of this label. Apply Esplanade 200 SC at 5-7 fl oz per acre. A repeat application can be made but not to exceed a total amount of 10 fl oz per acre per year.

Warm Season Turf Release

Esplanade 200 SC may be used to promote the growth of warm season grasses in areas where low maintenance vegetation or erosion control is desired. Established bermudagrass (*Cynodon dactylon*), centipedegrass (*Eremochloa ophiuroides*), bahiagrass (*Paspalum notatum*), buffalograss (*Buchloe dactyloides*), and Zoysiagrass (*Zoysia* spp.) are tolerant to Esplanade 200 SC at rates up to 5 fl oz per acre. Application of Esplanade 200 SC in the spring or fall to these grasses will control labeled weeds and allow low maintenance turf to develop. A repeat application can be made but not to exceed a total amount of 10 fl oz per acre per year. Cool season grasses such as Kentucky bluegrass (*Poa pratensis*), perennial ryegrass (*Lolium perenne*), and fescues (*Festuca* sp) are not tolerant to Esplanade 200 SC. Use Esplanade 200 SC on these grasses only when removal of these grasses is desired.

Esplanade 200 SC can inhibit the emergence of seed and damage newly emerged seedlings. Seeding into turf treated with Esplanade 200 SC should be delayed until at least **8 months** after application. Applications to newly seeded turf made sooner than **8 months** after emergence may significantly reduce stand establishment and turf vigor.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Protect Esplanade 200 SC from freezing temperatures.

PESTICIDE DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING: Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available or reconditioning, if appropriate. Then puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

Bayer (reg'd), the Bayer Cross (reg'd), Finale® and Esplanade® are registered trademarks of Bayer.

Produced for:
Bayer Environmental Science
A Division of Bayer CropScience LP
2 T. W. Alexander Drive
Research Triangle Park, NC 27709

Bayer

Backed by
BAYER



EsplAnade[®]

200 SC

Preemergent Herbicide for the Control of Annual Grasses and Broadleaf Weeds in Non-Residential Non-Crop Areas, Railroad and Rail Yards, Managed Roadsides, Fence Rows, Utilities, Hardscapes, Industrial, Municipal, and Government Sites

ACTIVE INGREDIENT:
 Indaziflam (CAS No: 730979-19-8) 19.05%
OTHER INGREDIENTS: 80.95%
TOTAL: 100.00%

EPA Reg. No. 432-1516
 Contains 1.67 pounds of indaziflam per gallon

For **MEDICAL** and **TRANSPORTATION** Emergencies
ONLY Call 24 Hours A Day 1-800-334-7577
 For **PRODUCT USE** Information Call 1-800-331-2867

**KEEP OUT OF REACH
 OF CHILDREN
 CAUTION**

**PRECAUTIONARY STATEMENTS
 HAZARDS TO HUMANS AND
 DOMESTIC ANIMALS
 CAUTION**

Harmful if swallowed, absorbed through the skin or inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. All mixers, loaders, applicators and other handlers must wear long-sleeved shirt, long pants, shoes plus socks, and waterproof gloves. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using toilet. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

This Product is toxic to fish, aquatic invertebrates, and plants. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean watermark. Do not contaminate water when disposing of rinsate or washwater. This product may impact water through spray drift or runoff. Follow directions for use to avoid spray drift and runoff. A level well maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential of this product entering water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

Ground Water Advisory: This pesticide has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory: This pesticide may impact water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application.

FIRST AID	
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything to an unconscious person.
If on skin:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
<p>For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577 Have the product container or label with you when calling a poison control center or doctor or going for treatment.</p>	

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.
PESTICIDE STORAGE: Protect ESPLANADE 200 SC from freezing temperatures.

PESTICIDE DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available or reconditioning, if appropriate. Then puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.



Backed by
BAYER

Net Contents
2.5 Gallons
 B0878486
 61380637A 140117AV1

Bayer

Produced for:
 Bayer Environmental Science
 A Division of Bayer CropScience LP
 2 T. W. Alexander Drive
 Research Triangle Park, NC 27709

Product of Germany



Bayer CropScience

Bayer CropScience LP
P.O. Box 12014
2 T.W. Alexander Drive
Research Triangle Park, North Carolina 27709
1-800-331-2867

Esplanade 200SC

EPA Reg. No. 432-1516

For Use On: Release or Restoration of Desirable Vegetation

This supplemental label expires on 05/06/2018 and must not be used or distributed after this date.

Supplemental Label

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation. Read this label and the product package label before using this product. This Supplemental Label must be in the possession of the user at the time of pesticide application. Follow all applicable directions, restrictions, Worker Protection Standard requirements, and precautions on the product label for Esplanade 200 SC attached to the container.

USE DIRECTIONS FOR RELEASE OR RESTORATION OF DESIRABLE VEGETATION

Esplanade 200 SC may be used to release or re-establish desirable perennial grasses, forbs, shrubs and trees in non-crop areas such as parks and open space, wildlife management areas, recreational areas, fire rehabilitation areas, prairies and fire breaks.

Application Timings and Rates

Apply Esplanade 200 SC at 3.5 to 7 fl oz per acre. The 3.5 fl oz rate of Esplanade 200 SC should only be applied under low weed pressure when minimal preemergence residual control is desired. For the best residual control, apply Esplanade 200 SC at 5 to 7 fl oz per acre.

Esplanade 200 SC may be applied by ground or aerial equipment (helicopter or fixed wing).

Timing of application is determined by precipitation expectation and weed targets. Apply during periods when sufficient precipitation to activate the herbicide is expected prior to target weed germination, but avoid application if heavy rain is expected which can move treated soil into areas with crops or desirable vegetation..

Esplanade 200 SC has minimal post emergent activity and generally does not control weeds that have emerged. A labeled post emergent herbicide may be mixed with Esplanade 200 SC to control existing weeds. Refer to "Tank Mix Combinations" section for specific tank mix instructions.

Low rainfall areas of the West: Apply in the fall, winter, or spring. Esplanade 200 SC will not control winter annuals that have emerged at the time of application or that emerge prior to activating rainfall. A post emergence tank mix partner is needed to control winter annuals that have emerged at the time of application. Susceptible winter annual weeds that have emerged and escape the post emergence herbicide may be controlled preemergence the following season depending on the rate of Esplanade 200 SC used. Esplanade 200 SC at the highest labeled rate may provide several years of residual preemergence control of winter annual grasses such as downy brome, cheatgrass, feral ryegrass, and medusahead.

High rainfall areas of the East: Apply in the fall to control winter annual weeds or apply in the spring to control spring and summer germinating weeds. A tank mix partner is needed to control weeds that have emerged at the time of application.

Established perennial grasses that are tolerant to Esplanade 200 SC:

The following tables list species that have demonstrated tolerance to Esplanade 200 SC. When treating areas with desirable species not listed in the tables, treat a small area to confirm tolerance prior to large scale use.

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Created on 10/26/2015, 01/05/2016, 01/08/2016, 01-15-2016, 05/06/2016– SAL 05/10/2016

Cool Season Grasses	Warm Season Grasses
Crested Wheatgrass (<i>Agropyron cristatum</i>)	Blue Grama (<i>Bouteloua gracilis</i>)
Green Needlegrass (<i>Nassella viridula</i>)	Sand Dropseed (<i>Sporobolus cryptandrus</i>)
Intermediate Wheatgrass (<i>Thinopyrum intermedium</i>)	
Needle-and-thread (<i>Hesperostipa comata</i>)	
Prairie Junegrass (<i>Koeleria macrantha</i>)	
Streambank Wheatgrass (<i>Elymus lanceolatus</i>)	
Western Wheatgrass (<i>Pascopyrum smithii</i>)	

Established forbs and shrubs that are tolerant to Esplanade 200 SC:

Forbs and Shrubs
Broom groundsel (<i>Senecio spartioides</i>)
Fringed Sage (<i>Artemisia frigida</i>)
Lemon Scurfpea (<i>Psoraleidum lanceolatum</i>)
Louisiana Sage (<i>Artemisia ludoviciana</i>)
Prickly Pear (<i>Opuntia</i>)
Porter Aster (<i>Symphotrichum porteri</i>)
Scarlet globemallow (<i>Sphaeralcea coccinea</i>)
Short's milkvetch (<i>Astragalus shortianus</i>)
Sulfur Flower (<i>Eriogonum umbellatum</i>)
Western Ragweed (<i>Ambrosia psilostachya</i>)
Wild Tarragon (<i>Artemisia dracuncululus</i>)

Use Restrictions:

Do not apply to frozen or snow covered ground.
Do not graze or feed forage, hay, or straw from treated areas to livestock.

Precautions:

Avoid application to powdery, dry, light or sandy soil when there is little likelihood of rainfall soon after application. Injury to crops or desirable vegetation may result if treated soil is washed, blown, or moved into these areas.

If planning to plant desirable species in the treated area, avoid planting for at least eight months after application. A field bioassay must then be completed before planting. To conduct a field bioassay, grow to maturity test strips of the species you plan to plant. The test strips should cross the entire area including knolls and low areas. Response to the field bioassay will indicate whether or not to plant the species grown in the test strips. If no injury (such as poor germination, stunting, chlorosis, malformation, or necrosis) the species grown in the test strips may be planted.

Aerial Use Directions (Release or Restoration of Desirable Vegetation)

For aerial application (helicopter and fixed wing aircraft), use 5-30 gallons of spray volume per acre.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops.

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward, parallel with the air stream and never be pointed downwards more than 45 degrees.
3. All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.

Where states have more stringent regulations, they shall be observed. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

For helicopters, use a boom length and position that prevents the spray from entering the rotor, normally accomplished by a spray boom length that does not exceed the rotor diameter.

Set the boom and make applications at the lowest height that safely permits uniform coverage of the soil and minimizes droplet evaporation. Avoid application if wind conditions are gusty. Local terrain may influence wind patterns; the applicator should be familiar with local conditions and understand how they may impact spray drift. Boom or nozzle shielding can reduce the effects of wind or air currents on drift. Verify that the shields do not interfere with uniform deposition of product prior to application.

**For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-866-99BAYER 1-800-331-2867**

*As with any crop-protection product, always read and follow label directions.
For additional information call toll-free 1-800-331-2867).*

ESPLANADE 200 SC is a Registered trademark of Bayer.

Created on 10/26/2015, 01/05/2016, 01/08/2016, 01-15-2016, 05/06/2016– SAL 05/10/2016

DO NOT USE PLANT MATERIAL TREATED WITH
METHOD® 240SL HERBICIDE FOR MULCH OR COMPOST



Method® 240SL

HERBICIDE

Soluble Liquid
For Non-Crop Use

ACTIVE INGREDIENT:	Bayer
Potassium salt of aminocyclopyrachlor	1.2%
Potassium salt of 6-amino-5-chloro-2-	1.2%
-cyclopropyl-4-pyrimidinecarboxylic acid	1.2%
OTHER INGREDIENTS:	97.4%
TOTAL:	100%
*Acid Equivalent: 6-Amino-5-chloro-2-	
cyclopropyl-4-pyrimidinecarboxylic acid	
- 2 pounds acid per gallon or 2.2%	

EPA REG. NO. 432-1565

Nonrefillable Container

**KEEP OUT OF REACH
OF CHILDREN
CAUTION**

See inside leaflet for complete First Aid
Instructions, Precautionary Statements, Directions
for Use and Storage and Disposal Instructions

Net Contents
2.5 Gallons
84099295
B4942561A 150820AV1

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Causes moderate eye irritation. Avoid contact with eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers and loaders must wear:

Long-sleeved shirt and long pants. Shoes plus socks.

Applicators: After the product has been diluted in accordance with label directions for use, shirt, pants, socks, and shoes are sufficient Personal Protective Equipment (PPE).

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Control Statement: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

USERS SHOULD: Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

FIRST AID

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-334-7577 for emergency medical treatment information.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

Surface Water Advisory

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of aminocyclopyrachlor from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

Ground Water Advisory

Aminocyclopyrachlor has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the watertable is shallow.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

METHOD® 240SL HERBICIDE must be used only in accordance with directions on this label or in separately published BAYER CROPS-SCIENCE LP directions.

BAYER CROPS-SCIENCE LP will not be responsible for losses or damages resulting from the use of this product in any manner not specifically directed by BAYER CROPS-SCIENCE LP. User assumes all risks associated with such non-directed use.

PRODUCT INFORMATION

METHOD 240SL HERBICIDE is a soluble liquid that is mixed in water and applied as a spray. METHOD 240SL HERBICIDE may be applied by aerial or ground equipment for control of broadleaf weeds and woody species, including many terrestrial and riparian invasive and noxious weeds. METHOD 240SL HERBICIDE is registered for general weed and brush control on private, public, and military lands as follows: uncultivated non-agricultural areas (such as airports, highway, railroad and utility rights-of-way, sewage disposal areas, etc.); uncultivated agricultural areas - non-crop producing (such as farmyards, fuel storage areas, fence rows, non-irrigation ditchbanks, barrier strips, etc.); industrial sites - outdoor (such as lumberyards, pipeline and tank farms, etc.); and natural areas (such as wildlife management areas, wildlife openings, and wildlife habitats). METHOD 240SL HERBICIDE may be used for the release or restoration of native perennial grasses and in established industrial turf grasses.

This product may be applied to terrestrial non-crop sites and unimproved turf sites that contain areas of temporary surface water, caused by collection of water in equipment ruts or in other depressions created by management activities. It is permissible to treat intermittently flooded low lying sites, seasonally dry flood plains, and transitional areas between upland and lowland sites when no water is present. It is also permissible to treat marshes, swamps, and bogs after water has receded, as well as seasonally dry flood deltas. METHOD 240SL HERBICIDE may be applied up to the waters edge. Do not apply directly to water.

METHOD 240SL HERBICIDE provides preemergence and/or postemergence control of the broadleaf weeds, vines, and brush species listed in the weeds controlled section of the label. For perennial species on the label, a postemergence application should be used. For best postemergence performance, an MSO type adjuvant should be included to the spray solution. Excessive wetting of the target plant is not necessary but good spray coverage of the target plant is needed for best results.

METHOD 240SL HERBICIDE is non-corrosive to spray equipment.

Do not apply more than 18 fluid ounces per acre per year.

BIOLOGICAL ACTIVITY

METHOD 240SL HERBICIDE is quickly taken up by the leaves, stems and roots of plants. The effects of METHOD 240SL HERBICIDE may be seen on plants from within a few hours to a few days. The most noticeable symptom is a bending and twisting of stems and leaves. Other advanced symptoms include severe necrosis, stem thickening, growth stunting, leaf crinkling, calloused stems and leaf veins, leaf-cupping, and enlarged roots. Death of treated broadleaf plants may require several more weeks and up to several months for some woody plant species. METHOD 240SL HERBICIDE is rain-fast at 1 hour after application.

IMPORTANT RESTRICTIONS

- Do not apply this product in areas where the roots of desirable trees and/or shrubs may extend unless injury or loss can be tolerated. Root zone areas of desirable trees or vegetation are affected by local conditions and can extend well beyond the tree canopy.

- Do not apply this product if site-specific characteristics and conditions exist that could contribute to movement and unintended root zone exposure to desirable trees or vegetation, unless injury or loss can be tolerated.
- Do not make applications when circumstances favor movement from treatment site.
- Do not apply METHOD 240SL HERBICIDE to roadsides or other non-crop areas during periods of intense rainfall or where prevailing soils are either saturated with water or of a type through which rainfall will not readily penetrate as this may result in off-site movement.
- Do not apply or otherwise permit this product or sprays containing this product to come into contact with any non-target crop or desirable vegetation.
- Do not apply in or on dry or water containing irrigation ditches or canals including their outer banks.
- Do not apply through any type of irrigation system.
- Do not contaminate water intended for irrigation. To avoid injury to crops or other desirable vegetation, do not treat or allow spray drift or run-off to fall onto banks or bottoms of irrigation ditches, either dry or containing water, or other channels that carry water that may be used for irrigation purposes.
- Treatment of powdery dry soil and light sandy soils, when there is little likelihood of rainfall soon after treatment, may result in off target movement and possible damage to susceptible crops and desirable vegetation, when soil particles are moved by wind or water. Injury to crops or desirable vegetation may result if treated soil is washed, blown or moved onto land used to produce crops or land containing desirable vegetation. Do not apply METHOD 240SL HERBICIDE when these conditions are identified and powdery dry soil or light or sandy soils are known to be prevalent in the area to be treated.
- Do not apply when the soil is frozen or covered with snow.
- Do not use on lawns, walks, driveways, tennis courts, or similar areas.
- Do not apply more than 18 fluid ounces (0.28 pound ae) per acre per year.
- Do not graze or feed forage, hay, or straw from treated areas to livestock.
- Do not use plant material treated with this product for mulch or compost.
- If non-crop sites treated with METHOD 240SL HERBICIDE are to be converted to a food, feed, or fiber agricultural crop, or to a horticultural crop, do not plant the treated sites for at least one year after the METHOD 240SL HERBICIDE application. A field bioassay must then be completed before planting the desired crop.
- Not for sale, sale into, distribution, and/or use in Nassau and Suffolk counties of New York State.

IMPORTANT PRECAUTIONS

- Certain species may, in particular, be sensitive to low levels of METHOD 240SL HERBICIDE including but not limited to conifers (such as Douglas fir, Norway spruce, ponderosa pine and white pine), deciduous trees (such as aspen, Chinese tallow, cottonwood, honey locust, magnolia, poplar species, redbud, silver maple, and willow species), and ornamental shrubs (such as arborvitae, burning bush, crape myrtle, forsythia, hydrangea, ice plant, magnolia, purple plum and yew).
- Injury or loss of desirable trees or vegetation may result if METHOD 240SL HERBICIDE is applied on or near desirable trees or vegetation, on areas where their roots extend, or in locations where the treated soil may be washed or moved into contact with their roots. Consider site-specific characteristics and conditions that could contribute to unintended root zone exposure to desirable trees or vegetation. Root zone areas of desirable trees or vegetation are affected by local conditions and can extend beyond the tree canopy. If further information is needed regarding root zone area, consult appropriate state extension service, professional consultant, or other qualified authority.
- Injury to or loss of desirable trees or vegetation may result if equipment is drained or flushed on or near these trees or vegetation or on areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots.
- In non-crop areas adjacent to desirable vegetation, avoid overlapping spray applications and shut off spray to the spray boom while starting, turning, slowing, or stopping to avoid injury to desirable vegetation.
- Applications made where runoff water flows onto agricultural land may injure or kill crops such as but not limited to sugar beets, potatoes, tomatoes, tobacco, soybeans, field beans, alfalfa, grapes, peaches, almonds, and vegetables.
- Applications should be made only when there is little or no hazard from spray drift. Very small quantities of spray, which may not be visible, may seriously injure susceptible plants.
- Exposure to METHOD 240SL HERBICIDE may injure or kill most crops and may injure or kill desirable vegetation. Injury may be more severe when the crops or desirable vegetation are irrigated.
- Caution is advised when using this product in areas where loss of desirable conifer or deciduous trees and/or shrubs, as well as other broadleaf plants, including but not limited to legumes and wild flowers, cannot be tolerated. Without prior experience, it is necessary that small areas containing these plants be tested for tolerance to METHOD 240SL HERBICIDE and its soil residues before any large scale spraying occurs.
- Low rates of METHOD 240SL HERBICIDE can kill or severely injure most crops. Following a METHOD 240SL HERBICIDE application, the use of spray equipment to apply other pesticides to crops on which METHOD 240SL HERBICIDE is not registered may result in their damage. The most effective way to reduce this crop damage potential is to use dedicated mixing and application equipment.
- Leave treated soil undisturbed to reduce the potential for METHOD 240SL HERBICIDE movement by soil erosion due to wind or water.
- In the case of suspected off-site movement of METHOD 240SL HERBICIDE to cropland, soil samples should be quantitatively analyzed for METHOD 240SL HERBICIDE, or any other herbicide which could be having an adverse effect on the crop, in addition to conducting the field bioassay.
- METHOD 240SL HERBICIDE may suppress or severely injure certain established grasses, such as some brome grass and wheat-grass species, especially when the grass plants are stressed by adverse environmental conditions. Areas that contain these grass plants should recover as environmental conditions for good grass growth occur.

FIELD BIOASSAY

To conduct a field bioassay, grow to maturity test strips of the crop you plan to grow the following year. The test strips should cross the entire field including knolls and low areas. Crop response to the field bioassay will indicate whether or not to plant the crops grown in the test strips. If no crop injury (such as, poor germination, stunting, or chlorosis, malformation, or necrosis of leaves) or yield loss is evident from the crops grown in the test strips, the intended rotational crop may be planted. If herbicide symptoms or yield loss is observed, do not plant the crop.

TANK MIXTURES

METHOD 240SL Herbicide may be tank mixed with other herbicides which are registered for the same use sites, methods of application, and timings as specified on this product label. Refer to the tank mix product label for any additional instructions or use restrictions. In addition, a spray adjuvant may be mixed with METHOD 240SL HERBICIDE when making postemergence applications. Refer to the adjuvant label for additional instructions or use restrictions.

ADJUVANTS

Methylated Seed Oils and Vegetable Oils: A methylated seed oil (MSO) or vegetable oil based adjuvant may provide increased leaf absorption

of METHOD 240SL HERBICIDE. Include the MSO or vegetable oil adjuvant at 1% v/v (1 gallon per 100 gallons of spray solution). Non-ionic Surfactants: Use a non-ionic surfactant at a minimum rate of 0.25% v/v (1 quart surfactant per 100 gallons of spray solution). Surfactant products must contain at least 70% non-ionic surfactant with a hydrophilic/lipophilic balance (HLB) of 12 to 17. Invert Emulsions: METHOD 240SL HERBICIDE may be applied as an invert emulsion. The spray solution results in an invert (water- in-oil) spray emulsion designed to minimize spray drift and spray run-off, resulting in more herbicide deposited on the target foliage. The spray emulsion may be formed in a single tank (batch mixing) or injected (in-line mixing). Consult the invert chemical label for proper mixing directions.

INVASIVE SPECIES MANAGEMENT

This product may be used on public, private, and tribal lands to treat certain weed species infestations that have been determined to be invasive, consistent with the Federal Interagency Committee for the Management of Noxious and Exotic Weeds (FICMNEW) National Early Detection and Rapid Response (EDRR) System for invasive plants. Effective EDRR systems address invasions by eradicating the invader where possible, and controlling them when the invasive species is too established to be feasibly eradicated. Once an EDRR assessment has been completed and action is recommended, a Rapid Response needs to be taken to quickly contain, deny reproduction, and, if possible, eliminate the invader. Consult your appropriate state extension service, forest service, or regional multidisciplinary invasive species management coordination team to determine the appropriate Rapid Response provisions and allowed treatments in your area.

RESISTANCE

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field.

Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of action. To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it may be necessary to change cultural practices within and between crop seasons such as using a combination of tillage, retreatment, tank-mix partners and/or sequential herbicide applications that have a different site of action. Weed escapes that are allowed to go to seed will promote the spread of resistant biotypes. It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative cultural practices or herbicide recommendations available in your area.

INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

NON-AGRICULTURAL USES

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Terrestrial non-crop weed control is not within the scope of the Worker Protection Standard. See the Product Information section of this label for a description of noncrop sites.

Do not enter terrestrial/non-crop treated areas without protective clothing until sprays have dried.

PRODUCT INFORMATION FOR NON-AGRICULTURAL USES

METHOD 240SL HERBICIDE is a soluble liquid that is mixed in water and applied as a spray. METHOD 240SL HERBICIDE may be applied by aerial or ground equipment for control of broadleaf weeds and woody species, including many terrestrial and riparian invasive and noxious weeds. METHOD 240SL HERBICIDE is registered for general weed and brush control on private, public, and military lands as follows: uncultivated non-agricultural areas (such as airports, highway, railroad and utility rights-of-way, sewage disposal areas, etc.); uncultivated agricultural areas - noncrop producing (such as farmyards, fuel storage areas, fence rows, non-irrigation ditch banks, barrier strips, etc.); industrial sites - outdoor (such as lumberyards, pipeline and tank farms, etc.); and natural areas (such as wildlife management areas, wildlife openings, and wildlife habitats).

METHOD 240SL HERBICIDE may be used for the establishment or release of native grasses and for weed control in established, unimproved grass turf.

Apply METHOD 240SL HERBICIDE preemergence or early postemergence when broadleaf weeds are actively germinating or growing. METHOD 240SL HERBICIDE can provide long-term control of susceptible weeds. The length of control is dependent upon the application rate, condition and growth stage of target weeds, environmental conditions at and following application, and the density and vigor of competing desirable vegetation. Best results for long term weed control occur where grasses and other vegetation is allowed to recover from adverse environmental conditions and compete with susceptible weeds.

Weeds hardened off by cold weather or drought stress may not be controlled.

METHOD 240SL HERBICIDE may be applied broadcast using ground spray equipment, fixed-wing aircraft, or by helicopter. When applying by fixed-wing aircraft or helicopter, follow directions under the Aerial Applications section of this label; otherwise refer to the section on Ground Applications when using surface equipment.

METHOD 240SL HERBICIDE may also be applied using low and high volume ground spray equipment.

APPLICATION INFORMATION

AERIAL APPLICATIONS

When applying by air, apply only using nozzles which will deliver coarse or greater (VMD >350 microns) droplets as defined by ASABE S572 standard. Do not release spray at a height greater than 10 feet above the ground or canopy unless a greater height is required for aircraft safety. Do not apply when wind speed is greater than 10 mph. Do not apply during a temperature inversion.

For aerial applications near susceptible crops or other desirable plants, use a drift control additive as recommended by the manufacturer, or apply through a "Microfoil" or "Thru-Valve" boom, or use an equivalent drift control system. Thickened sprays prepared by using high viscosity invert systems, or other drift control systems, may be utilized if drift control is comparable to that obtained with drift control additives or the "Thru-Valve" boom. If a spray thickening agent is used, follow all recommendations and precautions on the product label. Do not use a thickening agent with the "Microfoil" boom or other systems that cannot accommodate thick sprays.

METHOD 240SL HERBICIDE may be applied by either fixed-wing aircraft or helicopter spray equipment. Fixedwing aircraft and helicopters can be used to apply METHOD 240SL HERBICIDE; however, do not make applications by fixed-wing aircraft unless appropriate buffer zones can be maintained to prevent spray drift out of the target area or, when treating open tracts of land, spray drift

as a result of fixed wing aircraft application can be tolerated. The application volume required will vary with the height and density of the brush and the application equipment used. Generally, aerial applications will require 15 to 25 gallons of spray solution per acre. Regardless of the application volume or spray equipment used, thorough coverage of the foliage is necessary to optimize control results.

All precautions and restrictions should be taken to minimize or eliminate spray drift.

GROUND APPLICATIONS

When applying by ground, apply only using nozzles which will deliver coarse or greater (VMD >350 microns) droplets as defined by ASABE S572 standard. Do not apply with a nozzle height greater than 4 feet above the ground or canopy unless necessitated by the application equipment. Apply with the spray boom or nozzle height as low as possible. Do not apply when wind speed is greater than 10 mph. Do not apply during a temperature inversion.

For ground applications, keep the spray boom as low as possible; apply 10 gallons or more of spray per acre; use spray pressures no greater than are required to obtain adequate plant coverage; use large-droplet producing nozzle tips; use drift control additives; use shielded-sprayers or other drift control systems; and/or spray when wind velocity is low.

LOW-VOLUME FOLIAR APPLICATION

For low-volume applications, see Table 1 for use rate and mixing guidelines. The spray concentration of METHOD 240SL HERBICIDE should be adjusted according to the spray volume per acre and the size and plant density of the target brush species. For best results, include an MSO adjuvant at the rate of 1% v/v. Good plant coverage is necessary for best results. Use spray nozzles and pressure that will aid the proper deposition of the spray solution. Apply in sufficient spray volume to help provide uniform spray distribution of spray particles over the area to be treated and to avoid spray drift. Generally, low volume ground applications will require 20 to 50 gallons per acre and ultra-low volume ground application will require 10 to 20 gallons of spray solution per acre. The use of an even flat fan tip with a spray angle of 40 degrees or less will aid in proper spray deposition. Some recommended tip sizes include 4004E or 1504E. For cone or straight stream nozzle patterns, the adjustable cone nozzles, such as the 5500 X3 or the 5500 X4 may be used. Use the higher concentration rates for hard to control brush species. Do not apply more than 18 fluid ounces of METHOD 240SL HERBICIDE per acre per year. Note: Add a spray pattern indicator, if desired, at the recommended label rates.

HIGH VOLUME FOLIAR APPLICATION

High volume applications may be applied at rates equivalent to broadcast rates up to 18 fluid ounces per acre per year.

Where a rate range is indicated for the brush species, use the higher rate for high density brush sites. For best results, use MSO adjuvant at the rate of 1% V/V to the spray solution.

When making broadcast applications, apply near the tops of the brush plants in a light drizzle pattern. The spray solution should reach the crown of the plants and trickle down into the canopy. Use sufficient spray volume to thoroughly and uniformly wet foliage and stems but don't over apply causing excessive run-off. Generally, high volume ground applications will require 100 to 400 gallons per acre. Do not apply more than 18 fluid ounces per broadcast acre per year.

Table 1: METHOD 240SL HERBICIDE Use Rate and Mixing Guide

Total Spray Volume [gallons per acre]	Rate of METHOD 240SL HERBICIDE 8 fluid ounces/acre [fluid ounces/ 100 gallons of spray]*	Rate of METHOD 240SL HERBICIDE 12 fluid ounces/acre [fluid ounces/ 100 gallons of spray]*	Rate of METHOD 240SL HERBICIDE 16 fluid ounces/acre [fluid ounces/ 100 gallons of spray]*
400	2	3	4
300	2.7	4	5.3
200	4	6	8
100	8	12	16
50	16	24	32
40	20	30	40
30	26.7	40	53.3
20	40	60	80
10	80	120	160

* Do not exceed the maximum use rate of 18 fluid ounces product broadcast per acre per year.

SPOT APPLICATION

Spot applications may be applied at rates equivalent to the broadcast application rate up to a maximum of 18 fluid ounces per acre per year. Use sufficient spray volume to thoroughly and uniformly wet target weed or brush foliage. Use of a high quality MSO adjuvant may be added to the spray mixture as recommended by the adjuvant manufacturer. Repeat applications may be made, but the total amount of METHOD 240SL HERBICIDE must not exceed 18 fluid ounces per year. To prevent misapplication, spot applications should be applied with either a calibrated boom sprayer, a boom-less sprayer, or a hand-held or backpack sprayer.

Do not apply more than 18 fluid ounces product per broadcast acre per year as a result of broadcast, spot, or repeat applications. Application rates in Table 2 are based on treating an area of 1000 square feet (sq ft). Mix METHOD 240SL HERBICIDE in 0.3 to 3 gallons of water, depending on the spray volume necessary to treat 1000 sq ft.

A spray volume of 0.3 to 3 gallons per 1000 sq ft is equivalent to 13 to 130 gallons per acre.

Table 2. Spot spray use rates

Broadcast Rate (fl ounces/acre)	Amount of METHOD 240SL HERBICIDE per 1000 square feet to Equal a Broadcast Rate	
	METHOD 240SL HERBICIDE needed per 1000 sq ft	
	(fl ounces)	(mls)
8	0.18	5.3
12	0.27	8
16	0.37	11
18	0.42	12.4

INVERT EMULSION APPLICATIONS

METHOD 240SL HERBICIDE can be applied as an invert emulsion (water in oil). This can be done in a batch mixing (single tank) or inline-mixing (injected) process. Follow the directions on the invert chemical guide.

CUT STUMP AND STEM TREATMENTS

Make a dilute solution by mixing 5 to 10 gallons of METHOD 240SL HERBICIDE in enough basal oil to make 100 gallons of spray mixture. Apply with a knapsack or backpack sprayer using low pressure and solid cone or flat fan nozzles. Spray the stump cut surface and thoroughly wet the cambium layer next to the bark, also treat the sides of the stump and the root collar area. On larger trees, treat only the outer 2-3 inches of the stump. On trees 3 inches or less in diameter treat the entire cut surface. Apply anytime except when snow or water prevents treating to the ground line of the stump. Moisture stress may affect optimum control.

BASAL BARK TREATMENTS

Make a dilute solution by mixing 10 to 20 gallons of METHOD 240SL HERBICIDE in enough basal oil to make 100 gallons of spray mixture. Apply with a knapsack or backpack sprayer using low pressure and solid cone or flat fan nozzles. Make applications to susceptible brush or tree species with stems less than 6 inches in basal diameter. Thoroughly wet the lower 12 to 18 inches of the trunk or stem (from ground line). Treat until run-off at the ground line is noticeable. Brush or trees with old or rough bark will require more spray solution than smooth young bark. Applications can be made anytime of the year except when snow or water prevents treating to the ground line of the brush or tree trunk.

CUT STUBBLE TREATMENTS

For the prevention of re-sprouting, after hand cutting or mechanical mowing of susceptible brush species along rights-of-way and other non-crop sites, apply a broadcast application of METHOD 240SL HERBICIDE at 18 fluid ounces product per acre. Apply in a minimum of 20 gallons of water per acre. Make applications soon after cutting. The addition of a penetrating agent at 5% V/V or more can aid in uptake through the bark or exposed roots of the cut brush. For best results, make applications before or during periods of active root growth. Do not apply when the soil is frozen or covered by standing water or snow.

SPECIFIC USE DIRECTIONS

BAREGROUND

METHOD 240SL HERBICIDE may be used in non-crop sites for bareground (total vegetation control) weed control.

Preemergence or postemergence applications of METHOD 240SL HERBICIDE provide control of many annual and perennial broadleaf weeds. Apply at up to 18 fluid ounces product per acre in tank mixes with other products registered for use on bareground sites. Consult the manufacturer's labels for specific rates, weeds controlled and use restrictions.

Make a thorough and uniform application with calibrated spray equipment per label directions. Apply at any time of the year.

Use the higher rates of METHOD 240SL HERBICIDE for fall applications and in previously untreated areas or areas with high weed infestations. For postemergence applications always include a spray adjuvant. For faster brown-out or burn down results, add glyphosate or similar products to the tank. For added residual weed control, or to broaden the weed control spectrum, tank mix with other residual products registered for use on bareground sites. The level and length of control will depend on the herbicide rate applied, amount of rainfall, soil texture, environmental and applications conditions.

UNIMPROVED TURF GRASS

METHOD 240SL HERBICIDE may be used in non-crop industrial sites, such as utility rights-of-way and roadsides, for general weed control in established industrial turf grasses. Apply METHOD 240SL HERBICIDE at 2.0 to 4.0 fluid ounces product per acre. Treatments made prior to the full green-up stage may delay green-up. Apply METHOD 240SL HERBICIDE by ground equipment only. Use a minimum of 10 gallons of water per acre. The addition of an MSO adjuvant may increase the potential for turf grass injury. Important: Temporary chlorosis (yellowing), reddening, stunting, droopy or twisted grass leaves, and seed head suppression may occur.

Do not apply in the first growing season of any grass. Do not apply METHOD 240SL HERBICIDE to grass under stress from disease, insects, drought, or other environmental causes.

NON-CROPLAND RESTORATION

METHOD 240SL HERBICIDE is labeled for the control of broadleaf weeds and brush, listed in the weeds controlled section, in unimproved industrial turf, on roadsides, airports, industrial sites, or on other similar non-crop sites in order to establish or release desirable, introduced or native perennial grass species for site stabilization.

To maximize and extend the weed and brush control provided by METHOD 240SL HERBICIDE, it is critical that other vegetation management practices, including mowing, fertilization, etc., be incorporated into the restoration program to help extend or build on the weed control benefits and promote the growth of introduced or established grasses and/or desirable plants or plant communities. During the season of establishment, METHOD 240SL HERBICIDE must only be applied after introduced or native perennial grasses are well established. The grass must have a good secondary root system and show good vigor.

METHOD 240SL HERBICIDE may suppress certain established grasses especially when the grass plants are stressed by adverse environmental conditions. Temporary reddening, stunting, droopy or twisted leaves may occur. Do not apply METHOD 240SL HERBICIDE to grass under stress from disease, insects, drought, or other environmental causes.

Apply METHOD 240SL HERBICIDE at 2.0 to 4.0 fluid ounces product per acre in the fall, before the soil freezes, or in the spring after the soil thaws. When applied at lower rates, METHOD 240SL HERBICIDE provides short-term control of weeds listed; when applied at higher rates, weed control spectrum is broadened and extended.

Do not apply when the soil is frozen.

WEEDS CONTROLLED

Use the higher spray volumes and herbicide rates for heavy weed and brush infestations, hard to control species, and tall brush or dense hardwood canopies. Do not apply more than 18 fluid ounces product broadcast per acre per year.

BROADLEAF WEEDS		Rate (fluid ounces per acre)
Clover, bush	<i>Lespedeza</i> sp.	4 to 8
Clover, Dutch (white)	<i>Trifolium repens</i>	
Dandelion, common	<i>Taraxacum officinale</i>	
Ironweed, tall	<i>Vernonia gigantea</i>	
Lespedeza, serecia	<i>Lespedeza cuneata</i>	
Lettuce, prickly	<i>Lactuca serriola</i>	
Mullein, turkey	<i>Croton setigerus</i>	
Ragweed, western	<i>Ambrosia psilostachya</i>	
Sowthistle, common	<i>Sonchus oleraceus</i>	
Starthistle, yellow	<i>Centaurea solstitialis</i>	
Hawkweed, orange	<i>Hieracium aurantiacum</i>	8 to 18
Knapweed, diffuse	<i>Centaurea diffusa</i>	
Knapweed, Russian	<i>Centaurea repens</i>	
Knapweed, spotted	<i>Centaurea biebersteinii</i>	
Kochia (Up to 6 inches) ¹	<i>Kochia scoparia</i>	
Locust, honey	<i>Gleditsia triacanthos</i>	
Marestail/horseweed	<i>Conyza canadensis</i>	
Ragweed, common	<i>Ambrosia artemisiifolia</i>	
Spurge, leafy	<i>Euphorbia esula</i>	
Thistle, Canada	<i>Cirsium arvense</i>	
Thistle, cotton	<i>Onopordum acanthium</i>	
Thistle, musk	<i>Carduus nutans</i>	
Thistle, Russian	<i>Salsola iberica</i>	
Toadflax, dalmatian	<i>Linaria dalmatica</i>	
Plantain	<i>Plantago</i> spp.	10 to 18
Aster, white	<i>Aster pilosus</i>	12 to 18
Bindweed, field	<i>Convolvulus arvensis</i>	
Cinquefoil, sulfur	<i>Potentilla recta</i>	
Goldenrod, Canada	<i>Solidago canadensis</i>	
Hemlock, poison	<i>Conium maculatum</i>	
Honeysuckle, Japanese	<i>Lonicera japonica</i>	
Poison-ivy, eastern	<i>Toxicodendron radicans</i>	
Teasel	<i>Dipsacus fullonum</i>	
Yarrow, common	<i>Achillea millefolium</i>	
BRUSH		
Ash (Green, White)	<i>Fraxinus</i> sp.	10 to 18
Catalpa	<i>Catalpa speciosa</i>	
Cottonwood	<i>Populus deltoides</i>	
Dewberry	<i>Rubus trivialis</i>	
Elder, box	<i>Acer negundo</i>	
Elm	<i>Ulmus americana</i>	
Hackberry, common	<i>Celtis occidentalis</i>	
Locust, black	<i>Robinia pseudoacacia</i>	
Maple, red	<i>Acer rubrum</i>	
Maple, silver	<i>Acer sacharinum</i>	
Poplar, yellow	<i>Liriodendron tulipifera</i>	
Sugarberry	<i>Celtis laevigata</i>	
Sumac	<i>Rhus</i> sp.	
Sycamore	<i>Acer pseudoplatanus</i>	
Tupelo, black	<i>Nyssa sylvatica</i>	
Willow, weeping	<i>Salix alba</i>	
Wild grape	<i>Vitis rotundifolia</i>	
Oak, northern red	<i>Quercus borealis</i>	16
Pine, Virginia ²	<i>Pinus virginia</i>	
Sassafras	<i>Sassafras albidum</i>	
Huisache	<i>Acacia farnesiana</i>	18
Mesquite	<i>Prosopis juliflora</i>	

¹-See specific weed directions.

²-Suppression: a visual reduction in weed competition (reduced population or vigor) as compared to an untreated area.

Specific Weed Directions:

Kochia: For non-selective applications, tankmixing glyphosate with Method® 240 SL HERBICIDE may improve control under dry conditions.

SPRAY EQUIPMENT

Be sure the sprayer is calibrated before use. Use a sufficient volume of water that will deliver a uniform spray pattern and coverage of the target brush or weeds.

The selected sprayer should be equipped with an agitation system to help keep METHOD 240SL HERBICIDE suspended in the spray tank.

Note: Low rates of METHOD 240SL HERBICIDE can kill or severely injure most crops. Following an METHOD 240SL HERBICIDE application, the use of spray equipment to apply other pesticides to crops on which METHOD 240SL HERBICIDE is not registered may result in their damage.

The most effective way to reduce this crop damage potential is to use dedicated mixing and application equipment.

MIXING INSTRUCTIONS

1. Fill the tank 1/3 to 1/2 full of water.
2. While agitating, add the required amount of METHOD 240SL HERBICIDE.
3. Continue agitation until the METHOD 240SL HERBICIDE is fully dispersed, at least 5 minutes.
4. Once the METHOD 240SL HERBICIDE is fully dispersed, maintain agitation and continue filling tank with water. METHOD 240SL HERBICIDE should be thoroughly mixed with water before adding any other material.
5. As the tank is filling, add tank mix partners (if desired) and then add the necessary volume of spray adjuvants. Always add spray adjuvants last.
6. If the mixture is not continuously agitated, settling will occur. If settling occurs, thoroughly re-agitate before using.
7. Apply METHOD 240SL HERBICIDE spray mixture within 24 hours of mixing to avoid product degradation.
8. If METHOD 240SL HERBICIDE and a tank mix partner are to be applied in multiple loads, pre-slurry METHOD 240SL HERBICIDE in clean water prior to adding it to the tank. This will prevent the tank mix partner from interfering with the dissolution of the METHOD 240SL HERBICIDE.

SPRAYER CLEANUP

The spray equipment must be cleaned before METHOD 240SL HERBICIDE is sprayed. Follow the cleanup procedures specified on the labels of the previously applied products.

AT THE END OF THE DAY

It is recommended that, during periods when multiple loads of METHOD 240SL HERBICIDE are applied, at the end of each day of spraying the interior of the tank should be rinsed with fresh water and then partially filled and the boom and hoses flushed.

This will prevent the buildup of dried pesticide deposits which can accumulate in the application equipment.

1. Empty the tank and drain the sump completely.
2. Spray the tank walls with clean water using a minimum volume of 10% of the tank volume. Circulate the water through the lines, including all by-pass lines, for at least two minutes. Flush the boom well and empty the sprayer. Completely drain the sump.
3. Repeat step 2.
4. Remove the nozzles and screens and clean separately in a bucket containing water. The rinsate solution may be applied to the non-crop sites listed on this label. Do not exceed the maximum labeled use rate. If cleaners are used, consult the cleaner label for rinsate disposal instructions. If no instructions are given, dispose of the rinsate on site or at an approved waste disposal facility.

Notes:

1. Always start with a clean spray tank.
2. Steam-cleaning aerial spray tanks is recommended to facilitate the removal of any caked deposits.
3. When METHOD 240SL HERBICIDE is tank mixed with other pesticides, all cleanout procedures for each product should be examined, and the most rigorous procedure should be followed.
4. In addition to this cleanout procedure, all pre-cleanout guidelines on subsequently applied products should be followed as per the individual labels.
5. Low rates of METHOD 240SL HERBICIDE can kill or severely injure most crops. Following a METHOD 240SL HERBICIDE application, the use of spray equipment to apply other pesticides to crops on which METHOD 240SL HERBICIDE or its active ingredients are not registered may result in their damage. The most effective way to reduce this crop damage potential is to use dedicated mixing and application equipment.

SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See Wind, Temperature and Humidity, and Temperature Inversions sections of this label.

CONTROLLING DROPLET SIZE - GENERAL TECHNIQUES

- Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure - Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.
- Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

CONTROLLING DROPLET SIZE - AIRCRAFT

- Number of Nozzles - Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- Nozzle Orientation - Orienting nozzles so that the spray is emitted backwards, parallel to the air stream will produce larger droplets than other orientations.
- Nozzle Type - Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.
- Boom Length - The boom length should not exceed 3/4 of the wing or rotor length - longer booms increase drift potential.
- Application Height - Application more than 10 ft above the canopy increases the potential for spray drift.

BOOM HEIGHT

Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

WIND

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. AVOID GUSTY OR WINDLESS CONDITIONS. Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

SURFACE TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind.

They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

SENSITIVE AREAS

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

DRIFT CONTROL ADDITIVES

Drift control additives may be used with all spray equipment with the exception of controlled droplet applicators. When a drift control additive is used, read and carefully observe cautionary statements and all other information on the label. It is recommended that drift control additives be certified by the Chemical Producers and Distributors Association (CPDA).

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store product in original container only. Store in a cool, dry place.

Pesticide Disposal: Waste resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:

Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.

Nonrefillable Rigid Plastic and Metal Containers (Capacity Equal to or Less Than 5 Gallons):

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Rigid Plastic and Metal Containers (Capacity Greater Than 5 Gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Rigid Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down): Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying the contents from this container into application equipment or mix tank and before final disposal using the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour, or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

All Refillable Containers: Refillable container. Refilling Container: Refill this container with METHOD 240SL HERBICIDE containing aminocyclopyrachlor potassium salt only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. If damage is found, do not use container; contact BAYER CROPSCIENCE LP at the number below for instructions. Check for leaks after refilling and before transporting. If leaks are found, do not reuse or transport container, contact BAYER CROPSCIENCE LP at the number below for instructions. Disposing of Container; Do not reuse this container for any other purpose other than refilling (see preceding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, use the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration, and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour, or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling, if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

Do not transport if container is damaged or leaking. If the container is damaged, leaking or obsolete, or in the event of a major spill, fire, or other emergency, contact BAYER CROPSCIENCE LP at 1-800-334-7577, day or night.

CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, plant injury, other property damage, as well as other unintended consequences may result because of factors beyond the control of Bayer CropScience LP. Those factors include, but are not limited to, weather conditions, presence of other materials or the manner of use or application. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

For product information call: 1-800-331-2867

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Produced for:
Bayer Environmental Science
A Division of Bayer CropScience LP
2 T. W. Alexander Drive
Research Triangle Park, NC 27709

Bayer

DO NOT USE PLANT MATERIAL TREATED WITH METHOD® 240SL HERBICIDE FOR MULCH OR COMPOST



Method® 240SL HERBICIDE

Soluble Liquid
For Non-Crop Use

ACTIVE INGREDIENT:

By Weight

Potassium salt of aminocyclopyrachlor	
Potassium salt of 6-amino-5-chloro-2-cyclopropyl-4-pyrimidinecarboxylic acid*	25%
OTHER INGREDIENTS:	75%
TOTAL:	100%

*Acid Equivalent: 6-Amino-5-chloro-2-cyclopropyl-4-pyrimidinecarboxylic acid - 2 pounds acid per gallon or 21.2%
IEPA Reg. No. 432-1565

KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Avoid contact with eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers and loaders must wear:

Long-sleeved shirt and long pants. Shoes plus socks.

Applicators: After the product has been diluted in accordance with label directions for use, shirt, pants, socks, and shoes are sufficient Personal Protective Equipment (PPE).

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Control Statement: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4- 6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

USERS SHOULD: Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

FIRST AID

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-334-7577 for emergency medical treatment information.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store product in original container only. Store in a cool, dry place.

Pesticide Disposal: Waste resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:

Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.

Nonrefillable Rigid Plastic and Metal Containers (Capacity Equal to or Less Than 5 Gallons):

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. (continued)

See attached leaflet for complete First Aid Instructions, Precautionary Statements, Directions for Use and Storage and Disposal Instructions.

Net Contents: **2.5 Gallons**

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continued

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Rigid Plastic and Metal Containers (Capacity Greater Than 5 Gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Rigid Plastic and Metal Containers, e.g., Intermediate Bulk Containers (IBC) (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down): Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying the contents from this container into application equipment or mix tank and before final disposal using the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour, or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

All Refillable Containers: Refillable container. Refilling Container: Refill this container with METHOD 240SL HERBICIDE containing aminocyclopyrachlor potassium salt only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. If damage is found, do not use container; contact BAYER CROPSCIENCE LP at the number below for instructions. Check for leaks after refilling and before transporting. If leaks are found, do not reuse or transport container, contact BAYER CROPSCIENCE LP at the number below for instructions.

Disposing of Container: Do not reuse this container for any other purpose other than refilling (see preceding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, use the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration, and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour, or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling, if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

Do not transport if container is damaged or leaking. If the container is damaged, leaking or obsolete, or in the event of a major spill, fire, or other emergency, contact BAYER CROPSCIENCE LP at 1-800-334-7577, day or night.

Produced for:
Bayer Environmental Science
A Division of Bayer CropScience LP
2 T. W. Alexander Drive
Research Triangle Park, NC 27709



PULL HERE TO OPEN

Product of China



Specimen Label



Dow AgroSciences



SPECIALTY HERBICIDE

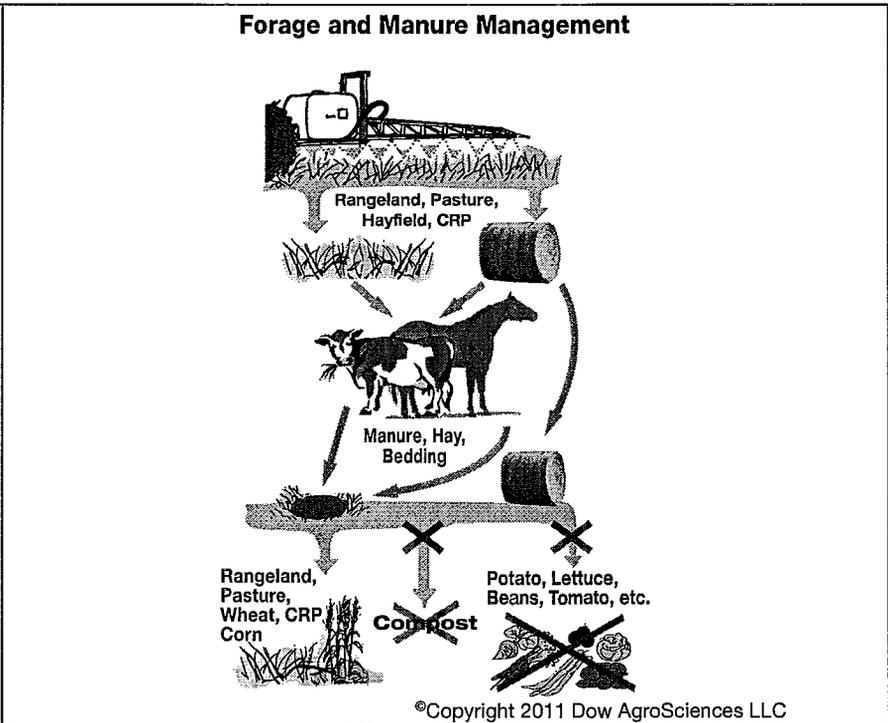
®Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

For control of susceptible weeds and certain woody plants, including invasive and noxious weeds, on rangeland, permanent grass pastures, Conservation Reserve Program (CRP) acres, non-cropland areas including industrial sites, rights-of-way (such as roadsides, electric utility and communication transmission lines, pipelines, and railroads), non-irrigation ditch banks, natural areas (such as wildlife management areas, wildlife openings, wildlife habitats, recreation areas, campgrounds, trailheads and trails), and grazed areas in and around these sites.

Hay from grass treated with Opensight within the preceding 18-months can only be used on the farm or ranch where product is applied unless allowed by supplemental labeling

IMPORTANT USE PRECAUTIONS AND RESTRICTIONS TO PREVENT INJURY TO DESIRABLE PLANTS

- Carefully read the section "**Restrictions in Hay or Manure Use**."
- It is mandatory to follow the "**Use Precautions and Restrictions**" section of this label.
- Manure and urine from animals consuming grass or hay treated with this product may contain enough aminopyralid to cause injury to sensitive broadleaf plants.
- Hay can only be used on the farm or ranch where product is applied unless allowed by supplemental labeling.
- Consult with a Dow AgroSciences representative if you do not understand the "Use Precautions and Restrictions". Call [1-(800) 263-1196] Customer Information Group.



Not For Sale, Distribution, or Use in New York State.

GROUP	2	4	HERBICIDE
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Active Ingredients:

Potassium salt of 2-pyridine carboxylic acid, 4-amino-3,6-dichloro-.....	62.13%
Metsulfuron methyl (Methyl 2-[[[4-methoxy-6-methyl-1,3,5-triazin-2-yl)-amino]carbonyl]amino]sulfonyl]benzoate).....	9.45%
Other Ingredients	28.42%
Total	100.0%

Acid Equivalent: aminopyralid (2-pyridine carboxylic acid, 4-amino-3,6-dichloro-) - 52.5%

Contains 0.62 pound potassium salt of aminopyralid active ingredient (0.525 pound acid equivalent) and 0.0945 pound metsulfuron methyl per pound of product

Precautionary Statements

Hazards to Humans and Domestic Animals

EPA Reg. No. 62719-597

WARNING

Causes Substantial but Temporary Eye Injury • Harmful if Swallowed

Do not get in eyes or on clothing. Avoid contact with skin.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical resistant gloves
- Protective eyewear

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

First Aid

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

If on skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

This chemical has the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Directions for Use

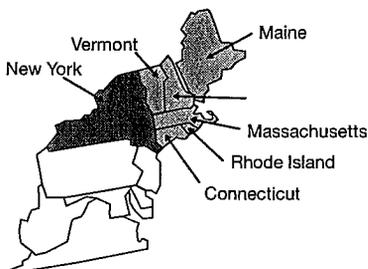
It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Not For Sale, Distribution, or Use in New York State.

Not for use on pastures in Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. All other labeled uses are permitted in these states including grazed areas in and around approved use sites.



Light grey = states where use in pastures is not permitted
Dark grey = NY where the product is not registered

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for Agricultural Pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Entry Restrictions for Non-WPS Uses: Do not enter or allow people or pets to enter the treated area until sprays have dried.

Storage and Disposal

Do not contaminate water, food, feed or fertilizer by storage or disposal.

Pesticide Storage: Store in original container only. In case of spill, contain material and dispose as waste.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Nonrefillable rigid containers 5 gallons or less:

Container Handling: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Nonrefillable nonrigid containers:

Container Handling: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available, or dispose in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Refillable rigid containers larger than 5 gal:

Container Handling: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

Nonrefillable rigid containers larger than 5 gal:

Container Handling: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water.

Storage and Disposal (Cont.)

Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Opensight® specialty herbicide may be applied by aerial or ground equipment to control susceptible broadleaf weeds and certain woody plants, including invasive and noxious weeds on rangeland, permanent grass pastures, CRP acres, non-cropland areas including industrial sites, rights-of-way (such as roadsides, electric utility and communication transmission lines, pipelines, and railroads), non-irrigation ditch banks, natural areas (such as wildlife management areas, wildlife openings, wildlife habitats, recreation areas, campgrounds, trailheads and trails), and grazed areas in and around these sites without injury to most grasses.

It is permissible to treat non-irrigation ditch banks, seasonally dry wetlands (such as flood plains, deltas, marshes, swamps, or bogs) and transitional areas between upland and lowland sites only when dry. Opensight can be used to the water's edge. Do not apply directly to water and take precautions to minimize overspray to open water when treating target vegetation in and around non-flowing, quiescent or transient water. When making applications to control unwanted plants on banks or shorelines of flowing water, minimize overspray to open water. Note: Consult local public water control authorities before applying this product in and around public water. Permits may be required to treat such areas.

***Hay from grass treated with Opensight within the preceding 18-months can only be used on the farm or ranch where product is applied unless allowed by supplemental labeling.**

Resistance Management Guidelines

- This product contains two herbicides with different modes of action. Development of plant populations resistant to the mode of action of aminopyralid is usually not a problem on rangeland, permanent grass pastures, Conservation Reserve Program (CRP), or non-cropland sites since these sites receive infrequent pesticide applications. There may be resistant weed biotypes to metsulfuron and adequate control of these species cannot be expected.
- Similar looking biotypes of a given weed species occurring in a treated area may vary in their susceptibility to a herbicide. Application of a herbicide below its labeled rate may allow more tolerant weeds to survive and a shift to more tolerant biotypes within the treated area.
- Where identified, spreading of resistant weeds to other fields may be prevented by cleaning harvesting and tillage equipment before moving to other areas and by planting weed-free seed.
- Contact your extension specialist, certified crop consultant, or Dow AgroSciences representative for the latest resistance management information.

Use Precautions and Restrictions

Consult with a Dow AgroSciences representative if you do not understand the "Use Precautions and Restrictions." Call (1-800-263-1196) for more information.

- **Do not use grasses treated with Opensight in the preceding 18-months for hay intended for export outside the United States.**
- **Hay from areas treated with Opensight in the preceding 18-months CANNOT be distributed or made available for sale off the farm or ranch where harvested unless allowed by supplemental labeling.**
- **Hay from areas treated with Opensight in the preceding 18-months CANNOT be used for silage, haylage, baylage and green chop unless allowed by supplemental labeling.**

- **Do not move hay made from grass treated with Opensight within the preceding 18-months off farm unless allowed by supplemental labeling.**
- **Do not use hay or straw from areas treated with Opensight within the preceding 18-months or manure from animals feeding on hay treated with Opensight in compost.**
- **Do not use grasses treated with Opensight in the preceding 18-months for seed production.**

Maximum Application Rate: On all labeled use sites do not broadcast apply more than 3.3 ounce/acre of Opensight per year. The total amount of Opensight applied broadcast, as a re-treatment, and/or spot treatment cannot exceed 3.3 oz of product per acre per year. Spot treatments may be applied at an equivalent broadcast rate of up to 6.6 oz product of Opensight per acre per annual growing season; however, not more than 50% of an acre may be treated at that rate. Do not apply more than a total of 3.3 ounce/acre of Opensight per annual growing season as a result of broadcast, spot or repeat applications.

- Do not use on Timothy hay or other cool-season grasses grown for hay.
- Do not apply this product on lawns, turf, ornamental plantings, urban walkways, driveways, tennis courts, golf courses, athletic fields, commercial sod operations, or other high-maintenance, fine turfgrass areas, or similar areas.
- Do not overseed ryegrass for 4 months after treatment.
- **Opensight is highly active against many broadleaf plant species.** Do not use this product on areas where loss of broadleaf plants, including legumes, cannot be tolerated.
- **Chemigation:** Do not apply this product through any type of irrigation system.
- **Do not contaminate water intended for irrigation or domestic purposes.** Do not treat inside banks or bottoms of irrigation ditches, either dry or containing water, or other channels that carry water that may be used for irrigation or domestic purposes.
- Do not apply to irrigated land where the tailwater will be used to irrigate crops.
- Do not use this product for impregnation on dry fertilizer, unless specified in Dow AgroSciences state-specific product bulletin.
- Do not use Opensight in the following counties of Colorado: Alamosa, Conejos, Costilla, Rio Grande, and Saquache.
- **Trees** adjacent to or in a treated site can occasionally be affected by root uptake of Opensight. Do not apply Opensight within the root zone of desirable trees unless such injury can be tolerated. Use special caution near roses, and leguminous trees such as locusts, redbud, mimosa, and caragana.
 - Do not apply or drain or flush equipment on or near desirable trees or other plants, or on areas where their roots extend, or in locations where the product may be washed or moved into contact with their roots, as injury or loss of desirable trees or other plants may result.
- Applications made during periods of intense rainfall, to soils saturated with water, surfaces paved with materials such as asphalt or concrete, or soils through which rainfall will not readily penetrate may result in runoff and movement of Opensight. Injury to crops may result if treated soil and/or runoff water containing Opensight is washed, or moved onto land used to produce crops. Exposure to Opensight may injure or kill susceptible crops and other plants, such as grapes, soybeans, tobacco, sensitive ornamentals. Do not treat frozen soil where runoff could damage sensitive plants.
- **Seeding Legumes:** Do not plant forage legumes until a soil bioassay has been conducted to determine if aminopyralid or metsulfuron concentration remaining in the soil will adversely affect the legume establishment.
- Under certain conditions such as heavy rainfall, high pH, prolonged cold weather, or wide fluctuations in day/night temperatures prior to or soon after Opensight application, temporary discoloration and/or grass injury may occur. Opensight should not be applied to grass that is stressed by severe weather conditions, drought, low fertility, water-saturated soil, disease, or insect damage, as grass injury may result. Severe winter stress, drought, disease, or insect damage before or following application also may result in grass injury.
- Do not apply to frozen ground as surface runoff may occur.
- Do not apply to snow-covered ground.
- **Grazing and Haying Restrictions:** There are no restrictions on grazing or grass hay harvest intervals following application of Opensight at labeled rates. However, cutting hay too soon after spraying weeds will reduce weed control. Wait 14 days after herbicide application to cut grass hay to allow herbicide to work. Do not transfer grazing animals from areas treated with Opensight to areas where sensitive broadleaf crops occur without first allowing 3 days of grazing on an

untreated pasture. Otherwise, urine and manure may contain enough aminopyralid to cause injury to sensitive broadleaf plants.

- **Grazing Poisonous Plants:** Application of this product may increase palatability of certain poisonous plants. Do not graze areas treated with Opensight until poisonous plants are dry and no longer palatable to livestock.
- **Restrictions in Hay or Manure Use:**
 - Do not use treated plant residues, including hay or straw from areas treated within the preceding 18-months, in compost, mulch or mushroom spawn.
 - Do not use manure from animals that have grazed forage or eaten hay harvested from treated areas within the previous 3 days, in compost, mulch or mushroom spawn.
 - Do not spread manure from animals that have grazed or consumed forage or eaten hay from treated areas within the previous 3 days on land used for growing susceptible broadleaf crops.
 - Manure from animals that have grazed forage or eaten hay harvested from treated areas within the previous 3 days may only be used on pasture grasses, grass grown for seed, wheat and corn.
 - Do not plant a broadleaf crop (including soybeans, sunflower, tobacco, vegetables, field beans, peanuts, and potatoes) in fields treated with manure from animals that have grazed forage or eaten hay harvested from aminopyralid-treated areas until an adequately sensitive field bioassay is conducted to determine that the aminopyralid concentration in the soil is at level that is not injurious to the crop to be planted.
 - Do not plant a broadleaf crop in fields treated in the previous year with manure from animals that have grazed forage or eaten hay harvested from treated areas until an adequately sensitive field bioassay is conducted to determine that the aminopyralid concentration in the soil is at level that is not injurious to the crop to be planted.
 - To promote herbicide decomposition, plant residues should be evenly incorporated in the surface soil or burned. Breakdown of aminopyralid in plant residues or manure is more rapid under warm, moist soil conditions and may be enhanced by supplemental irrigation.
- **Crop Rotation:** Do not rotate to any crop from rangeland, permanent pasture or CRP acres within one year following treatment. Do not plant a broadleaf crop until an adequately sensitive field bioassay shows that the level of aminopyralid or metsulfuron present in the soil will not adversely affect that broadleaf crop.
- **Field Bioassay Instructions:** In fields previously treated with this product, plant short test rows of the intended rotational crop across the original direction of application in a manner to sample variability in field conditions such as soil texture, soil organic matter, soil pH, rainfall pattern or drainage. The field bioassay can be initiated one year after the last application of aminopyralid in that field. Observe the test crop for symptoms of herbicidal activity, such as poor stand (effect on seed germination), chlorosis (yellowing), and necrosis (dead leaves or shoots), or stunting (reduced growth). If herbicidal symptoms do not occur, the test crop can be grown. If there is apparent herbicidal activity, do not plant the field to the intended rotational crop; plant only to wheat, perennial forage grasses, native grasses or grasses grown for hay.
- **Avoiding Injury to Non-Target Plants:** Do not aerially apply Opensight within 50 feet of a border downwind (in the direction of wind movement), or allow spray drift to come in contact with, any broadleaf crop or other desirable broadleaf plants, including, but not limited to, alfalfa, cotton, dry beans, flowers, grapes, lettuce, potatoes, radishes, soybeans, sugar beets, sunflowers, tobacco, tomatoes or other broadleaf or vegetable crop, fruit trees, ornamental plants, or soil where sensitive crops are growing or will be planted. Avoid application under conditions that may allow spray drift because very small quantities of spray may seriously injure susceptible crops. Read and consider the "Precautions for Avoiding Spray Drift and Spray Drift Advisory" at the end of this label to help minimize the potential for spray drift.
- To reduce the potential for movement of treated soil due to wind erosion, do not apply to powdery dry or light sandy soils until they have been stabilized by rainfall, plant residue mulch, reduced tillage, or other cultural practices. Injury to immediately adjacent crops may occur when treated soil is blown onto land used to produce crops other than pasture, rangeland or CRP.

Sprayer Clean-Out Instructions

It is recommended to use separate spray equipment on highly sensitive crops such as tobacco, soybeans, peanuts and tomatoes. Do not use spray equipment used to apply Opensight for other applications to land planted to, or to be planted to, broadleaf plants unless it has been determined that all residues of this herbicide has been removed by thorough cleaning of equipment.

Equipment used to apply Opensight should be thoroughly cleaned before reusing to apply any other chemicals as follows:

1. Rinse and flush application equipment thoroughly after use. Dispose of rinse water in non-cropland area away from water supplies.
2. Rinse a second time, adding 1 quart of household ammonia or tank cleaning agent for every 25 gallons of water. Circulate the solution through the entire system so that all internal surfaces are contacted (15 to 20 minutes). Let the solution stand for several hours, preferably overnight.
3. Flush the solution out of the spray tank through the boom.
4. Rinse the system twice with clean water, recirculating and draining each time.
5. Spray nozzles and screens should be removed and cleaned separately.

Do not apply this product with mist blower systems that deliver very fine spray droplets. Use of mist blower equipment can reduce control achieved with the herbicide and increase spray drift potential.

Application Methods

Apply the specified rate of Opensight as a coarse low-pressure spray. Do not apply this product with mist blower systems that deliver very fine spray droplets. Spray volume should be sufficient to uniformly cover foliage. Increase spray volume to ensure thorough and uniform coverage when target vegetation is tall and/or dense. To enhance foliage wetting and coverage, an approved non-ionic agricultural surfactant may be added to the spray mixture as specified by the surfactant label.

Ground Broadcast Application: Higher spray volumes (greater than 10 gallons per acre) generally provide better coverage and better control, particularly in dense and/or tall foliage.

Aerial Broadcast Application: Do not apply less than 2 gallons per acre total spray volume. Five gallons per acre or greater will generally provide better coverage and better control, particularly in dense and/or tall foliage.

High-Volume Foliar Application: High volume foliar treatments may be applied at rates equivalent to a maximum of 3.3 ounces per acre annual growing season. Use sufficient spray volume to thoroughly and uniformly wet foliage and stems.

Spot Application: Spot treatments may be applied at an equivalent broadcast rate of up to 6.6 oz of product per acre per annual growing season; however, not more than 50% of an acre may be treated at that rate. Do not apply more than a total of 3.3 ounce/acre of Opensight per annual growing season as a result of broadcast, spot or repeat applications. Spray volume should be sufficient to thoroughly and uniformly wet weed foliage, but not to the point of runoff. Repeat treatments may be made, but the total amount of Opensight applied must not exceed 3.3 ounce/acre per year. To prevent misapplication, spot treatments should be applied with a calibrated sprayer.

In general for spot treatments, mix 2.5 oz for weeds and 3.3 oz for brush of Opensight per 100 gallons of water (assuming an application volume of 100 gallons per acre).

Product Measurement

Opensight is measured using the Opensight volumetric measuring cylinder. Scales calibrated in ounces may also be used.

Mixing Instructions

1. Fill the tank 1/4 to 1/3 full of water (If using liquid nitrogen fertilizer solution in place of water, see Tank Mixtures sections for additional details).
2. While agitating, add the required amount of Opensight.
3. Continue agitation until the Opensight is fully dispersed, at least 5 minutes.
4. Once the Opensight is fully dispersed, maintain agitation and continue filling tank with water. Opensight should be thoroughly mixed with water before adding any other material.
5. As the tank is filling, add tank mix partners (if desired) then add the necessary volume of spray adjuvants. Always add spray adjuvants last.
6. If the mixture is not continuously agitated, settling will occur. If settling occurs, thoroughly re-agitate before using.
7. Apply Opensight spray mixture within 24 hours of mixing to avoid product degradation.
8. If Opensight and a tank mix partner are to be applied in multiple loads, pre-slurry the Opensight in clean water prior to adding to the tank. This will prevent the tank mix partner from interfering with the dissolution of the Opensight.

Soil pH Limitations

Opensight should not be used on soils having a pH above 7.9, as extended soil residual activity could extend crop rotation intervals beyond

normal. Under certain conditions, Opensight could remain in the soil for 34 months or more injuring wheat and barley. In addition, other crops planted in high-pH soils can be extremely sensitive to low concentrations of Opensight.

Checking Soil pH

Before using Opensight, determine the soil pH of the areas of intended use. To obtain a representative pH value for the test area, take several 0" to 4" samples from different areas of the field and analyze them separately. Consult local extension publications for additional information on recommended soil sampling procedures.

Spray Adjuvants

Unless otherwise directed, applications of Opensight must include either a crop oil concentrate or a nonionic surfactant. In addition, an ammonium nitrogen fertilizer can be used unless specifically prohibited by tank mix partner labeling. If another herbicide is tank mixed with Opensight, select adjuvants authorized for use with both products. Products must contain only EPA-exempt ingredients (40 CFR 1001).

Petroleum Crop Oil Concentrate (COC) or Methylated Seed Oil (MSO)

- Apply at 1% v/v (1 gallon per 100 gallons spray solution) or 2% under arid conditions.
- MSO adjuvants may be used at 0.5% v/v (0.5 gallons per 100 gallons spray solution) if specifically noted on adjuvant product labeling.
- Oil adjuvants must contain at least 80% high quality, petroleum (mineral) or modified vegetable seed oil with at least 15% surfactant emulsifiers.

Nonionic Surfactant (NIS)

- Apply at 0.25% v/v (1 quart per 100 gallons spray solution) or 0.5% under arid conditions.
- Surfactant products must contain at least 60% nonionic surfactant with a hydrophilic/lipophilic balance (HLB) greater than 12.

Ammonium Nitrogen Fertilizer

- Use 2 quarts/acre of a high-quality urea ammonium nitrate (UAN), such as 28%N or 32%N, or 2 pounds/acre of a spray grade ammonium sulfate (AMS). Use 4 quarts/acre UAN or 4 pounds/acre AMS under arid conditions.

Special Adjuvant Types

- Combination adjuvant products may be used at doses that provide the required amount of NIS, COC, MSO and/or ammonium nitrogen fertilizer. Consult product literature for use rates and restrictions. Exception: On tall fescue pastures use a reduced rate of 1/2 to 1 pint non-ionic surfactant per 100 gallons.
- Antifoaming agents may be used if needed.
- Do not use Opensight with spray additives that reduce the pH of the spray solution to below 3.0.

Tank Mixing with Other Herbicides: Opensight at rates of up to 3.3 ounce/acre may be mixed with labeled rates of other herbicides registered for application on all labeled use sites. Opensight may be applied in tank-mix combination with labeled rates of other herbicides provided: (1) the tank-mix product is labeled for the timing and method of application for the use site to be treated and (2) mixing is not prohibited by the label of the registered tank mixed products, and (3) that the tank-mix combination is physically compatible (see tank-mix compatibility testing below). When tank mixing, use only in accordance with the restrictions, precautions and limitations on the respective product labels.

- Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels.
- Do not exceed specified application rates. If products containing the same active ingredient are mixed, do not exceed the maximum allowable active ingredient use rates.
- For direct injection or other spray equipment where the product formulations will be mixed in undiluted form, special care should be taken to ensure tank mix compatibility.
- Always perform a jar test to ensure the compatibility of products to be used in tank mixture.

Tank Mix Compatibility Testing: Perform a jar test prior to mixing in a spray tank to ensure compatibility of Opensight and other pesticides or carriers. Use a clear glass jar with lid and mix ingredients in the same order and proportions as will be used in the spray tank. The mixture is compatible if the materials mix readily when the jar is inverted several times. The mixture should remain stable after standing for 1/2 hour or, if separation occurs, should readily remix if agitated. An incompatible mixture is indicated by separation into distinct layers that do not readily remix when agitated and/or the presence of flakes, precipitates, gels, or heavy oily film in the jar. Use of an appropriate compatibility aid may resolve mix incompatibility. If the mixture is incompatible do not use that tank mix partner in tank mixtures.

Note: Foliar-applied liquid fertilizers themselves can cause yellowing of the foliage of forage grasses and other vegetation.

Guidelines for Grass Management

Opensight may be applied to established native grasses such as wheatgrasses, bluestems and grama, and on other established pasture grasses such as bermudagrass, bluegrass, orchardgrass, bromegrass, and tall fescue that were planted the previous growing season (or earlier) and are fully tillered, unless otherwise directed on this label. Specific application timing information on several of these grass species follows:

- Opensight may suppress certain established grasses, such as smooth bromegrass (*Bromus inermis*), especially when plants are stressed by adverse environmental conditions. Plants should recover from this transient suppression with the onset of environmental conditions favorable to grass growth and upon release from weed competition.
- Varieties and species of forage grasses differ in their tolerance to herbicides. When using Opensight on a particular grass for the first time, limit use to a small area. If no injury occurs throughout the season, larger acreage may be treated.
- Application of Opensight to Pensacola bahiagrass, ryegrass (Italian or perennial) and Garrison's creeping foxtail may cause severe injury to and/or loss of pastures.

Seeding grasses:

Preemergence: In general, Opensight may be applied in the spring or early summer, depending on the target weed species, as a broadcast application over grass that was planted at least 4 months prior to the application and that has been growing under favorable conditions for grass establishment.

With fall applications, do not plant grasses the following spring. Do not overseed ryegrass for 4 months after treatment.

Tall Fescue:

Opensight may stunt tall fescue, cause it to turn yellow, or cause seed head suppression. To minimize these symptoms, take the following precautions:

- do not use on tall fescue grown for seed
- do not use more than 2 ounce/acre of Opensight
- tank-mix Opensight with 2,4-D
- use a reduced rate of non-ionic surfactant at 1/2 to 1 pint per 100 gallons of spray solution (1/16 to 1/8% v/v)
- make application later in the spring after the new growth is 5 to 6 inches tall (until after reproductive culm has started to elongate), or in the fall
- do not use surfactant when liquid nitrogen is used as a carrier
- do not use a spray adjuvant other than non-ionic surfactant

Initial grass yields may be reduced due to fescue seed head suppression resulting from treatment with Opensight at labeled rates. However, this could be beneficial because in tall fescue infected with the fungal endophyte (*Neotyphodium* spp.), the endophyte is concentrated in the seed and cattle grazing plants with the seed head will get the maximum exposure to the endophyte. Increased levels of ingestions of the fungal endophyte can reduce weight gain and conception rates in cattle. Since the first grazing is often delayed in the spring until long after seed head development, Opensight could potentially be used to reduce development of the seed head, thereby reducing the amount of the endophyte that would be consumed by livestock when grazing.

Seed Head Suppression: If the intent is to control weeds and reduce tall fescue seed heads, apply Opensight at 2.0 to 2.5 ounce/acre early to fescue that is less than 6 inches tall.

Pensacola bahiagrass control in established Bermudagrass pasture: Apply Opensight at 2-2.5 ounce/acre after green-up in the spring, but before bahiagrass seedhead formation. Application should be made when environmental conditions favor grass growth.

Bahiagrass suppression could take up to 30 days before the desired level of control is achieved. Application of 2,4-D mixed with Opensight could decrease bahiagrass control. In pastures severely infested with bahiagrass, a positive response in forage yield may be slowed until desired forage grasses, like bermudagrass, grow into areas previously infested with bahiagrass. To reduce this effect consider treating different portions of heavily infested pastures with Opensight over a period of several years. Do not apply Opensight to an entire farm or ranch in one year. Fertilization and/or replanting may accelerate bermudagrass recovery following bahiagrass control with Opensight.

Bahiagrass regrowth may occur in pastures heavily infested with bahiagrass, intense grazing pressure, or when adverse environmental conditions (heat and drought), slows the recovery of desired grass forages.

Opensight will not control common or Argentine bahiagrass.

Pensacola bahiagrass control can be reduced when Opensight is applied in liquid fertilizer solutions.

Use Rates and Timing

Opensight may be applied post emergence as a broadcast spray or as a spot application to control weeds and brush including, but not limited to, those listed on this label. When a rate range is given use the higher rate to control weeds at advanced growth stages, or under less than favorable growing conditions, or for longer residual control. Best results are obtained when spray volume is sufficient to provide uniform coverage of treated weeds. For optimum uptake and translocation of Opensight, avoid mowing, haying, shredding, burning or soil disturbance in treated areas for at least 14 days following application.

Opensight also provides preemergence control of emerging seedlings of susceptible weeds, and re-growth of certain perennial weeds following application. Preventing establishment of weeds will depend upon application rate, season of application, and environmental conditions after application.

Opensight can provide long-term control of susceptible weeds. The length of control is dependent upon the application rate, condition and growth stage of target weeds, environmental conditions at and following application, and the density and vigor of competing desirable vegetation. Long-term weed control is most effective where grass vegetation is allowed to recover from overgrazing, drought, etc., and compete with weeds.

Opensight can be an important component of integrated vegetation management programs designed to renovate or restore desired plant communities. To maximize and extend the benefits of weed control provided by Opensight, it is important that other vegetation management practices, including proper grazing management, biological control agents, replanting, fertilization, prescribed fire, etc., be used in appropriate sequences and combinations to further alleviate the adverse effects of weeds on desirable plant species and to promote development of desired plant communities. Agricultural and natural resources specialists with federal and state government agencies can provide guidance on best management practices and development of integrated vegetation management programs.

Species Controlled

General Mix of Broadleaf Weeds: Opensight at 2.0 ounce/acre is the standard rate to provide control of many problem weeds when applied early in the season. If a certain weeds are key targets, use the rate in Table 1 for that species. The addition of Garlon herbicides, DMA 4 IVM, or other herbicides allowed for use on the site to be sprayed can be tank mixed to broaden the weed spectrum.

Opensight controls weeds and woody plants primarily by postemergent activity. Although Opensight has Preemergence activity, best results are generally obtained when Opensight is applied to foliage after emergence or dormancy break. Generally, for the control of annual weeds, Opensight provides the best results when applied to young, actively growing weeds. For the control of perennial weeds, applications made at the bud/bloom stage or while the target weeds are in the fall rosette stage typically provide the best results. The use rate depends upon the weed species and size of the weed at the time of application.

The degree and duration of control depends on weed spectrum and infestation intensity, weed size at application, environmental conditions at and following treatment, soil pH, soil moisture, and soil organic matter, and other factors.

For best results, most weeds should be treated when they are actively growing and under conditions favorable for growth. Use a higher rate in the rate range indicated when growing conditions are less than favorable (drought conditions), weeds are large and mature, weed density and foliage cover is high and canopy height is tall, or when residual control is desired. Opensight also provides preemergence control of germinating seeds or seedlings of susceptible weeds following application.

For rates for specific weeds, see Table 1. The life cycle is included for each weed species. The general timing of application for each life cycle is as follows:

Annuals: Use lower rates when weeds are less than 6 inches and actively growing. Increase rate as season progresses and plants become more mature.

Biennials: Apply in the spring and early summer to rosette or bolting plants or in the fall to seedlings and rosettes before ground is frozen. Use higher rates after bolting through early flower.

Perennials: Apply to vegetative stage prior to bloom. Use higher rate when weeds are larger.

Table 1: Species Controlled with Opensight

Note: Weeds marked with a * indicate more information is included in the specific weed problems section after the table.

Broadleaf Weeds Controlled by Opensight

Weed Species				Opensight rate oz product/a
Common Name	Scientific Name	Life Cycle	Plant Family	
actinomeris, wingstem	<i>Verbesina alternifolia</i>	perennial	Asteraceae	3.0
alyssum, hoary	<i>Berteroa incana</i>	biennial	Brassicaceae	2.0-2.5
amaranth, spiny	<i>Amaranthus spinosus</i>	summer annual	Amaranthaceae	1.5-2.0
arrowgrass, seaside†	<i>Triflochin maritima</i>	perennial	Juncaginaceae	3.0-3.3
aster	<i>Aster spp.</i>	perennial	Asteraceae	1.5-2.0
bahiagrass, Pensacola*	<i>Paspalum notatum</i> Flugge	perennial	Poaceae	2.0-2.5
babysbreath	<i>Gypsophila paniculata</i>	perennial	Caryophyllaceae	2.5-3.0
bedstraw	<i>Galium spp.</i>	perennial	Rubiaceae	2.0-2.5
bittercress	<i>Cardimane spp</i>	perennial	Brassicaceae	2.0-2.5
blackeyed-Susan	<i>Rudbeckia hirta</i>	annual	Asteraceae	1.5-2.0
brackenfern	<i>Pteridiums spp.</i>	perennial	Dennstaedtiaceae	2.5-3.3
broomweed, annual	<i>Amphiachyris dracunculoides</i>	annual	Asteraceae	1.0-1.5
bur buttercup (testiculate)	<i>Ranunculus testiculatus</i>	annual	Ranunculaceae	1.0-1.5
burclover	<i>Medicago spp</i>	annual	Fabaceae	1.5-2.0
burdock, Common	<i>Arctium minus</i>	biennial	Asteraceae	2.0-2.5
buttercup, hairy	<i>Ranunculus sardous</i>	perennial	Ranunculaceae	1.0-1.5
buttercup, tall	<i>Ranunculus acris</i>	perennial	Ranunculaceae	2.0-2.5
camelthorn	<i>Alhagi pseudalhagi</i>	perennial	Fabaceae	2.0-3.0
camphorweed	<i>Heterotheca subaxillaris</i>	summer annual	Asteraceae	2.0-3.0
campion, bladder‡	<i>Silene vulgaris</i>	perennial	Caryophyllaceae	2.0-2.5
caraway, wild	<i>Carum carvi</i>	biennial	Apiaceae	2.5-3.0
carrot, wild	<i>Daucus carota</i>	biennial	Apiaceae	2.0-2.5
catchfly, conical	<i>Silene conoidea</i>	annual	Caryophyllaceae	1.0-1.5
chamomile	<i>Matricaria spp</i>	annual	Asteraceae	2.5-3.0
chickweed, common	<i>Stellaria media</i>	Winter annual	Caryophyllaceae	3.0

Broadleaf Weeds Controlled by Opensight (Cont.)

Weed Species				Opensight rate oz product/a
Common Name	Scientific Name	Life Cycle	Plant Family	
chicory	<i>Cichorium intybus</i>	perennial	Asteraceae	1.5-2.0
cinquefoil*	<i>Potentilla spp</i>	perennial	Rosaceae	2.0-2.5
clover, sweet	<i>Mellilotus officinalis</i>	biennial	Fabaceae	2.5-3.0
clover, white	<i>Trifolium repens</i>	perennial	Fabaceae	1.5-2.0
cockle, corn	<i>Agrostemma githago</i>	annual	Caryophyllaceae	2.0-3.0
cocklebur	<i>Xanthium strumarium</i>	annual	Asteraceae	1.5-2.0
coreopsis, plains	<i>Coreopsis tinctoria</i>	annual	Asteraceae	2.0-3.0
cowcockle	<i>Vaccaria pyramidata</i>	annual	Caryophyllaceae	1.5-2.0
crazyweed, silky	<i>Oxytropis Lambertii</i>	perennial	Fabaceae	2.0-2.5
croton, woolly	<i>Croton capitatus</i>	annual	Euphorbiaceae	1.5-2.0
crownvetch	<i>Securigera varia</i>	perennial	Fabaceae	1.5-2.0
crupina, common	<i>Crupina vulgaris</i>	perennial	Asteraceae	3.0-3.3
cudweed, purple	<i>Gnaphalium purpureum</i>	annual	Asteraceae	2.0-2.5
daisy, oxeye*	<i>Leucanthemum vulgare</i>	perennial	Asteraceae	2.5-3.3
dandelion, common	<i>Taraxacum officinale</i>	perennial	Asteraceae	1.5-2.0
dock	<i>Rumex spp</i>	perennial	Polygonaceae	2.0-2.5
dyer's woad ‡	<i>Istis tinctoria</i>	perennial	Brassicaceae	3.3
evening primrose, cutleaf	<i>Oenothera laciniata</i>	annual	Asteraceae	1.5-2.0
false dandelion, Carolina	<i>Tragopogon dubius</i>	biennial	Asteraceae	1.5-2.0
falseflax, Smallseed	<i>Camelina microcarpa</i>	annual/biennial	Brassicaceae	1.5-2.0
fiddleneck, common	<i>Amsinckia intermedia</i>	annual	Boraginaceae	1.5-2.0
filaree, redstem	<i>Erodium cicutarium</i>	annual/biennial	Geraniaceae	3.0-3.3
fireweed	<i>Epilobium angustifolium</i>	perennial	Onagraceae	2.5-3.0
fleabane, annual	<i>Erigeron annuus</i>	annual	Asteraceae	1.5-2.0
garlic, wild	<i>Allium vineale</i>	perennial	Liliaceae	1.5-2.0
geranium, Carolina	<i>Geranium carolinianum</i>	Winter annual	Geraniaceae	1.5-2.0
goldenrod spp	<i>Solidago canadensis</i>	perennial	Asteraceae	2.0-2.5
gumweed, curlycup	<i>Grindelia squarrosa</i>	biennial	Asteraceae	2.0-2.5
halogeton	<i>Halogeton glomeratus</i>	annual	Chenopodiaceae	3.0-3.3
hawkweed, orange*	<i>Hieracium aurantiacum</i>	perennial	Asteraceae	2.5-3.3
hawkweed, yellow*	<i>Hieracium pratense</i>	perennial	Asteraceae	2.5-3.3
hemlock, poison‡	<i>Conium maculatum</i>	perennial	Apiaceae	2.5-3.3
henbane, black	<i>Hyoscyamus niger</i>	annual/biennial	Solanaceae	2.5-3.0
henbit	<i>Lamium amplexicaule</i>	annual/biennial	Lamiaceae	2.0-2.5
horsemint (beebalm)	<i>Monarda spp</i>	annual	Lamiaceae	1.5-2.0
horsenettle, Carolina	<i>Solanum carolinense</i>	perennial	Solanaceae	2.0-2.5
horseweed (marestail)	<i>Conyza canadensis</i>	annual	Asteraceae	1.5-2.0
houndstongue*	<i>Cynoglossum officinale</i>	biennial	Boraginaceae	2.5-3.3
ironweed, tall	<i>Vernonia gigantea</i>	perennial	Asteraceae	2.0-3.0
ironweed, western	<i>Vernonia baldwinii</i>	perennial	Asteraceae	2.0-3.0
knapweed	<i>Centaurea sp.</i>	biennial	Asteraceae	2.5-3.3
knapweed, brown	<i>Centaurea jacea</i>	perennial	Asteraceae	2.5-3.3
knapweed, diffuse*	<i>Centaurea diffusa</i>	biennial	Asteraceae	2.5-3.3
knapweed, Russian*	<i>Acroptilon repens</i>	perennial	Asteraceae	2.5-3.3
knapweed, spotted*	<i>Centaurea stoebe</i>	biennial	Asteraceae	2.5-3.3
knotweed, prostrate	<i>Polygonum aviculare</i>	annual	Polygonaceae	3.0
kochia*	<i>Kochia scoparia</i>	annual	Chenopodiaceae	1.5-2.0
lady's thumb	<i>Polygonum persicaria</i>	annual	Polygonaceae	1.5-2.0
lambsquarters, common	<i>Chenopodium album</i>	annual	Chenopodiaceae	2.0-2.5
lespedeza, annual	<i>Lespedeza striata</i>	annual	Fabaceae	2.0-2.5
lespedeza, sericea*	<i>Lespedeza cuneata</i>	perennial	Fabaceae	2.5-3.0
lettuce, Miner's	<i>Montia perfoliata</i>	annual	Portulacaceae	1.5-2.0
lettuce, prickly*	<i>Lactuca scariola</i>	annual	Asteraceae	1.5-2.0
locoweed	<i>Astragalus spp.</i>	perennial	Fabaceae	2.0-2.5
loosestrife, purple	<i>Lythrum salicaria</i>	perennial	Lythraceae	3.0-3.3
marshelder, annual‡	<i>Iva annua</i>	annual	Asteraceae	2.0-2.5

Broadleaf Weeds Controlled by Opensight (Cont.)

Weed Species				Opensight rate oz product/a
Common Name	Scientific Name	Life Cycle	Plant Family	
mayweed, scentless	<i>Tripleurospermum perforata</i>	annual	Asteraceae	1.5-2.0
mayweed, stinking	<i>Anthemis cotula</i>	annual	Asteraceae	3.0-3.3
medic, black	<i>Medicago lupulina</i>	perennial	Fabaceae	2.0-2.5
mexicantea	<i>Dysphania ambrosioides</i>	annual/perennial	Chenopodiaceae	2.0-2.5
mullein*	<i>Verbascum spp.</i>	biennial	Scrophulariaceae	2.0-3.3
mustard, blue*	<i>Chorispora tenella</i>	annual	Brassicaceae	1.5-2.0
mustard, tumble/Jim Hill	<i>Sisymbrium altissimum</i>	Winter annual	Brassicaceae	1.5-2.0
mustard, wild	<i>Brassica kaber</i>	annual	Brassicaceae	1.5-2.0
needles, Spanish needles	<i>Bidens bipinnata</i>	annual	Asteraceae	2.0-2.5
oxtongue, bristly	<i>Picris echioides</i>	biennial	Asteraceae	2.5-3.0
parsnip, Wild	<i>Pastinaca sativa</i>	biennial	Apiaceae	2.0-3.0
partridgepea	<i>Chamaecrista fasciculata</i>	annual	Fabaceae	2.5-3.0
pepperweed, perennial†*	<i>Lepidium latifolium</i>	perennial	Brassicaceae	3.3
pigweeds	<i>Amaranthus spp</i>	annual	Amaranthaceae	1.5-2.0
plantain, broadleaf	<i>Plantago major</i>	perennial	Plantaginaceae	2.0-2.5
plantain, buckhorn	<i>Plantago lanceolata</i>	perennial	Plantaginaceae	2.0-2.5
purslane, common	<i>Portulaca oleracea</i>	annual	Portulacaceae	1.5-2.0
ragweed, common	<i>Ambrosia artemisiifolia</i>	annual	Asteraceae	2.0-2.5
ragweed, western*	<i>Ambrosia psilostachya</i>	perennial	Asteraceae	2.0-2.5
ragwort, tansy	<i>Senecio jacobaea</i>	perennial	Asteraceae	2.5-3.0
rush skeletonweed	<i>Chondrilla juncea</i>	perennial	Asteraceae	2.5-3.0
salsify, Western‡	<i>Tragopogon dubius</i>	biennial	Asteraceae	3.0-3.3
scouringrush‡	<i>Equisetum hyemale</i>	grass	Equisetaceae	3.3
shephardspurse	<i>Capsella bursa-pastoris</i>	Winter annual	Brassicaceae	1.5-2.0
sicklepod	<i>Senna obtusifolia</i>	annual	Fabaceae	2.5-3.0
sida, arrowleaf	<i>Sida rhombifolia</i>	annual	Malvaceae	2-2.5
smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>	annual	Polygonaceae	1.5-2.0
snakeweed, broom*	<i>Gutierrezia sarothrae</i>	perennial	Asteraceae	3.0
sneezeweed, bitter	<i>Helenium amarum</i>	annual	Asteraceae	1.0-1.5
snow-on-the-mountain	<i>Euphorbia marginata</i>	annual	Euphorbiaceae	2.0-2.5
soda apple, tropical*	<i>Solanum viarum</i>	perennial	Solanaceae	2.5-3.0
sorrel, red	<i>Rumex acetosella</i>	perennial	Polygonaceae	2.0-2.5
sowthistle, perennial	<i>Sonchus arvensis</i>	perennial	Asteraceae	2.0-2.5
sowthistle, prickly	<i>Sonchus asper</i>	annual	Asteraceae	1.5-2.0
St. Johnswort, common	<i>Hypericum perforatum</i>	perennial	Clusiaceae	2.5-3.0
starthistle, purple*	<i>Centaurea calcitrapa</i>	biennial	Asteraceae	1.5-2.0
star-thistle, Malta*	<i>Centaurea melitensis</i>	annual	Asteraceae	1.5-2.0
starthistle, yellow*	<i>Centaurea solstitialis</i>	annual	Asteraceae	1.5-2.0
sunflower, common	<i>Helianthus annua</i>	annual	Asteraceae	1.5-2.0
tansy, common	<i>Tanacetum vulgare</i>	perennial	Asteraceae	2.5-3.3
teasel	<i>Dipsacus spp.</i>	biennial	Dipsacaceae	2.0-3.0
thistle, Russian*	<i>Salsola iberica</i>	annual	Chenopodiaceae	1.5-2.0
thistle, artichoke	<i>Cynara cardunculus</i>	perennial	Asteraceae	2.0-3.0
thistle, bull*	<i>Cirsium vulgare</i>	biennial	Asteraceae	1.0-2.5
thistle, Canada*	<i>Cirsium arvense</i>	perennial	Asteraceae	2.0-3.3
thistle, Italian	<i>Carduus pycnocephalus</i>	annual	Asteraceae	2.0-3.0
thistle, musk*	<i>Carduus nutans</i>	biennial	Asteraceae	1.0-2.5
thistle, plumeless*	<i>Carduus acanthoides</i>	biennial	Asteraceae	1.0-2.5
thistle, Scotch	<i>Onopordum acanthium</i>	biennial	Asteraceae	1.5-2.5
thistle, woolly distaff	<i>Carthamus lanatus</i>	annual	Asteraceae	1.5-2.0
vervain‡	<i>Verbena spp.</i>	perennial	Asteraceae	2.0-2.5
vetch, common*	<i>Vicia sativa</i>	annual	Fabaceae	1.5-2.0
wallflower, bushy	<i>Erysimum repandum</i>	annual	Brassicaceae	1.5-2.0
waterpod	<i>Ellisia nyctelea</i>	annual	Brassicaceae	1.5-2.0
whitetop (hoary cress)*	<i>Cardaria draba</i>	perennial	Brassicaceae	3.3
woodsorrel, yellow	<i>Oxalis stricta</i>	perennial	Oxalidaceae	3.0-3.3

Broadleaf Weeds Controlled by Opensight (Cont.)

Weed Species				Opensight rate oz product/a
Common Name	Scientific Name	Life Cycle	Plant Family	
wormwood, absinth*	<i>Artemisia absinthium</i>	perennial	Asteraceae	3.0-3.3
yankeeweed	<i>Eupatorium compositifolium</i>	perennial	Asteraceae	3.0-3.3
yarrow, common	<i>Achillea millefolium</i>	perennial	Asteraceae	1.5-2.0

‡ : This symbol denotes weed suppression which is a reduction in weed competition compared to untreated areas. A second treatment may be necessary. The addition of 0.5 lbs ae/acre of 2,4-D may improve initial control.

Hawkweed, orange or yellow: Apply Opensight at 2.5 to 3.3 ounce/acre to plants in the bolting stage of development.

Houndstongue: Apply 2.5 ounce/acre to rosettes. As plant bolts, increase the rate to 3.0 to 3.3 ounce/acre up to early bud stage. Add 1 quart of 2,4-D/acre after the bud stage.

Knapweeds, diffuse and spotted: Apply Opensight at 2.5 to 3.3 ounce/acre when plants are actively growing with the optimum time of application occurring from rosette to the bolting stages of development or in the fall. Plants will be controlled by mid-summer and fall applications even though plants may not show any changes in form or stature the year of application.

Knapweed, Russian: Apply Opensight at 2.5 to 3.3 ounce/acre to plants in the spring and summer to plants from early bud to flowering stage and to dormant plants in the fall.

Lespedeza, Sericea: Apply 2.5 to 3.0 ounce/acre beginning at flower bud initiation through the full bloom stage of growth.

Mullein: Apply 2.0 ounce/acre in the rosette stage in spring or fall. Use rates from 2.5 to 3.3 ounce/acre for bolting plants less than 12 inches tall.

Oxeye daisy: Apply Opensight at 2.5 to 3.3 ounce/acre to plants in the prebud stage of development.

Pepperweed, perennial: Apply Opensight at 3.3 ounce/acre plus 2 lb ae/a 2, 4-D when plants are at early flowering through bloom for optimum control.

Ragweed, Western: Apply Opensight at 2.0 to 2.5 ounce/acre when plants are in the vegetative growth stage. The addition of 0.5 to 1 lb ae/acre (1 to 2 pints/acre of 4 lb ae/gallon 2,4-D) of 2,4-D/acre will improve control in dense stands or when ragweed is greater than 6 inches.

Russian thistle, kochia, and prickly lettuce: Naturally occurring resistant biotypes of these weeds to metsulfuron are known to occur. For best results, use Opensight at 1.5 to 2.0 ounces/acre in tank-mix with 2,4-D. Applications to these weeds should be made early to weeds less than 6 inches in height.

Snakeweed, broom: Applications should be made in the fall at 3.0 ounces/acre. Spring applications will provide suppression only.

Soda apple, tropical: Apply Opensight at 2.5 to 3.0 ounce/acre at any growth stage, but application by flowering will reduce seed production potential.

Starthistle, malta, purple, and yellow: Apply Opensight at 1.5 to 2.0 ounce/acre to plants at the rosette through bolting growth stages.

Sulfur cinquefoil: Apply Opensight at 2.0 to 2.5 ounce/acre to plants in the prebud stage of development.

Thistle, Canada: Apply Opensight at 2.0 to 3.3 ounce/acre either in the spring or summer to fully emerged Canada thistle. The goal is to insure all plants have emerged and many of the thistles will be in the bud to early flower stage at this time. Applications are also effective in the fall before a killing frost. Use higher rates for older/dense stands or for longer residual control.

Thistles, Bull, musk, and plumeless: Apply Opensight at 1.0 to 2.0 ounce/acre in the spring and early summer to rosette or bolting plants or in the fall to seedlings and rosettes. Apply at 2.0 to 2.5 ounce/acre plus 0.5 lb ae/acre 2,4-D when plants are at the late bolt through early flowering growth stages.

Vervain: Apply 1.5 to 2.0 oz/acre of Opensight with 0.5 lb ae/acre (1 pint/acre of 4 lb ae/gallon 2,4-D) of 2,4-D.

Whitetop: Apply 3.3 ounce/acre early in the spring to actively growing rosettes or to regrowth before the bud stage. Treatment after bloom is generally less effective and the addition of 2,4-D at 1 lb ae/acre (2 pint/acre of 4 lb ae/gallon 2,4-D) is recommended. Treatments can also be made to fall regrowth before the first killing frost.

Wormwood, absinth: Apply 3.0 to 3.3 ounce/acre before wormwood is 12 inches tall. When applying by air on CRP, coverage is important and a minimum of 3 GPA is specified. Remove old duff and litter by fire or mowing for best results. Fall applications are also effective if green regrowth is present.

Woody Plant Control: Apply Opensight at 3.3 ounce/acre at the timing described below in Table 2.

Table 2: Woody Plant Control with Opensight

Common Name	Scientific Name	Plant Family	Application Details
blackberry*	<i>Rubus spp</i>	Rosaceae	Apply when leaves are fully expanded and the plant has stopped rapid spring and early summer growth. Application after bloom and before frost is optimal. It is recommend that after mowing, shredding, or burning applications should wait until the next season and enough re-growth has occurred for good uptake and translocation..
buckbrush	<i>Symphoricarpos orbiculus</i>	Caprifoliaceae	Apply 2.0 to 3.0 oz/acre in spring or early summer when new growth is 6-12 inches tall. Add 0.5 to 1 lb ae/acre of 2,4-D (1 to 2 pints/acre of 4 lb ae/gallon 2,4-D) to the lower rate.
dewberry*	<i>Rubus flagellaris</i>	Rosaceae	Apply when leaves are fully expanded and the foliage is dark green, either before first flower or after fruit drop. Application after fruit drop is preferred until frost. It is recommend that after mowing, shredding, or burning applications should wait until the next season and enough re-growth has occurred for good uptake and translocation..
honey locust	<i>Gleditsia triacanthos</i>	Fabaceae	Apply in spring when leaves are fully expanded and foliage is mature.
honeysuckle	<i>Lonicera japonica</i>	Caprifoliaceae	Apply in spring when leaves are fully expanded and foliage is mature.
kudzu	<i>Pueraria montana</i>	Fabaceae	Apply at or after bloom (July) in the summer until fall when the foliage begins to senesce. Kudzu should be actively growing; avoid treating when drought stressed.
locust, black	<i>Robinia pseudoacacia</i>	Fabaceae	Apply in spring when leaves are fully expanded and foliage is mature.
mimosa	<i>Albizia julibrissin</i>	Fabaceae	Apply after full leaf emergence in the spring until fall foliage color change.
redbud	<i>Cercis canadensis</i>	Fabaceae	Apply after full leaf emergence in the spring until fall foliage color change.
rose, Cherokee	<i>Rosa laevigata</i>	Rosaceae	Apply from full leaf through flowering. For best results, delay treatment for 9-12 months after mowing.
rose, multiflora	<i>Rosa multiflora</i>	Rosaceae	Apply from full leaf through flowering. For best results, delay treatment for 9-12 months after mowing.
rose, prairie wild	<i>Rosa arkansana</i>	Rosaceae	Apply from full leaf through flowering. For best results, delay treatment for 9-12 months after mowing.

Table 2: Woody Plant Control with Opensight (Cont.)

Common Name	Scientific Name	Plant Family	Application Details
snowberry, Western	<i>Symphoricarpos occidentalis</i>	Caprifoliaceae	Apply 3 oz/acre of Opensight alone or 2.0 to 3.0 oz/acre with 1 lb ae/acre of 2,4-D ester (2 pints/acre of 4 lb ae/gallon 2,4-D) in the spring when leaves are fully expanded and foliage is mature. Apply 3 oz/acre with 1 lb ae/acre of 2,4-D ester (2 pints/acre of 4 lb ae/gallon 2,4-D) from full leaf expansion up to the flowering stage.
wisteria	<i>Wisteria brachybotrys</i>	Fabaceae	Apply after full leaf emergence in the spring until fall foliage color change.
yucca‡	<i>Yucca glauca</i>	Agavaceae	Add 1 lb ai/acre of 2,4-D ester (2 pints/acre of 4 lb ae/gallon 2,4-D) to Opensight at 3.3 ounce/acre. Another option for additional woody plant control is Chaparral plus 1 pint/acre Remedy® Ultra. Make applications from flower stalk elongation through seed pod development. Crop oil concentrate (COC), Methylated Seed Oil (MSO) or Methylated Seed Oil/Organosilicone (MSO/OS) are the preferred adjuvants. Aerial application is recommended with a minimum of 4 gallons per acre volume for dense yucca populations.

‡ : This symbol denotes weed suppression which is a reduction in weed competition compared to untreated areas. A second treatment may be necessary.

* This recommendation is for blackberry and dewberry control in bermudagrass or other non-sensitive grasses only. For control in tall fescue pastures, only apply Opensight as a spot treatment. For broadcast blackberry control in tall fescue pastures, use 1 pint/acre of Remedy Ultra + 2 pts/acre of ForeFront™ R&P

Opensight alone provides brush control for a number of woody/perennial species. In most situations, Opensight is added to brush control tank mixtures to improve control of the species listed below.

Control of Woody Species with Opensight Alone			
Common Name	Scientific Name	Life Cycle	Plant Family
ash	<i>Fraxinus spp.</i>	perennial	Oleaceae
aspen	<i>Populus tremuloides</i>	perennial	Salicaceae
camelthorn	<i>Alhagi pseudalhagi</i>	perennial	Fabaceae
cherry	<i>Prunus spp.</i>	perennial	Rosaceae
cottonwood	<i>Populus spp.</i>	perennial	Salicaceae
Eastern red cedar	<i>Juniperus virginiana</i>	perennial	Cupressaceae
elder	<i>Sambucus spp.</i>	perennial	Caprifoliaceae
elm	<i>Ulmus spp.</i>	perennial	Ulmaceae
firs	<i>Abies spp.</i>	perennial	Pinaceae
hawthorn	<i>Crataegus spp.</i>	perennial	Rosaceae
mulberry	<i>Morus spp.</i>	perennial	Moraceae
muscadine (wild grape)	<i>Muscadinia rotundifolia</i>	perennial	Vitaceae
oaks	<i>Quercus spp.</i>	perennial	Fagaceae
ocean spray	<i>Holodiscus discolor</i>	perennial	Rosaceae
osage orange	<i>Maclura pomifera</i>	perennial	Moraceae
maple, red	<i>Acer rubrum</i>	perennial	Aceraceae
salmonberry	<i>Rubus spectabilis</i>	perennial	Rosaceae
spruce, black	<i>Picea mariana</i>	perennial	Pinaceae
spruce, white	<i>Picea glauca</i>	perennial	Pinaceae
thimbleberry	<i>Rubus parviflorus</i>	perennial	Rosaceae
tree of heaven	<i>Ailanthus altissima</i>	perennial	Simaroubaceae
willow	<i>Salix spp.</i>	perennial	Salicaceae
poplar, yellow	<i>Liriodendron tulipifera</i>	perennial	Magnoliaceae

Selective Weed Control with tank mixes

Opensight is tank mix compatible with other selective herbicides such as Garlon 3A. Spot treatments using a tank mixture of Garlon 3A at 3% to 5 % v/v + Opensight at 20 oz product per 100 gallons of water (0.2 oz product/gallon water) + non-ionic surfactant, will control the following species, in addition to species listed above, without harming the grasses.

Control of Woody Species with Opensight in Tank Mixes			
Common Name	Scientific Name	Life Cycle	Plant Family
alder	<i>Alnus rubra</i>	perennial	Betulaceae
arrowweed	<i>Pluchea sericea</i>	perennial	Asteraceae
Australian pine	<i>Pinus nigra</i>	perennial	Pinaceae
bear clover (bearmat)	<i>Chamaebatia foliolosa</i>	perennial	Rosaceae
beech	<i>Fagus spp.</i>	perennial	Fagaceae
birch	<i>Betula spp.</i>	perennial	Betulaceae
blackgum	<i>Nyssa sylvatica</i>	perennial	Cornaceae
Brazilian pepper-tree	<i>Schinus terebinthifolius</i>	perennial	Anacardiaceae
casara	<i>Rhamnus purshiana</i>	perennial	Rhamnaceae
ceanothus	<i>Ceanothus spp.</i>	perennial	Rhamnaceae
chinquapin	<i>Chrysolepis chrysophylla</i>	perennial	Fagaceae
choke cherry	<i>Prunus virginiana</i>	perennial	Rosaceae

Control of Woody Species with Opensight in Tank Mixes (Cont.)			
Common Name	Scientific Name	Life Cycle	Plant Family
dogwood	<i>Cornus spp.</i>	perennial	Cornaceae
Douglas-fir	<i>Pseudotsuga menziesii</i>	perennial	Pinaceae
elderberry	<i>Sambucus spp.</i>	perennial	Adoxaceae
gallberry	<i>Ilex coriacea</i>	perennial	Aquifoliaceae
hazel	<i>Corylus spp.</i>	perennial	Betulaceae
hornbeam	<i>Corylus spp.</i>	perennial	Betulaceae
madrone	<i>Arbutus menziesii</i>	perennial	Ericaceae
maple	<i>Acer spp.</i>	perennial	Aceraceae
mulberry	<i>Morus spp.</i>	perennial	Moraceae
persimmon	<i>Diospyros spp.</i>	perennial	Ebenaceae
pine	<i>Pinus spp.</i>	perennial	Pinaceae
poison ivy	<i>Toxicodendron radicans</i>	perennial	Anacardiaceae
poison oak	<i>Toxicodendron pubescens</i>	perennial	Anacardiaceae
poplar	<i>Populus spp.</i>	perennial	Salicaceae
coyote bush	<i>Baccharis pilularis</i>	perennial	Asteraceae
sassafras	<i>Sassafras spp.</i>	perennial	Lauraceae
Scotch broom	<i>Cytisus scoparius</i>	perennial	Fabaceae
sumac	<i>Rhus coriaria</i>	perennial	Anacardiaceae
sweetbay magnolia	<i>Magnolia virginiana</i>	perennial	Magnoliaceae
sweetgum	<i>Liquidambar spp.</i>	perennial	Altingiaceae
sycamore	<i>Platanus spp.</i>	perennial	Platanaceae
tanoak	<i>Lithocarpus densiflorus</i>	perennial	Fagaceae
wax myrtle	<i>Myrica spp.</i>	perennial	Myricaceae
Western hemlock	<i>Tsuga heterophylla</i>	perennial	Pinaceae
winged elm	<i>Ulmus alata</i>	perennial	Ulmaceae

Apply either with a low volume backpack or handgun (hose reel 7 hydraulic spraygun). In all cases, use the amount specified to provide uniform and complete coverage of the plants to be controlled. Total spray volume should not exceed 16 gallons of spray mix per acre.

Non-selective weed control with tank mixes

Opensight is tank mix compatible with non-selective herbicides such as Accord XRT II or Rodeo at 3 to 4 quarts per acre + a non-ionic surfactant at 0.25% v/v for control of grasses and many broadleaf woody species such as red oak, white oak, cherry, sweetgum, loblolly pine, red maple and yellow poplar.

Precautions for Avoiding Spray Drift

Avoid application under conditions that may allow spray drift because very small quantities of spray, which may not be visible, may injure susceptible crops. This product should be applied only when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, non-target crops and other plants) is minimal (e.g., when wind is blowing away from the sensitive areas. A drift control aid may be added to the spray solution to further reduce the potential for drift. If a drift control aid is used, follow the use directions and precautions on the manufacturer's label. Do not use a thickening agent with Microfoil, Thru-Valve booms, or other spray delivery systems that cannot accommodate thickened spray solutions.

Ground Equipment: With ground equipment spray drift can be lessened by keeping the spray boom as low as possible; by applying 10 gallons or more of spray per acre; by keeping the operating spray pressures at the manufacturer's specified minimum pressures for the specific nozzle type used (low pressure nozzles are available from spray equipment manufacturers); and by spraying when the wind velocity is low (follow state regulations). Avoid calm conditions which may be conducive to thermal inversions. Direct sprays no higher than the tops of target vegetation and keep spray pressures low enough to provide coarse spray droplets to minimize drift.

Aerial Application: Avoid spray drift at the application site. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. Users are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications:

1. The distance of the outer most operating nozzles on the boom must not exceed 75% of wingspan or 85% of rotor diameter.

2. Nozzles should be pointed backward parallel with the air stream or not pointed downwards more than 45 degrees.

State regulations must be followed.

The applicator should be familiar with and take into account the information covered in the following **Aerial Drift Reduction Advisory**. This information is advisory in nature and does not supersede mandatory label requirements.

Aerial Drift Reduction Advisory

Information on Droplet Size: The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

Controlling Droplet Size:

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Do not exceed the nozzle manufacturer's specified pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** - Use the minimum number of nozzles that will provide uniform coverage.
- **Nozzle Orientation** - Orient nozzles so that the spray is released parallel to the airstream to produce larger droplets than other orientations. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Length: The distance of the outer most operating nozzles on the boom must not exceed 75% of wingspan or 85% of rotor diameter.

Application Height: Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment: When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement

by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

Wind: Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **Note:** Local terrain such as valleys and ravines can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity: When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions: Applications should not occur during a local, low level temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of the smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

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2. Replacement of amount of product used.

To the extent permitted by law, Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. To the extent permitted by law, in no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

®Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

Produced for
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

Label Code: D02-372-005
Replaces Label: D02-372-004
LOES Number: 010-02200

EPA accepted 04/15/14

Revisions:

1. Updated the statement "Do not apply directly to water and take precautions to minimize spray drift onto water" to "Do not apply directly to water and take precautions to minimize overspray to open water when treating target vegetation in and around non-flowing, quiescent or transient water. When making applications to control unwanted plants on banks or shorelines of flowing water, minimize overspray to open water. Note: Consult local public water control authorities before applying this product in and around public water. Permits may be required to treat such areas" throughout the label.
2. Updated the statement "The field bioassay can be initiated at any time between harvest of the treated crop and the planting of the intended rotational crop" to "The field bioassay can be initiated one year after the last application of aminopyralid in that field" throughout the label and supplemental label.
3. Added statement and graphic for Northeastern states.
4. Updated trademark line.

SPECIMEN

PLATEAU[®]

herbicide

FOR WEED CONTROL, NATIVE GRASS ESTABLISHMENT AND TURF GROWTH SUPPRESSION ON PASTURES, RANGELAND AND NONCROP AREAS AND CONIFER PLANTATION SITE PREPARATION

Active Ingredient:

Ammonium salt of imazapic (+)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-methyl-3-pyridinecarboxylic acid* 23.6%

Other Ingredients: 76.4%

Total: 100.0%

*Equivalent to 22.2% (+)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-methyl-3-pyridinecarboxylic acid (1 gallon contains 2.0 pounds of active ingredient as the free acid)

EPA Reg. No. 241-365

EPA Est. No.

**KEEP OUT OF REACH OF CHILDREN
CAUTION/PRECAUCION**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

See inside for complete **First Aid, Precautionary Statements, Directions for Use, Conditions of Sale and Warranty**, and state-specific crop and/or use site restrictions.

In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).

Net Contents:

BASF Corporation
26 Davis Drive
Research Triangle Park, NC 27709

 **BASF**
The Chemical Company

FIRST AID	
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. • Call a poison control center for treatment advice.
HOTLINE NUMBER	
<p>Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact BASF Corporation for emergency medical treatment information: 1-800-832-HELP (4357).</p>	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Avoid breathing spray mist. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

Personal Protective Equipment (PPE):

Applicators and other handlers must wear:

- Long-sleeve shirt and long pants
- Chemical-resistant gloves made of waterproof material
- shoes plus socks

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations:

Users Should:

- Wash hands before eating, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

For terrestrial use only. **DO NOT** apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark.

DO NOT contaminate water when disposing of equipment washwaters or rinsate.

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

This product may contaminate water through drift of spray in wind. This product has a high potential for runoff for several months or more after application. Poorly draining soils and soils with shallow watertables are more prone to produce runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

IMPORTANT

Plateau® herbicide may be applied to non-irrigation ditches and low lying areas when water has drained, but may be isolated in pockets due to uneven or unlevel conditions. **DO NOT** treat the inside of irrigation ditches. **DO NOT** rinse equipment on or near desirable trees or ornamental plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. **DO NOT** use on residential lawns.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

This labeling must be in the possession of the user at the time of pesticide application.

DO NOT use **Plateau** on food or feed crops except as recommended by this label or supplemental labeling.

DO NOT cut treated area for hay within seven days after treatment.

DO NOT use organophosphate insecticides on newly seeded areas treated with **Plateau** unless severe injury or loss of stand can be tolerated.

Observe all cautions and limitations on this label and on the labels of products used in combination with **Plateau**. **DO NOT** use **Plateau** other than in accordance with the instructions set forth on this label. The use of **Plateau** not consistent with this label may result in injury to desired vegetation. Keep containers closed to avoid spills and contamination

When making new plantings of prairiegrass or wildflowers, carry-over from persistent herbicides such as sulfonyl-urea, imidazolinone, triazine, substituted urea, dinitroaniline, and other herbicides applied the previous year may result in compounded injury or death of desirable vegetation when treated with **Plateau**.

When making applications around desirable trees or ornamental plants, small areas should be tested to determine the tolerance of a particular species to soil and/or foliar applications of **Plateau**. See "TOLERANCE OF TREES AND BRUSH TO **PLATEAU** HERBICIDE" section of this label.

DO NOT apply this product through any type of irrigation system.

DO NOT exceed 12 ounces of **Plateau** per acre in one year.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- coveralls
- chemical-resistant gloves made of any waterproof material
- shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Noncrop weed control is not within the scope of the Worker Protection Standard. See the GENERAL INFORMATION section of this label for a description of noncrop sites.

DO NOT enter treated areas without protective clothing until sprays have dried.

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: KEEP FROM FREEZING. **DO NOT** store below 20°F.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

Nonrefillable Container. DO NOT reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Triple rinse containers small enough to shake (capacity ≤ 5 gallons) as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Triple rinse containers too large to shake (capacity > 5 gallons) as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

In Case of Spill

In case of large-scale spillage regarding this product, call:
CHEMTREC 1-800-424-9300
BASF Corporation 1-800-832-HELP (4357)

GENERAL INFORMATION

Plateau® herbicide is an aqueous solution to be mixed with water and an adjuvant and applied as a spray solution to provide weed control and/or turf height suppression on pastures, rangeland (see "GUIDELINES FOR RANGELAND USE" section), Federal Conservation Reserve Program (CRP) land and noncropland areas including noncropland areas that may be grazed or cut for hay. Examples of noncropland areas include, but are not limited to railroad, utility, pipeline and highway rights-of-way, railroad crossings, utility plant sites, petroleum tank farms, pumping installations, non-agricultural fence rows, storage areas, non-irrigation ditchbanks, prairie sites, airports, industrial turf, golf courses, recreational and non-residential turf and other similar areas. **Plateau** may be used for the release of bermudagrass, bahiagrass, smooth bromegrass, wheatgrass, "wildtype" common Kentucky bluegrass, native prairiegrass, wildflowers, crown vetch, other grasses and certain legumes. **Plateau** can also be used for weed control during the establishment of native prairiegrasses and other grasses (see "REVEGETATION WITH PRAIRIEGRASSES AND OTHER FORAGE GRASSES" section). **Plateau** may also be used for conifer plantation site preparation.

Plateau is readily absorbed through leaves, stems, and roots and is translocated rapidly throughout the plant, with accumulation in the meristematic regions. Treated plants stop growing soon after spray application. Chlorosis appears first in the newest leaves, and necrosis spreads from this point. In perennials, the herbicide is translocated into, and kills, underground storage organs which prevents regrowth. Chlorosis and tissue necrosis may not be apparent in some plant species for several weeks after application. Complete kill of plants may not occur for several weeks after application. Adequate soil moisture is important for optimum **Plateau** activity. When adequate soil moisture is present, **Plateau** will provide residual control of susceptible germinating weeds. Activity on established weeds will depend on the weed species and rooting depth. **Plateau** is rainfast one hour after application.

Plateau will control annual and perennial grasses and broadleaf weeds and vine species. **Plateau** will provide residual control of labeled weeds which germinate in the treated area. Certain brush species and ornamentals may be injured by direct application of **Plateau** to their foliage. This product may be applied either preemergence or postemergence to the weeds. However, postemergence application is the method of choice in most situations, particularly for perennial species. For maximum activity, weeds should be growing vigorously at the time of postemergence applications and the spray solution should include an adjuvant (see "SPRAY ADJUVANTS FOR POSTEMERGENCE APPLICATIONS" section). These solutions may be applied as a broadcast or as a spot treatment using backpack, or ground equipment.

Plateau may be applied in the dormant or growing season for weed control.

Tolerance of desirable grass species to **Plateau** may be reduced when grasses are stressed due to insect damage, disease, environmental conditions, shade, poorly drained soils or other causes.

Depending on the turf type being treated, some yellowing of turf may occur with applications during the growing season. Depending on weather conditions, yellowing will usually disappear in 2 to 4 weeks.

Plateau should not be applied to newly seeded or sprigged grass stands, unless otherwise stated in this label (see "REVEGETATION WITH PRAIRIEGRASSES AND OTHER FORAGE GRASSES" section).

MANAGING OFF-TARGET MOVEMENT

Spray Drift: Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Spray drift from applying this product may result in damage to sensitive plants adjacent to the treatment area. Only apply this

product when the potential for drift to these and other adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, or non-target crops) is minimal. **DO NOT** apply when the following conditions exist that increase the likelihood of spray drift from intended targets: high or gusty winds, high temperatures, low humidity, temperature inversions.

To minimize spray drift, the applicator should be familiar with and take into account the following drift reduction advisory information. Additional information may be available from state enforcement agencies or the Cooperative Extension on the application of this product.

The best drift management strategy and most effective way to reduce drift potential are to apply large droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see **Wind, Temperature and Humidity and Temperature Inversions**).

Controlling Droplet Size:

- Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure - **DO NOT** exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of Nozzles - Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is recommended practice. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift. **DO NOT** use nozzles producing a mist droplet spray.

Application Height: Making applications at the lowest possible height (aircraft, ground driven spray boom) that is safe and practical reduces exposure of droplets to evaporation and wind.

Swath Adjustment: When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the application equipment (e.g. aircraft, ground) upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller droplets, etc.).

Wind: Drift potential is lowest between wind speeds of 3-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 3 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity: When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions: Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud, which can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind

conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Wind Erosion: Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.

Aerial Application Methods and Equipment: Use 2 or more gallons of water per acre. The actual minimum spray volume per acre is determined by the spray equipment used. Use adequate spray volume to provide accurate and uniform distribution of spray particles over the treated area and to avoid spray drift.

Managing spray drift from aerial applications: Applicators must follow these requirements to avoid off-target drift movement: 1) boom length - the distance of the outermost nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor, 2) nozzle orientation - nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees, and 3) application height - without compromising aircraft safety, applications should be made at a height of 10 feet or less above the crop canopy or tallest plants. Applicators must follow the most restrictive use cautions to avoid drift hazards, including those found in this labeling as well as applicable state and local regulations and ordinances.

Ground Application (Broadcast): Use 5 or more gallons of water per acre. The actual minimum spray volume per acre is determined by the spray equipment used. Use adequate spray volume to provide accurate and uniform distribution of spray particles over the treated area and to avoid spray drift.

MIXING INSTRUCTIONS

Fill the spray tank one-half to three-quarters full with clean water. Use a calibrated measuring device to measure the required amount of **Plateau® herbicide**. Add **Plateau** to the spray tank while agitating. Fill the remainder of the tank with water.

For postemergence applications, add a surfactant to the spray tank (see "SPRAY ADJUVANTS FOR POSTEMERGENCE APPLICATIONS" section of this label for specific recommendations). Maintain agitation while spraying to ensure a uniform spray mixture. An antifoaming agent may be added to the tank if needed.

When tank-mixing **Plateau** with recommended herbicides, add wettable powders, dispersible granules or other dry formulations first, then EC's, then **Plateau**, and then an adjuvant.

SPRAYING INSTRUCTIONS

DO NOT apply during windy or gusty conditions unless applications are being made with a drift control agent and/or an enclosed or shielded spray system. **DO NOT** apply if rainfall is threatening. Rainfall within 1 hour after **Plateau** application may reduce weed control.

GROUND APPLICATIONS:

Uniformly apply with properly calibrated ground equipment in 2 or more gallons of water per acre. Application equipment, specially designed to make low volume application should be used when making applications using less than 10 gallons of water per acre. A spray pressure of 20 to 40 psi is recommended.

To achieve acceptable control of the target vegetation, good spray coverage of the weed foliage (postemergence) or soil surface (preemergence) is required. To achieve good spray coverage the sprayer must be calibrated to deliver the recommended spray volume and pressure and adjust the spray boom height to ensure proper coverage of weed foliage or soil surface (according to the manufacturer's recommendation). Avoid overlaps when spraying.

SPOT TREATMENTS:

To prepare the spray solution, thoroughly mix in water 0.25 to 1.5% (0.3 to 1.9 oz/gallon water) **Plateau** plus an adjuvant (see "SPRAY ADJUVANTS FOR POSTEMERGENCE APPLICATIONS" section). A methylated seed oil at 1% v/v is the recommended spray adjuvant except when treating seedling prairiegrasses and wildflowers. When making spot applications, spray coverage should be sufficient to moisten the leaves of the target vegetation, but not to the point of run-off. See section on desired species and **DO NOT** exceed the recommended **Plateau** rate per acre. Also see "WEEDS CONTROLLED" and "SPECIAL WEED CONTROL" sections for specific rate and/or tank-mix recommendations.

AERIAL APPLICATION:

All precautions should be taken to minimize or eliminate spray drift. Fixed wing aircraft and helicopters can be used to apply **Plateau® herbicide**, however, when making applications by fixed wing aircraft maintain appropriate buffer zones to prevent spray drift out of the target area. Aerial equipment designed to minimize spray drift such as a helicopter equipped with a MICROFOIL™ boom, or THRU-VALVE™ boom or raindrop nozzles, must be used and calibrated. Except when applying with a MICROFOIL boom, a drift control agent may be added at the recommended label rate. To avoid drift, applications should not be made during inversion conditions, when winds are gusty, or under any other conditions that promote spray drift.

Uniformly apply recommended amount of **Plateau**, using enough water volume to provide adequate coverage of target area or foliage. Include an adjuvant in the spray solution (see "SPRAY ADJUVANTS FOR POSTEMERGENCE APPLICATIONS" section). A foam reducing agent may be added at the recommended rate, if needed. Aerial application to target species growing under the canopy of trees and brush may not receive sufficient spray coverage for effective control. For weed species with a recommended fall application timing (see "SPECIAL WEED CONTROL" section), delaying the aerial application until trees and brush have dropped their leaves can improve weed control and reduce the potential for tree and brush injury (see "TOLERANCE OF TREES AND BRUSH TO PLATEAU HERBICIDE" section).

IMPORTANT: Thoroughly clean application equipment, including landing gear, immediately after use of this product. Prolonged exposure of this product to uncoated steel (except stainless steel) surfaces may result in corrosion and failure of the exposed part. The maintenance of an organic coating (paint) may prevent corrosion.

Avoid overlaps when spraying.

SPRAY ADJUVANTS FOR POSTEMERGENCE APPLICATIONS

Postemergence applications of **Plateau** require a spray adjuvant. See "SPECIAL WEED CONTROL" section. Due to variations in surfactant contents, certain surfactants containing high amounts of alcohols, paraffin based petroleum oils, and other compounds which can increase phytotoxicity to desirable vegetation, it is recommended to choose a low phytotoxic surfactant.

Methylated Seed Oils or Vegetable Oil Concentrates: Instead of a surfactant, a methylated vegetable-based seed oil concentrate containing 5 to 20% surfactant and the remainder methylated vegetable oil is the preferred adjuvant for use with **Plateau** and may be used at the rate of 1.5 to 2 pints per acre. Methylated seed oils provide their greatest effects at 30 GPA or less. At spray volumes above 50 GPA, their advantage appears negated. When using spray volumes greater than 30 gallons per acre methylated seed oil or vegetable based seed oil concentrates should be mixed at a rate of 1% of the total spray volume or alternatively use a nonionic surfactant as described below. Research indicates these oils may aid in deposition and uptake of **Plateau** for hard-to-control perennials, waxy leaf species or when plants are under moisture or temperature stress. **DO NOT** use a methylated seed oil or vegetable oil concentrate when making applications to newly emerged seedling prairiegrasses or wildflowers as injury may occur.

Nonionic Surfactants: Use a nonionic surfactant at the rate of 0.25% v/v or higher (see manufacturer's label) of the spray solution (0.25% v/v is equivalent to 1 quart in 100 gallons). For best results, select a nonionic surfactant with a HLB (hydrophilic to lipophilic balance) ratio between 12 and 17 and having at least 60% surfactant in the formulated product (alcohols, fatty acids, oils, ethylene glycol or diethylene glycol should not be considered as surfactants to meet the above requirements).

Silicone-Based Surfactants: See manufacturer's label for specific rate recommendations. Silicone-based surfactants may reduce the surface tension of the spray droplet allowing greater spreading on the leaf surface as compared to conventional nonionic surfactants. However, some silicone-based surfactants may dry too quickly, limiting herbicide uptake and higher spray volumes may exhibit "run-off".

Fertilizer/Surfactant Blends: Nitrogen-based liquid fertilizers such as 28%N, 32%N, 10-34-0, or ammonium sulfate, may be added at the rate of 2 to 3 pints per acre in combination with the

recommended rate of nonionic surfactant or methylated seed oil. Research indicates that nitrogen based fertilizers aid in the burndown of annual weeds and increase **Plateau** uptake through waxy leaf species. However, fertilizers may increase phytotoxicity to desired species and newly emerged seedling prairiegrasses and wildflowers. The use of liquid fertilizers at a rate of 2 to 3 pints per acre in a tank-mix without a nonionic surfactant or a methylated seed oil is not recommended and may result in herbicide failure. Only when liquid fertilizer is used as the spray carrier is no additional spray adjuvant required.

TANK MIXES

For use in noncrop areas, **Plateau** may be tank-mixed with PENDULUM® herbicide for additional control of late season annual grasses and certain broadleaves. For additional weed control in noncrop areas, **Plateau** may be tank-mixed with ACCORD®, ROUNDUP® PRO, glyphosate, ARSENAL® herbicide, SAHARA® DG herbicide, diuron, CAMPAIGN®, FINALE®, GARLON™ 3A, MSMA, VANQUISH®, OUST®, ESCORT®, TORDON®, or other labeled products. A compatibility test is advised for products not listed. 2,4-D and other phenoxy type herbicides have resulted in reduced control of perennial grass weeds.

DO NOT tank mix with organophosphate insecticides or use the same year as **Plateau** when making applications to newly planted areas.

Consult manufacturer's labels for specific rates and weeds controlled. Always follow the more restrictive label when making an application involving tank-mixes.

FOR WEED CONTROL IN PASTURE AND RANGELAND

For the control of undesirable weeds in pasture and rangeland (see "GUIDELINES FOR RANGELAND USE" section), apply **Plateau** at 2 to 12 oz. per acre as a broadcast treatment or as a 0.25% to 1% solution with 1.0% MSO for spot treatments. See appropriate sections of this label for specific use directions.

GUIDELINES FOR RANGELAND USE

Plateau may be applied to rangeland for the control of undesirable vegetation in order to achieve one or more of the following vegetation management objectives:

1. The control of undesirable (non-native, invasive and noxious) plant species.
2. The control of undesirable vegetation in order to aid in the establishment of desirable rangeland plant species.
3. The control of undesirable vegetation in order to aid in the establishment of desirable rangeland vegetation following a fire.
4. The control of undesirable vegetation for purposes of wildfire fuel reduction.
5. The release of existing desirable rangeland plant communities from the competitive pressure of undesirable plant species.
6. The control of undesirable vegetation for purposes of wildlife habitat improvement.

To ensure the protection of threatened and endangered plants when applying **Plateau** to rangeland:

1. Federal agencies must follow NEPA regulations to ensure protection of threatened and endangered plants.
2. State agencies must work with the Fish and Wildlife Service or the Service's designated state conservation agency to ensure protection of threatened and endangered plants.
3. Other organizations or individuals must operate under a Habitat Conservation Plan if threatened or endangered plants are known to be present on the land to be treated.

Please see the appropriate section(s) of this label for specific use directions for the desired rangeland vegetation management objective.

Plateau should only be applied to a given rangeland acre as specific weed problems arise. For the control of annual weed species such as cheatgrass, downy brome and medusahead rye, a single application of **Plateau** that coincides with the successful establishment and/or release of desirable rangeland vegetation and the use of available IPM can provide effective, sustainable control of the annual weed problem. For difficult to control perennial weed

species such as leafy spurge, dalmatian toadflax and Russian knapweed, a single broadcast application of **Plateau** herbicide should be effective in most cases. If needed, spot treatments with **Plateau** can be used to control any remnant plants or new seedlings that may emerge. Long term control of undesirable weed species ultimately depends on the successful use of land management practices that promote the growth and sustainability of desirable rangeland plant species.

USE OF PLATEAU HERBICIDE ON FEDERAL CONSERVATION RESERVE PROGRAM (CRP) LAND

Plateau may be used on Federal Conservation Reserve Program (CRP) land at rates up to 12 oz. per acre per year (see minimum plant-back intervals below). See appropriate section of this label for specific instructions for the intended use.

ROTATIONAL CROP RESTRICTIONS

The following rotational crops may be planted after applying **Plateau**. Planting rotational crops earlier than the recommended interval may result in crop injury.

Plateau Use Rate (oz/A)	Minimum Plant Back Interval (Months After Plateau Herbicide Application)				
	≤4	12	18	26	40
5-8	12	14	22	30	44
9-12	12	18	24	36	48
Rotational Crops	Bahiagrass CLEARFIELD® corn hybrids Peanuts Rye Wheat	Snapbeans Southern peas Soybeans Tobacco	Barley Cotton¹ Grain sorghum Oats	Field corn² All crops not otherwise list- ed or included for use on this label²	Canola² Potatoes² Red table beets² Sugar beets²

¹ For Arizona, New Mexico, Oklahoma, and Texas only: Depending on the **Plateau** use rate, cotton may be planted 18 to 24 months after **Plateau** application in the states of Arizona, New Mexico, Oklahoma, and Texas unless drought conditions develop the year of **Plateau** application. **DO NOT** rotate to cotton at 18 to 24 months after **Plateau** application if less than 15 inches of rainfall or irrigation is received from the time of **Plateau** application through November 1 of the same year. If drought conditions develop the year of **Plateau** application, cotton may be planted 26, 30 and 40 months after **Plateau** application.

² After the recommended rotational interval listed for these selected crops and for all crops not otherwise listed or included for use on this label, a successful field bioassay must be completed. The field bioassay consists of a test strip of the intended rotational crop planted across the previously treated field and grown to maturity. The test strip should include low areas and knolls, and include variations in soil such as type and pH. If no crop injury is evident in the test strip, then the intended rotational crop may be planted the following year.

Use of **Plateau** in accordance with label directions is expected to result in normal growth of plant-back crops in most situations; however, various environmental and agronomic factors make it impossible to eliminate all risks associated with the use of this product and, therefore, plant-back crop injury is always possible. If crop injury is a concern then a bioassay with the desired crop is recommended prior to planting.

FOR FOLIAR AND SEEDHEAD SUPPRESSION OF BAHIAGRASS, COOL SEASON GRASSES AND SUPPRESSION OF SOME ANNUAL WEEDS

Bahiagrass: **Plateau** may be used at the rate of 2 to 6 oz per acre to suppress growth and seedhead development of bahiagrass in unimproved areas. In North and South Carolina it is recommended to use **Plateau** at the rate of 2 oz or 3 oz per acre respectively, as higher rates may cause turf thinning. Depending on rate of **Plateau** used, surfactant and environmental conditions, temporary turf discoloration may occur. For optimum performance, application should be made after green-up. Applications may be made before or after mowing. If applied prior to mowing, raise mowing height to leave adequate existing foliage as new growth will be suppressed. If applied after mowing, allow adequate foliage to remain by increasing mower height or allowing time for foliar regrowth prior to

application. **DO NOT** apply to turf under stress (drought, cold, insect, disease, etc.) or severe injury may occur. **DO NOT** use a methylated seed oil adjuvant.

PLATEAU	PHYTOTOXICITY	LENGTH OF SUPPRESSION
2 oz	none to low	partial to season long
3 to 6 oz	low to moderate	season long

For winter annual weed control, apply 8 oz of **Plateau** when bahiagrass is dormant, but when weeds are actively growing. This can be followed by 3 to 4 oz of **Plateau** in the spring after bahiagrass green-up for the suppression of seedheads and foliage.

Cool Season Grasses:

KY31 Tall Fescue and "Wildtype Common" Kentucky Bluegrass: Apply **Plateau** at 2 to 4 oz per acre for foliar and seedhead suppression of certain cool season grasses such as "KY31" tall fescue and "wildtype common" Kentucky bluegrass. **DO NOT** use a methylated seed oil adjuvant. Add a surfactant to the 2 oz rate of **Plateau** for optimum performance. The addition of a surfactant to 4 oz of **Plateau** may cause excessive turf injury or mortality of tall fescue. Application to turf type tall fescue or Kentucky bluegrass may result in severe injury or loss of stand.

Wheatgrass: Apply **Plateau** at 6 to 10 oz. per acre for foliar and seedhead suppression of crested wheatgrass, and 6 to 12 oz. per acre for foliar and seedhead suppression of intermediate wheatgrass. Other wheatgrass species may also be suppressed, however, apply **Plateau** to a limited area to determine effectiveness. Tank-mixes with 2,4-D or products containing 2,4-D may decrease the effectiveness of **Plateau**. Tank-mixes with GARLON®, TORDON®, TRANSLINE™ and VANQUISH® may decrease the potential of turf injury. **DO NOT** apply to turf under stress or severe injury may occur.

FOR THE CONTROL OF UNDESIRABLE WEEDS IN BERMUDAGRASS NOT BEING GROWN FOR FORAGE OR HAY

Plateau may be used on bermudagrass turf such as roadsides, utility rights-of-way, railroad crossings, airports, non-irrigation drainage ditches and other noncropland sites. There is a differential tolerance between bermudagrass types (see below paragraphs). Depending on bermudagrass type, timing of application, and **Plateau** rate, some foliar, stolon, and seedhead suppression may occur. **IMPORTANT:** Apply **Plateau** after bermudagrass has reached full green-up. Spring applications made prior to full green-up may delay green-up. Always add a surfactant when applying **Plateau**. **DO NOT** apply to grass under stress from drought, disease, insects or other causes. Simultaneous mow/spray operations may suppress internode development. After mowing, allow adequate foliage regrowth prior to **Plateau** application as some internode suppression may prevent bermudagrass from quickly recovering from mowing.

Common Bermudagrass: Common bermudagrass is the most tolerant bermudagrass to **Plateau**. Tank-mixes with ROUNDUP PRO, ACCORD or glyphosate will improve the weed control spectrum, but may increase turf phytotoxicity. Some stolon internode shortening and seedhead suppression may occur for the first 8 weeks.

Established Coastal Bermudagrass: **Plateau** at 2 to 12 oz per acre will provide control of labeled weeds as well as foliar and seed head suppression of established coastal bermudagrass. **DO NOT** use on World Feeder varieties of bermudagrass. Depending on environmental conditions and weed pressure, the longevity of suppression and weed control increases as the **Plateau** rate increases. Tank-mixes with ROUNDUP PRO, ACCORD, or glyphosate may result in death or excessive injury of coastal bermudagrass.

Turf Type Bermudagrass: Turf type bermudagrass varieties show a high degree of variation in tolerance to **Plateau**. **Plateau** at rates of 2 to 6 oz per acre will provide some annual weed control and foliar & seedhead suppression. Rates above 6 oz per acre may result in excessive injury or death of turf type bermudagrass.

SEE ABOVE SECTIONS FOR PLATEAU® HERBICIDE RATES AND TIMINGS FOR SPECIFIC BERMUDAGRASS TYPES WITH REGARD TO WEED CONTROL AND TURF TOLERANCE.

Winter Annual Weed Control: Apply Plateau at the rate of 4 to 12 oz. per acre prior to winter weed germination or while winter weeds are actively growing. Early spring applications may delay green-up of bermudagrass turf.

Summer Annual Weeds: For best results, apply Plateau at the rate of 4 to 12 oz per acre preemergence or early postemergence before weeds have reached 6 inches in height. Larger weeds may be controlled depending on susceptibility, growing conditions, tank-mix partner and adjuvant selection.

Perennial Weeds: Apply Plateau at the rate of 8 to 12 oz per acre postemergence after weeds have produced adequate foliage for herbicide uptake. For a particular weed see "SPECIAL WEED CONTROL" section below. The addition of ACCORD or ROUNDUP PRO herbicide may increase control.

Bahiagrass Control: Apply Plateau at the rate of 8 to 12 oz per acre postemergence. See "SPECIAL WEED CONTROL" section below for recommendations. The addition of ROUNDUP PRO or ACCORD herbicide at 12 to 16 oz per acre may increase control.

FOR THE CONTROL OF UNDESIRABLE WEEDS IN UNIMPROVED CENTIPEDE GRASS

Plateau may be applied at a rate of 4 to 8 oz per acre to established centipede grass for the control of annual broadleaf and grass weeds. Apply Plateau after centipede grass has reached full green-up. Spring applications made prior to full green-up may delay green-up. Always add a surfactant when applying Plateau. **DO NOT** apply to grass under stress from drought, disease, insects or other causes. Simultaneous mow/spray operations may suppress internode development. After mowing, allow adequate foliage regrowth prior to Plateau application as some internode suppression may prevent centipede grass from quickly recovering from mowing.

FOR CONTROL OF UNDESIRABLE WEEDS IN SMOOTH BROMEGRASS, WILDTYPE COMMON KENTUCKY BLUEGRASS AND WHEATGRASSES

Plateau may be used on smooth brome grass, "wildtype" common Kentucky bluegrass and wheatgrass. Plateau provides control of labeled grass and broadleaf weeds (see "WEEDS CONTROLLED" and "SPECIAL WEED CONTROL" sections). Treatment of smooth brome grass and wheatgrass with Plateau may result in foliar height and seedhead suppression.

Smooth Brome grass and "Wildtype" Common Kentucky Bluegrass: Use Plateau at 4 to 8 oz per acre in the spring for weed control and growth suppression after smooth brome grass and "wildtype" common Kentucky bluegrass have reached 100% green-up. Applications prior to 100% green-up may delay green-up. Rates from 8 to 12 oz per acre may be applied in the spring but may result in excessive growth suppression. For fall applications (see "SPECIAL WEED CONTROL" section), Plateau may be used at 8 to 12 oz per acre for control of perennial weeds.

Wheatgrass: To control undesirable weeds in wheatgrasses apply Plateau at 4 to 12 oz. per acre.

FOR CONTROL OF UNDESIRABLE WEEDS IN CROWN VETCH

Plateau may be applied at the rate of 4 oz per acre to newly seeded crown vetch beds to aid in the establishment of vetch and reduce weed competition.

Plateau at 8 to 12 oz per acre may be used on unimproved established crown vetch in noncropland areas. Plateau provides control of labeled grass and broadleaf weeds (refer to the "WEEDS CONTROLLED" and "SPECIAL WEED CONTROL" sections for specific rates). Treatment of crown vetch beds with Plateau may cause internode shortening and some minor tip chlorosis depending on timing of application.

Plateau should be applied during winter dormancy or early spring to reduce potential injury. Applications made after May, may result in increased injury or defoliation. Addition of surfactants such as dilimene based or crop oil concentrates will increase injury. Fall applications during the period of active crown vetch growth may result in severe injury or loss of stand.

REVEGETATION WITH PRAIRIEGRASSES AND OTHER FORAGE GRASSES

Plateau may be applied at the rate of 2 to 12 oz per acre to newly established or existing stands of labeled species (see below for details) in such areas as pasture, rangeland (see "GUIDELINES FOR RANGELAND USE" section), Conservation Reserve Program (CRP) land and noncropland sites such as roadsides, industrial sites, prairie restoration sites, drainage ditch banks, and other similar areas. Certain local ecotypes or varieties may be suppressed by Plateau. Many factors such as poor seedling vigor, cool temperatures, poor soil, planting depth, excessive moisture, disease, insects and dry weather after emergence can all result in poor stands. Additional stress of herbicide residue, poor soils and other factors contributing to poor seedling vigor can also increase injury and could result in mortality. BASF can not be held responsible for such unforeseen factors. It is suggested to try Plateau on a small area if tolerance is not known. Plateau controls many annual and perennial grass and broadleaf weeds. Weed competition is reduced allowing grass seedlings to establish. Plateau is also effective for control of noxious weeds in established grass stands and must be applied postemergence as a foliar treatment to perennial weeds. **IMPORTANT: ALWAYS ADD AN ADJUVANT** when applying Plateau. To maximize weed control always use a methylated seed oil when treating established grass stands. Use a nonionic surfactant when treating newly emerged seedling grasses. The addition of liquid fertilizer will decrease grass tolerance and should not be used when treating newly emerged seedling grasses.

Plateau may be applied at a rate of up to 12 oz per acre to Federal Conservation Reserve Program (CRP) land for the establishment or release of certain grass species (see "TOLERANT GRASS SPECIES" table).

Establishment: For optimum results in establishing mixed grass stands with Plateau, make application at planting before grass seedlings emerge. Newly emerged grasses can be sensitive to Plateau and/or the adjuvant used. If grasses have begun to emerge, it is best to wait until they have reached the five leaf stage to make a Plateau application and use a nonionic or silicone surfactant. **DO NOT** use a methylated seed oil at this time as some grass species tolerance will be lost. Plateau will control annual weeds preemergence or early postemergence. See "WEEDS CONTROLLED" section for maximum height of weeds and see below for more details on best rate and timing for grass and wildflower species. Postemergence applications may result in stand thinning due to variability in seedling grass tolerance to the use of spray adjuvants. Seedling grasses are generally more tolerant to the use of spray adjuvants after they have reached the five leaf stage. When planting into a field which was row cropped the previous year, compounded injury may occur from herbicide carry-over (see "DIRECTIONS FOR USE" section).

Rates and Control: Apply Plateau at 2 to 6 oz per acre to fields cropped the previous year, when annual weeds are the target and/or if grass/forb mixtures are used. Plateau at 2 to 6 oz per acre will provide control and/or suppression of many annual grass and broadleaf weeds. Use lower rates when in the northern most U.S., dry climates or for late season plantings into clean seedbeds. Plateau rates as low as 2 oz. per acre may be used on soils with a pH > 7, a low CEC and a coarse texture containing a minimum of clay and organic matter. Use higher rates in heavy weed pressure, heavy residue, high organic matter, high rainfall and long growing season (southern portions of Illinois, Indiana, Missouri and Ohio, etc.). Apply Plateau at 8 to 12 oz per acre for giant ragweed or for perennial weed control/suppression. Plateau rates of 8 to 12 oz per acre may result in stunting or stand thinning. The duration and intensity of suppression are directly related to weed pressure, chemical residue, soil type and environmental conditions. See below for details for particular grass tolerances and timings.

Established Stands: For optimum results, apply Plateau as an early postemergence application to annual grasses and broadleaf weeds. For perennial weed control, see "SPECIAL WEED CONTROL" section. The use of high rates may result in foliar and/or seed head height suppression of established grass stands. This effect is more likely to occur under conditions of light soils, low weed pressure, low rainfall, and short growing seasons. Use the lower rates for light weed infestations or when applying to grass stands containing desirable wildflowers and legumes (see "WILDFLOWER ESTABLISHMENT AND MAINTENANCE" section for rate tolerance). Use higher rates to broaden and lengthen weed control spectrum.

Big Bluestem, Little Bluestem and Indiangrass: Plateau® herbicide may be applied at the rate of 2 to 12 oz per acre at planting, or any time thereafter, including after seedling grasses have emerged or to perennial stands (dormant or actively growing). See "WEEDS CONTROLLED" section for desired rate. Use the lower rates in Wisconsin, Michigan, Minnesota, South Dakota, North Dakota, Kansas, Oklahoma, Texas and Nebraska and higher rates as rainfall and/or growing season increases.

Switchgrass (*Panicum virgatum*): Plateau is not recommended for the establishment of pure switchgrass stands as severe injury or death may result. Plateau may be applied at a rate of 2 to 4 oz per acre if switchgrass is planted in mixed stands with tolerant species, but only if some stand thinning or loss of stand can be tolerated. Mature switchgrass planting can be reclaimed from certain perennial weeds such as tall fescue, leafy spurge, johnsongrass, etc., with Plateau at rates of 10 to 12 oz per acre. However, severe stunting and injury is imminent. **DO NOT** apply Plateau to switchgrass if such severe injury can not be tolerated.

Sideoats and Blue Grama: Apply Plateau to monoculture stands of sideoats and blue grama only if some stand thinning or loss of stand can be tolerated. Plateau may be applied at the rate of 2 to 4 oz/A plus an adjuvant to aid in the establishment of sideoats and blue grama after new seedlings have emerged and reached the five (5) leaf stage. When using Plateau at 4 oz per acre it is not recommended to use in combination with a methylated seed oil adjuvant as stand thinning may occur. The lower rates may provide adequate weed suppression in early summer plantings in the states of Wisconsin, Michigan, Minnesota, South Dakota, North Dakota, Kansas, Oklahoma, Texas and Nebraska and other states where growing degree days are short. Sideoats and blue grama have shown tolerance to Plateau at 2 to 4 oz/A, applied preemergence at planting, however, some stand thinning may occur. For weed control in established stands use 4 to 10 oz/A of Plateau. Up to 12 oz/A of Plateau may be applied, but may result in foliar and/or seedhead suppression, or in the injury of sideoats and blue grama, depending on surfactant choice, soil type, variety, weed pressure and environmental conditions.

Buffalograss: Apply Plateau at the rate of 2 to 4 oz/A for control or suppression of labeled weeds and to aid in the establishment of newly sprigged buffalograss. Apply Plateau immediately after planting prior to spring growth or seed germination. New growth and small seedlings can be severely injured or killed. If applying after emergence it is best to wait until buffalograss has at least five true leaves and use a nonionic or silicone surfactant. **DO NOT** use a methylated seed oil. For established stands, Plateau may be applied at the rate of 2 to 8 oz/A for weed control. Higher rates may cause some turf discoloration and stunting. Plateau may be applied to dormant buffalograss to control winter annual weeds. Turf type buffalograss may express different tolerance level to Plateau than wild type buffalograss. Some turf types can tolerate low rates of Plateau at seeding. Consult seed dealer for details.

Eastern Gamagrass: Plateau should only be used for the establishment or maintenance of eastern gamagrass if some stand thinning or loss can be tolerated. Apply Plateau at 2 to 6 oz per acre at planting prior to gamagrass emergence. Stand thinning and stunting is imminent. Adverse conditions, poor soils, or added stress to the gamagrass could result in stand mortality. Postemergence application to seedlings will cause mortality. On established eastern gamagrass, apply Plateau at 2 to 8 oz per acre prior to gamagrass breaking dormancy. Some stunting will occur and increases as the Plateau rate increases. Applications made during or after green-up may result in foliar and seedhead suppression and possible mortality of weak plants.

Tall Fescue Control: (Not for use in California unless directed otherwise in supplemental labeling.) Tall fescue can be controlled by using Plateau at the rate of 12 oz per acre plus methylated seed oil at 2 pints per acre in established stands of or to prepare a seed bed for big bluestem, little bluestem, and indiangrass. The addition of nitrogen fertilizer (see "SPRAY ADJUVANTS FOR POSTEMERGENCE APPLICATIONS" section) to the above mix will aid in control. Tall fescue must be actively growing for optimum control. If tall fescue has reached the boot stage or has reached summer dormancy, control may be poor. For improved control of tall fescue, Plateau may be tank mixed with ACCORD®, ROUNDUP® PRO, or glyphosate. Fall applications of Plateau at 8 to 12 oz/A plus 24 to 64 oz/A ACCORD® or ROUNDUP® PRO will result in best control of existing tall fescue and new germinating seedlings. With spring applications of Plateau at 6 to 12 oz/A, plus a ACCORD® or ROUNDUP® PRO at 32 to 64 oz/A, use higher rates for older, mature fescue stands and lower Plateau rates when planting forbs. When using 8 oz/A of Plateau in the fall with a glyphosate product, it is recommended to apply 4 oz/A Plateau in

the spring at planting for annual weed and seedling fescue control. Burning the fescue stand, where permitted, the following spring, just prior to green-up, will aid in control and provide a better seedbed for planting. Mowing the fescue several times the summer before fall application will weaken the fescue root system, making it more susceptible to herbicides. Always allow for at least 10 inches of regrowth, following the last mowing before spraying, as both Plateau and glyphosate products need foliage present for herbicide uptake and satisfactory control.

TOLERANT GRASS SPECIES¹

Common Name	Genus Species	Plateau Rate (oz/A) ²	
		New Seeding	Established
Big Bluestem	<i>Andropogon gerardii</i>	2-12	2-12
Little Bluestem	<i>Schizachyrium scoparium</i>	2-12	2-12
Indiangrass	<i>Sorghastrum nutans</i>	2-12	2-12
Bushy Bluestem	<i>Andropogon glomeratus</i>	—*	2-12
King Ranch Bluestem	<i>Bothriochloa ischaemum</i>	—	2-12
Silver Beard Bluestem	<i>Bothriochloa saccharoides</i>	—	2-12
Broomsedge	<i>Andropogon virginicus</i>	—	2-12
Fingergrass, Rhodes grass	<i>Chloris</i> spp.	—	2-12
Needlegrass	<i>Stipa</i> spp.	—	2-12
Needleandthread	<i>Stipa comata</i>	—	2-12
Kearny (Plains) Threeawn	<i>Aristida longespica</i>	—	2-12
Prairie Threeawn	<i>Aristida oligantha</i>	—	2-12
Prairie Sandreed	<i>Calamovilfa longifolia</i>	—	2-12
Smooth Bromegrass	<i>Bromus inermis</i>	—	2-12
Kentucky Bluegrass	<i>Poa pratensis</i>	—	2-12 ⁴
Sandberg's Bluegrass	<i>Poa sandbergii</i>	—	2-12
Wheatgrasses	<i>Agropyron</i> spp.	—	2-12
Bottlebrush Squirreltail	<i>Sitanion hystrix</i>	—	2-12
Russian Wild Ryegrass	<i>Elymus junceus</i>	2-6 ²	2-12
Sideoats Grama	<i>Bouteloua curtipendula</i>	2-8 ³	2-8
Blue Grama	<i>Bouteloua gracilis</i>	2-8 ³	2-8
Buffalograss	<i>Buchloe dactyloides</i>	2-4	2-8
Eastern Gamagrass	<i>Tripsacum dactyloides</i>	2-6 ³	2-8

¹ See individual grass sections for application timing.

² High rates may result in stunting and growth suppression.

³ Plateau preemergence applications to newly seeded sideoats, blue grama and Eastern gamagrass may result in thinning or loss of stand.

⁴ Some bluegrass varieties are sensitive to Plateau. Drought can delay recovery and may result in overgrazing of treated area.

* Tolerance unknown

**TOLERANCE OF ESTABLISHED GRASSES TO
8 TO 12 OZ/A OF PLATEAU® HERBICIDE
APPLIED IN THE FALL**

Grass Species ¹	Tolerant	Suppressed ²	Not Tolerant	Tolerance Unknown
Bermudagrass	X			
Bluegrass, Kentucky		X		
Bluegrass, Sandberg's	X			
Bluestem, big	X			
Bluestem, bushy	X			
Bluestem, King Ranch	X			
Bluestem, little	X			
Bluestem, silver beard	X			
Bromegrass, meadow		X	X	
Bromegrass, smooth		X		
Broomsedge	X			
Buffalograss	X	X		
Cheatgrass			X	
Creeping foxtail, Garrison				X
Downey brome			X	
Fescue, Idaho	X			
Fescue, tall			X	
Gamagrass, eastern		X		
Grama, blue	X	X		
Grama, sideoats	X	X		
Indiangrass	X			
Medusahead			X	
Needleandthread	X			
Needlegrass, green	X			
Orchardgrass		X		
Prairie cordgrass		X		
Prairie dropseed				X
Praire sandreed	X			
Praire threeawn	X			
Quackgrass		X		
Redtop		X	X	
Reed canarygrass		X	X	
Rhodes grass/Fingergrass	X			
Ryegrass, annual or Italian			X	
Ryegrass, perennial		X	X	
Squirreltail, bottlebrush	X			
Switchgrass		X	X	
Timothy			X	
Wheatgrass, bluebunch	X	X		
Wheatgrass, crested	X	X		
Wheatgrass, intermediate	X	X		
Wheatgrass, pubescent	X	X		
Wheatgrass, siberian	X			
Wheatgrass, slender	X	X		
Wheatgrass, stream-bank	X	X		
Wheatgrass, western	X	X		
Wild ryegrass, Basin	X			
Wild ryegrass, Canada		X		
Wild ryegrass, Russian	X			
Wild ryegrass, Virginia		X		

¹ Species with an X in more than one column means tolerance will vary depending on variety, use rate and environmental conditions.

² Suppression may be expressed as reduction in number of seedheads, seedhead height suppression or foliage height reduction; however, full recovery of the grass can be expected.

**WILDFLOWER ESTABLISHMENT
AND MAINTENANCE**

Due to high degree of variation in genotypes, ecotypes and varieties of wildflowers, tolerances to Plateau can vary dramatically and may be reduced under certain soil types and environmental conditions. Apply Plateau only if some stand thinning or loss can be tolerated. Preemergence applications of low use rates (2 oz/A)

to tolerant species, result in the least amount of injury, but may not eliminate it. Postemergence applications of Plateau can result in injury or death of some genotypes, and should be used only as a rescue treatment when weed competition threatens the stand. Use of certain spray adjuvants can also increase wildflower injury and loss of stand. Although most legumes listed in the tolerance table are tolerant to 4 oz/A of Plateau preemergence, some stand thinning may occur. Legumes are more tolerant to post applications, but chlorosis or stunting is possible. Recommendations listed in the tables below are designed for mixed grass/wildflower stands. Less than satisfactory results may occur from applications to monoculture stands. It is recommended to try on a small scale to determine degree of satisfaction on monoculture stands.

For prairiegrass/wildflower mixtures: Where some wildflower injury (phytotoxicity, height suppression) can be tolerated, apply Plateau at the rate to achieve desired weed control, but not to exceed tolerance rate listed in the table below. Wildflower injury can be reduced or eliminated with preemergence applications. To minimize injury, apply Plateau at 2 to 4 oz per acre at planting to tolerant species listed below. Use the 2 oz per acre rate under cool dry conditions and in low rainfall areas. If postemergence application is made to established prairiegrass/wildflower mixtures, use the lowest rate of Plateau necessary to achieve desired weed control (see "WEEDS CONTROLLED" section). Postemergence application can result in stand thinning or death due to vast variation in seed sources, varieties and genotypes. It is recommended that a small area be tested prior to full application for tolerance of desired species. The rates listed below are for those species in which acceptable tolerance has been confirmed on the varieties/genotypes being treated.

Application of Plateau in conjunction with an organophosphate insecticide may cause an increase in wildflower injury.

**Seedling Wildflower and Legume Tolerance to
Plateau (4 oz/A)¹ in Mixed Grass/Forb Stands.**

Common Name	Genus Species	PRE	POST
Alfalfa	<i>Medicago sativa</i>	No	Yes
Aster, New England	<i>Aster novae angliae</i>	No	Yes
Aster, Prairie	<i>Aster tanacetifolius</i>	No	Yes
Baby Blue Eyes	<i>Nemophila menziesii</i>	No	Yes
Beggar ticks	<i>Bidens frondosa</i>	No	Yes
Bird's Eyes	<i>Gilia tricolor</i>	No	Yes
Bishop's Flower	<i>Ammi majus</i>	No	Yes
Blackeyed Susan	<i>Rudbeckia hirta</i>	Yes	Yes
Blanketflower	<i>Gaillardia aristata</i>	No	Yes
Bundleflower, Illinois	<i>Desmanthus illinoensis</i>	Yes	Yes
Catchfly	<i>Silene armeria</i>	No	Yes
Chicory	<i>Cichorium intybus</i>	Yes	Yes
Clover, Crimson	<i>Trifolium incarnatum</i>	Yes	Yes
Clover, White	<i>Trifolium repens</i>	No	Yes
Coneflower, Purple	<i>Echinacea purpurea</i>	Yes	Yes
Coneflower, Upright Prairie	<i>Ratibida columnifera</i>	Yes	Yes
Coreopsis, Dwarf Red Plains	<i>Coreopsis tinctoria</i> var. <i>Gay Feather</i>	Yes	Yes
Coreopsis, Lance Leaved	<i>Coreopsis lanceolata</i>	Yes	Yes
Coreopsis, Plains	<i>Coreopsis tinctoria</i>	Yes	Yes
Comflower	<i>Centaurea cyanus</i>	No	Yes
Cosmos, Garden	<i>Cosmos bipinnatus</i>	Yes	Yes
Cosmos, Yellow	<i>Cosmos sulphureus</i>	Yes	Yes
Daisy, Ox-eye	<i>Chrysanthemum leucanthemum</i>	Yes	Yes
Daisy, Shasta	<i>Chrysanthemum maximum</i>	Yes	Yes
Five Spot	<i>Nemophila maculata</i>	No	Yes
Flax, Blue	<i>Linum perenne</i>	No	Yes
Indian Blanket	<i>Gaillardia pulchella</i>	No	Yes
Indigo, Blue False	<i>Baptisia australis</i>	Yes	No
Johnny Jump-ups	<i>Viola cornuta</i>	Yes	Yes
Lemon Mint	<i>Monarda citriodora</i>	No	Yes

Seedling Wildflower and Legume Tolerance to Plateau® herbicide (4 oz/A)¹ in Mixed Grass/Forb Stands. (CONT):

Common Name	Genus Species	PRE	POST
Lespedeza, Bicolor	<i>Lespedeza</i>	Yes	Yes
Lespedeza, Korean	<i>Lespedeza stipulacea</i>	No	Yes
Lespedeza, Sericea	<i>Lespedeza cuneata</i>	No	Yes
Lupine, Perennial	<i>Lupinus perennis</i>	Yes	Yes
Mexican Hat	<i>Ratibida columnifera</i>	Yes	Yes
Partridgepea	<i>Cassia fasciculata</i>	Yes	Yes
Pea, Calico	<i>Vigna sinensis</i>	Yes	Yes
Pea, Flat	<i>Lathyrus sylvestris</i>	Yes	Yes
Pea, Perennial	<i>Lathyrus latifolius</i>	Yes	Yes
Phlox, Drummond	<i>Phlox drummondii</i>	Yes	No
Poppy, California	<i>Eschscholzia californica</i>	Yes	No
Poppy, Corn	<i>Papaver rhoeas</i>	Yes	Yes
Poppy, Red Corn	<i>Papaver sp.</i>	Yes	Yes
Prairieclover, Purple	<i>Dalea purpurea</i>	Yes	Yes
Prairieclover, White	<i>Dalea candidum</i>	Yes	Yes
Tick-trefoil, Showy	<i>Desmodium canadense</i>	No	Yes
Trefoil, Birdsfoot	<i>Lotus corniculatus</i>	No	Yes
Vetch, Crown	<i>Coronilla varia</i>	Yes	--
Vetch, Hairy	<i>Vicia villosa</i>	Yes	--
Yarrow, Gold	<i>Achillea filipendulina</i>	No	Yes

¹ For legumes, at least three true leaves should be present before a postemergence application.

Established Wildflower and Legume Tolerance to Plateau (maximum rate¹, oz/A) in Mixed Grass/Forb Stands.

Common Name	Genus Species	PRE	POST ²
Flax, Blue	<i>Linum perenne</i>	0	6
Indian Blanket	<i>Gaillardia pulchella</i>	0	6
Blanketflower	<i>Gaillardia aristata</i>	0	8
Chickory	<i>Cichorium intybus</i>	4	6
Daisy, Shasta	<i>Chrysanthemum maximum</i>	4	8
Prairieclover, Purple	<i>Dalea purpurea</i>	4	12
Coneflower, Upright Prairie	<i>Ratibida columnifera</i>	6	6
Mexican Hat	<i>Ratibida columnifera</i>	6	6
Poorjoe	<i>Diodia teres</i>	8	--
Lupine, Perennial ⁴	<i>Lupinus perennis</i>	8	12
Coneflower, Purple	<i>Echinacea purpurea</i>	8	8
Daisy, Ox-eye ³	<i>Chrysanthemum leucanthemum</i>	8	8
Leadplant	<i>Amorpha canescens</i>	8	8
Lespedeza, Bicolor	<i>Lespedeza</i>	8	8
Milkweed, Common	<i>Asclepias syriaca</i>	8	--
Pea, Prairie Scurf	<i>Psoralea esculenta</i>	8	8
Yarrow, Gold ⁵	<i>Achillea filipendulina</i>	8	8
Blackeyed Susan	<i>Rudbeckia hirta</i>	8	10
Johnny Jump-ups	<i>Viola cornuta</i>	8	12
Sweetclover	<i>Melilotus sp.</i>	12	8
Alfalfa	<i>Medicago sativa</i>	12	12
Bundleflower, Illinois	<i>Desmanthus illinoensis</i>	12	12
Lespedeza, Sericea	<i>Lespedeza cuneata</i>	12	12
Partridgepea	<i>Cassia fasciculata</i>	12	12
Sensitive vine	<i>Mimosa strigillosa</i>	12	12
Vetch, Crown	<i>Coronilla varia</i>	12	12
Violet, Wild	<i>Viola spp.</i>	12	12

¹ Height suppression or stand reduction may occur at maximum use rate. For legumes, some yellowing and stunting can occur at higher use rates.

² Postemergence application should be made early post on the flowers to reduce injury and increase flower set.

³ Will not flower.

⁴ Most native rangeland lupines are tolerant to Plateau at 12 oz/A postemergence.

Wildflower Establishment with Plateau 4 oz/A + PENDULUM herbicide 2 lbs a.i./A¹

Common Name	Genus Species	PRE ²	POST ³
Blackeyed Susan	<i>Rudbeckia hirta</i>	Yes	Yes
Blanketflower	<i>Gaillardia pulchella</i>	No	Yes
Bundleflower, Illinois	<i>Desmanthus illinoensis</i>	>50% thinning	Yes
Clover, Crimson	<i>Trifolium incarnatum</i>	>50% thinning	Yes
Coneflower, Claspig	<i>Dracopis amplexicaulis</i>	Yes	Yes
Coneflower, Upright Prairie	<i>Ratibida columnifera</i>	No	OK
Coneflower, Purple	<i>Echinacea purpurea</i>	Yes	Yes
Coreopsis, Dwarf Red Plains	<i>Coreopsis tinctoria</i> var. Gay Feather	OK stunting	OK stunting
Coreopsis, Plains	<i>Coreopsis tinctoria</i>	OK stunting	Yes
Coreopsis, Lance Leaved	<i>Coreopsis lanceolata</i>	25% thinning	Yes
Cornflower	<i>Centaurea cyanus</i>	No	OK 20% thinning
Cosmos, Garden	<i>Cosmos bipinnatus</i>	OK 10% thinning	OK stunting
Cosmos, Yellow	<i>Cosmos sulphureus</i>	Yes	Yes
Daisy, Ox-eye	<i>Chrysanthemum leucanthemum</i>	25% thinning	Yes
Daisy, Shasta	<i>Chrysanthemum maximum</i>	marginal-OK 20% thinning	Yes
Lupine, Perennial	<i>Lupinus perennis</i>	Yes	≤50% thinning
Partridgepea	<i>Cassia fasciculata</i>	25% thinning	Yes
Poppy, California	<i>Eschscholzia californica</i>	Yes	25% injury stunting, thinning
Yarrow, Gold	<i>Achillea filipendulina</i>	OK thinning	OK

¹ 2 lbs ai/A = 2.4 qts of PENDULUM herbicide 3.3 EC or 3.3 lbs of PENDULUM herbicide WDG

² Preemergence at planting

³ Postemergence to seedlings

Yes = no injury

No = results in no wildflower germination or unacceptable injury to seedling flowers.

OK = can be used if thinning and/or stunting can be tolerated or if establishment is threatened by weed competition.

Due to the diversity of species and varieties that exist in areas where wildflowers are grown, the response to Plateau may vary greatly. Careful testing on desirable species is recommended to determine if area-wide applications can be made. Try on a limited area to verify tolerance in a specific area.

The suitability of Plateau use on wildflower species not listed, should be determined by treating a small number of such wild flowers at an appropriate rate, not to exceed 12 oz per acre per year. Treated wildflowers should be evaluated 1 to 2 months following application for possible injury. THE USER ASSUMES RESPONSIBILITY FOR ANY DAMAGE OR OTHER LIABILITY.

SPECIAL WEED CONTROL

(Not for use in California unless directed otherwise in supplemental labeling.)

ALWAYS ADD AN ADJUVANT to Plateau (see "SPRAY ADJUVANTS FOR POSTEMERGENCE APPLICATIONS" section). Research has shown Methylated Seed Oil (MSO) surfactants provide Plateau with superior control of perennial weeds. This effect is not always observed and is most prevalent on waxy leaf species, perennials and weeds under stress conditions. For the weeds listed below, it is recommended to use a MSO for best results. The use of nonionic surfactants or silicone based surfactants may result in less than acceptable control.

Johnsongrass & Itchgrass: For best results, apply Plateau at the rate of 8 to 12 oz per acre after johnsongrass or itchgrass has reached 18 to 24 inches in height at the whorl. The addition of

ACCORD® or ROUNDUP® PRO at the rate of 8 to 16 oz per acre may improve control after culm elongation or in dense stands. Use higher herbicide rates as density increases. Larger grass than specified above can be controlled.

Dallisgrass, Bahiagrass, Vaseygrass, Paspalum spp., Smutgrass: For dallisgrass, bahiagrass and smutgrass control, apply **Plateau® herbicide** postemergence at the rate of 10 to 12 oz per acre, after grass has reached 100% green-up. For dallisgrass and smutgrass, activity may range from suppression to control depending upon grass growth stage and growing conditions at the time of application. For vaseygrass apply **Plateau** at the rate of 4 to 6 oz per acre postemergence after grass has reached 100% green-up and is from 3 to 8 inches in height. The addition of ACCORD® or ROUNDUP® PRO at the rate of 12 to 16 oz per acre will improve efficacy. Use higher herbicide rates as target grass weed densities and/or maturity increase. The addition of PENDULUM® will provide increased preemergence control of these grasses from seed.

Leafy Spurge: For best results, apply **Plateau** at 8 to 12 oz per acre in late summer or fall (August through October, but timing may vary by state and/or altitude). Consecutive year applications will optimize long term control. **Plateau** at 12 oz/A applied spring or fall, or 4 oz/A in the spring following an 8 oz/A fall treatment may result in excessive injury to cool season grasses in some areas. For best results, always use a methylated seed oil at 2 pints per acre. Two pints per acre of nitrogen fertilizer (see "SPRAY ADJUVANTS FOR POSTEMERGENCE APPLICATIONS" section) may also be added to the spray tank to increase leafy spurge control, however, this may increase injury to desired species of grasses and forbs. The use of nonionic and silicone based surfactants have resulted in little or no control of leafy spurge. Approximate dates for fall timing in North and South Dakota is late August through September; for Nebraska and Iowa is mid-September through mid-October. This application should be made after good soil moisture is present but prior to the leafy spurge losing its milky sap flow due to a killing frost. To check and see if the milky sap flow has been affected by a frost simply break the main stem of the leafy spurge and if milky sap flows from the break then **Plateau** can still be applied.

Tall Fescue Control: Tall fescue can be controlled by using **Plateau** at the rate of 12 oz plus Methylated Seed Oil at 2 pints per acre. The addition of ACCORD, glyphosate or ROUNDUP PRO and/or nitrogen fertilizer (see "SPRAY ADJUVANTS FOR POSTEMERGENCE APPLICATIONS" section) to the above mix will aid in control. Tall fescue must be actively growing for optimum control. If tall fescue has reached summer dormancy, control may be poor.

Fall applications of **Plateau** at 8 to 12 oz/A plus a ACCORD® or ROUNDUP® PRO at 24 to 64 oz/A will result in best control of existing tall fescue and new germinating seedlings. With spring applications of **Plateau** at 6 to 12 oz/A, plus ACCORD or ROUNDUP PRO at 32 to 64 oz/A, use higher rates for older, mature fescue stands and lower **Plateau** rates when planting forbs. When using 8 oz/A of **Plateau** in the fall with ACCORD or ROUNDUP PRO, it is recommended to apply 4 oz/A **Plateau** in the spring at planting for annual weed and seedling fescue control. Burning the fescue stand, where permitted, the following spring, just prior to green-up, will aid in control and provide a better seedbed for planting. Mowing the fescue several times the summer before fall application, will weaken the fescue root system, making it more susceptible to herbicides. Always allow for at least 10 inches of regrowth, following the last mowing before spraying, as both **Plateau** and ROUNDUP products need foliage present for herbicide uptake and satisfactory control.

Russian Knapweed: Apply 12 oz/A of **Plateau** plus 1 quart per acre of methylated seed oil during Russian knapweed senescence in the fall. Control improves as senescence progresses and may still be obtained with applications made after full senescence. Applications made prior to the initiation of senescence will result in reduced control.

Dalmatian Toadflax: Apply 12 oz/A of **Plateau** plus 1 quart per acre of methylated seed oil in the fall when the top 25% of the plant is necrotic, usually after a hard frost (late October through November). The addition of ammonium sulfate at a rate of 2 to 3 pints per acre may improve control. As long as there is some green stem and/or leaf tissue remaining, good control can be achieved. This timing usually corresponds to fall basal growth. Applications made prior to this will result in poor control.

Resistant Biotypes: Naturally occurring biotypes (a plant within a given species that has a slightly different, but distinct genetic

makeup from other plants of the same species) of some weeds listed on this label may not be effectively controlled by this and/or other herbicides (OUST®) with the ALS/AHAS enzyme inhibiting mode of action. If naturally occurring ALS/AHAS resistant biotypes are present in an area, **Plateau** should be tank-mixed or applied sequentially with an appropriate registered herbicide having a different mode of action to ensure control.

RESIDUAL BAREGROUND WEED CONTROL

For sensitive areas and use around desirable vegetation **Plateau** at 12 ounces per acre may be tank mixed with PENDULUM® herbicide, ROUNDUP® PRO, ESCORT®, KARMEX®, 2,4-D, diuron, ENDURANCE® or other labeled products to provide total vegetation control. For other bareground areas **Plateau** at 12 oz per acre may be tank mixed with ARSENAL® herbicide, SAHARA® DG herbicide, KROVAR®, OUST®, TORDON®, VANQUISH® or other labeled products to provide total bareground weed control. For maximum weed control, use 2 pints per acre of methylated seed oil as an adjuvant.

Spot Treatments: **Plateau** may be used to control weed encroachment in bareground or total vegetation control situations. To prepare the spray solution, thoroughly mix in each gallon of water 0.25 to 5% volume/volume (0.3 oz to 5.4 oz per gallon) **Plateau** plus a methylated seed oil adjuvant.

USE UNDER PAVED SURFACES

Applications should be made to the soil surface only when final grade is established. **DO NOT** move soil following **Plateau** application. Apply **Plateau** in sufficient water to ensure thorough and uniform wetting of the soil surface, including the shoulder area. Add **Plateau** at a rate of 12 oz. per acre to clean water in the spray tank during the filling operation. Agitate before spraying. If soil is not moist prior to treatment, incorporation of **Plateau** will improve control. **Plateau** can be incorporated into the soil to a depth of two inches using a rototiller or disc. Rainfall or irrigation totaling one inch is also sufficient to incorporate **Plateau** into the soil surface. **DO NOT** allow treated soil to wash or move into untreated area.

CONIFER PLANTATION SITE PREPARATION

Plateau may be applied as a site preparation treatment prior to establishing conifer plantations to provide residual weed control of herbaceous weeds. Apply **Plateau** at 12 ozs per acre.

DO NOT apply more than 12 ozs per acre per year.

DO NOT use in forests. Only for use on sites that are managed as conifer plantations.

TOLERANCE OF TREES AND BRUSH TO PLATEAU

The following tolerance information is provided as a general guideline when it is desirable or necessary to make **Plateau** applications in and around desirable tree and brush species. **DO NOT** use **Plateau** on nursery, orchard, ornamental plantings, new plantings, seedling trees or fiber farms except as specified on supplemental labeling. It is suggested that **Plateau** be tried on a limited basis to determine tolerance in your area. **Plateau** may be used at rates up to 12 oz per acre for weed control in and around established trees on pasture, rangeland (see "GUIDELINES FOR RANGELAND USE" section) and noncropland areas such as roadsides, prairies and similar areas used for wildlife cover, erosion control, wind breaks, etc. Tree and brush species known to have acceptable tolerance to **Plateau** when applied under the canopy and/or to the foliage are listed below. Tolerance is based upon trees with a minimum of 2 inch DBH. Application to tree and brush species that are under stress due to drought, disease, insect damage or other factors may be more susceptible to injury from **Plateau** and may result in severe injury or death. Some species may exhibit tip chlorosis and minor necrosis. Foliar contact may increase injury to include defoliation and terminal death. Application methods that minimize foliar contact with desirable tree and brush species can improve tolerance.

When making fall applications of **Plateau**, potential injury to tree and brush species from foliar contact may be minimized by making the application after the leaves have begun to senesce (fall color) or after leaf drop. Conifer species are generally tolerant to fall applications. **Plateau** applications in and around tree and brush species should be made at the recommended timing for the target weed species.

Brush and Tree Species Tolerance to Plateau® herbicide at 12 oz per Acre¹

Common Name	Genus Species	Tolerance by Application Method ²	
		Directed Below Foliage	To Foliage
Apple (Var. Winesap) ³	<i>Malus sylvestris</i>	Yes	NR
Ash, Blue	<i>Fraxinus quadrangulata</i>	Yes	NR
Ash, Green	<i>Fraxinus pennsylvanica</i>	No	No
Azalea	<i>Rhododendron</i> spp.	No	No
Basswood	<i>Tilia heterophylla</i>	No	No
Boxelder	<i>Acer negundo</i>	Yes	Injury ⁵
Buckeye, Ohio	<i>Aesculus glabra</i>	Yes	NR
Cedar-juniper, Western	<i>Thuja plicata</i>	Yes	Yes
Cherry, Black ³	<i>Prunus serotina</i>	No	No
Cherry, Choke	<i>Prunus virginiana</i>	No	No
Cherry, Sweet ³	<i>Prunus avium</i>	No	NR
Cottonwood	<i>Populus deltoides</i>	Yes	Injury ⁵
Cottonwood, narrow leaf	<i>Populus</i> spp.	Yes	Injury ⁵
Currant species	<i>Ribes</i> spp.	Injury ⁵	No
Dogwood, Flowering	<i>Cornus</i> spp.	Yes	Yes
Dogwood, Grey	<i>Cornus racemosa</i>	Yes	Injury ⁵
Dogwood, Red Trig	<i>Cornus</i> spp.	Yes	Yes
Douglas Fir	<i>Pseudotsuga menziesii</i>	Yes	Yes ⁴
Elm, American	<i>Ulmus americana</i>	Yes	Yes
Elm, Siberian	<i>Ulmus pumila</i>	Yes	No
Elm, Slippery	<i>Ulmus rubra</i>	Yes	Yes
Gooseberry	<i>Ribes</i> spp.	Injury ⁵	Injury ⁵
Hackberry	<i>Celtis occidentalis</i>	Yes	Yes
Hawthorn	<i>Crataegus</i> spp.	Yes	Injury ⁵
Juniper, Chinese	<i>Juniperus chinensis</i>	Yes	Yes
Juniper, Western	<i>Juniperus osteosperma</i>	Yes	Yes
Lilac	<i>Syringa</i> spp.	No	No
Linden, American	<i>Tilia americana</i>	No	No
Locust, Black	<i>Robinia pseudoacacia</i>	Yes	Yes
Locust, Honey	<i>Gleditsia triacanthos</i>	Yes	Yes
Maple, Red	<i>Acer rubrum</i>	Yes	Yes
Maple, Sugar	<i>Acer saccharum</i>	Yes	Yes
Mulberry, Red	<i>Morus rubra</i>	Yes	NR
Mulberry, White	<i>Morus alba</i>	Yes	NR
Oak, Black	<i>Quercus velutina</i>	Yes	NR
Oak, Live	<i>Quercus virginiana</i>	Yes	Yes
Oak, Southern Red	<i>Quercus falcata</i>	Yes	NR
Oak, White	<i>Quercus alba</i>	Yes	NR
Olive, Russian	<i>Elaeagnus angustifolia</i>	Yes	No
Osage Orange	<i>Maclura pomifera</i>	Yes	NR
Peach (Var. Elberta) ³	<i>Prunus persica</i>	Yes	NR
Photinia, Red Tip	<i>Photinia fraseri</i>	Yes	Yes
Pine, Lodgepole	<i>Pinus contorta</i>	Yes	Injury ⁴
Pine, White ⁴	<i>Pinus strobus</i>	Yes	Yes
Pittosporum, Japanese	<i>Pittosporum tobira</i>	Yes	Yes
Plum species	<i>Prunus</i> spp.	Yes	No
Poplar, Yellow (Tulip)	<i>Liriodendron tulipifera</i>	Yes	NR
Privet, Common	<i>Ligustrum vulgare</i>	Yes	Yes
Rabbitbrush species	<i>Chrysothamnus</i> spp.	Yes	Yes
Redbud	<i>Cercis canadensis</i>	Yes	Yes
Redcedar, Eastern	<i>Juniperus virginiana</i>	Yes	Yes
Rose, Multiflora	<i>Rosa multiflora</i>	Yes ⁵	No
Sage, Big	<i>Artemisia tridentata</i>	Yes	Yes
Sage, Fringe	<i>Artemisia frigida</i>	Yes	Yes
Sage, Silver	<i>Artemisia cana</i>	Yes	Yes
Sagebrush, Big	<i>Artemisia tridentata</i>	Yes	Yes

Brush and Tree Species Tolerance to Plateau at 12 oz per Acre¹ (CONT):

Common Name	Genus Species	Tolerance by Application Method ²	
		Directed Below Foliage	To Foliage
Sagebrush, Fringed	<i>Artemisia frigida</i>	Yes	Yes
Saltcedar	<i>Tamarix</i> spp.	Yes	No
Serviceberry	<i>Amelanchier alnifolia</i>	Yes	NR
Snowberry, Western	<i>Symphoricarpos occidentalis</i>	Yes	Injury ⁵
Spruce species	<i>Picea</i> spp.	Yes ⁴	Yes ⁴
Sugarberry	<i>Celtis laevigata</i>	Yes	Yes
Sweetgum	<i>Liquidambar styraciflua</i>	Yes	Yes ⁶
Sycamore	<i>Platanus occidentalis</i>	Yes	No
Tree-of-Heaven	<i>Ailanthus altissima</i>	Yes	Yes
Walnut, American Black	<i>Juglans nigra</i>	Yes	No
Willow	<i>Salix</i> spp.	Yes	Injury ⁵

¹ Not intended for nursery, orchard, ornamental plantings, new plantings or seedling trees.

² Yes = Tolerant

No = Not Tolerant, Severe injury or death

NR = Not Recommended due to insufficient tolerance data

³ Not for use on ornamental or fruit bearing trees.

⁴ Applications made just before or during candling may cause candle injury or death.

⁵ Possible defoliation and/or death. Some species may exhibit tip chlorosis and minor necrosis. If spray contacts foliage then defoliation and terminal death may occur. Injury can be reduced or eliminated if applied in fall after color change or leaf drop.

⁶ See supplemental label, "For Use in Sweetgum (*Liquidambar styraciflua*) Grown on Fiber Farms."

WEEDS CONTROLLED

(Not for use in California unless directed otherwise in supplemental labeling.)

Plateau, 4 to 6 oz per acre

Common Name	Genus Species	PRE ¹	POST ²	Annual/ Biennial/ Perennial ³
BROADLEAVES				
Bedstraw, Catchweed	<i>Galium aparine</i>	C	4	WA
Beggarweed, Florida	<i>Desmodium tortuosum</i>	C	2	SA
Buffalobur	<i>Solanum rostratum</i>	---	C	SA
Buttercup, Bur	<i>Ranunculus testiculatus</i>	C	C	WA
Cocklebur, Common	<i>Xanthium strumarium</i>	S	6	SA
Lambsquarters, Common	<i>Chenopodium album</i>	C	2	SA
Halogeton	<i>Halogeton glomeratus</i>	C	C	SA
Morningglory				
Entireleaf	<i>Ipomoea hederacea</i>	S	3	SA
Ivyleaf	<i>Ipomoea hederacea</i>	S	3	SA
Tall	<i>Ipomoea purpurea</i>	S	3	SA
Mustard, Garlic	<i>Alliaria petiolata</i>	C	C	SA
Mustard, Wild	<i>Brassica kaber</i>	C	C	WA
Pigweed	<i>Amaranthus</i> sp.	C	6	SA
Queen Anne's Lace	<i>Daucus carota</i>	---	4	B
Radish, Wild	<i>Raphanus raphanistrum</i>	S	4	WA
Yellow Rocket	<i>Barbarea vulgaris</i>	C	4	WA
Sicklepod	<i>Senna obtusifolia</i>	C	4	SA
Sida, Prickly	<i>Sida spinosa</i>	C	2	SA
Smartweed				
Ladysthumb	<i>Polygonum persicaria</i>	C	C	SA
Pennsylvania	<i>Polygonum pennsylvanicum</i>	C	C	SA
Swamp	<i>Polygonum coccineum</i>	C	C	SA
Starbur, Bristly	<i>Acanthospermum hispidum</i>	C	2	SA
Velvetleaf	<i>Abutilon theophrasti</i>	C	6	SA

Plateau® herbicide, 4 to 6 oz per acre (CONT):

Common Name	Genus Species	PRE ¹	POST ²	Annual/ Biennial/ Perennial ³
GRASS WEEDS				
Brome, Downy	<i>Bromus tectorum</i>	C	—	WA
Cheat	<i>Bromus secalinus</i>	C	—	WA
Crabgrass				
Large (Hairy)	<i>Digitaria sanguinalis</i>	C	4	SA
Smooth	<i>Digitaria ischaemum</i>	C	4	SA
Foxtail,				
Giant	<i>Setaria faberi</i>	C	6	SA
Green	<i>Setaria viridis</i>	C	4	SA
Yellow	<i>Setaria glauca</i>	C	4	SA
Goatgrass, Jointed	<i>Aegilops cylindrica</i>	C	C	WA
Goosegrass	<i>Eleusine indica</i>	S	2	SA
Johnsongrass (Seedling)	<i>Sorghum halepense</i>	C	12	SA
Medusahead	<i>Taeniatherum caput-medusae</i>	C	2	WA
Panicum, Fall	<i>Panicum dichotomiflorum</i>	S	6	SA
Sandbur	<i>Cenchrus</i> sp.	S	C	A/P
Shattercane	<i>Sorghum bicolor</i>	C	12	SA
Signalgrass, Broadleaf	<i>Brachiaria platyphylla</i>	C	C	SA
Stiltgrass, Japanese	<i>Microstegium vimineum</i>	C	4	A
Vaseygrass	<i>Paspalum urvillei</i>	—	8	P
SEDGES				
Nutsedge				
Yellow	<i>Cyperus esculentus</i>	S	4S	P
Purple	<i>Cyperus rotundus</i>	S	4S	P
Sedge	<i>Juncus</i> sp.	S	4S	A/P

¹ C = control, S = suppression in northern United States only

² Maximum plant height in inches at time of application

³ Growth habit: A=Annual, SA=Summer Annual, WA=Winter Annual, B=Biennial
P=Perennial

Plateau, 8 to 12 oz per acre

Common Name	Genus Species	PRE ¹	POST ²	Annual/ Biennial/ Perennial ³
BROADLEAVES				
Anoda, Spurred	<i>Anoda cristata</i>	C	6	SA
Baby's Breath ⁵	<i>Gypsophila paniculata</i>	—	C	P
Bedstraw, Catchweed	<i>Galium aparine</i>	C	C	WA
Bedstraw, Marsh	<i>Galium</i> spp.	C	C	WA
Beggarweed, Florida	<i>Desmodium tortuosum</i>	C	6	SA
Bindweed, Field	<i>Convolvulus arvensis</i>	—	C	P
Buffalobur	<i>Solanum rostratum</i>	—	C	SA
Burclover	<i>Medicago</i> sp.	—	4	SA
Chickweed, Common	<i>Stellaria media</i>	C	6	SA
Cocklebur, Common	<i>Xanthium strumarium</i>	C	6	SA
Cornsalad, Common	<i>Valerianella locusta</i>	—	C	WA
Crownbeard, Golden	<i>Verbesina encelioides</i>	C	2	SA
Dandelion	<i>Taraxacum officinale</i>	—	C	P
Dock, Curly	<i>Rumex crispus</i>	C	6	B
Fiddleneck	<i>Amsinckia</i> sp.	—	C	SA
Flax, Spurge	<i>Thymelaea passerina</i>	C	C	A
Fleabane, Annual	<i>Erigeron annuus</i>	—	C	A
Geranium, Carolina	<i>Geranium carolinianum</i>	—	C	WA/B
Geranium, Cranesbill	<i>Geranium maculatum</i>	C	C	WA/B
Ground Cherry	<i>Physalis heterophylla</i>	—	C	P
Hemlock, Poison	<i>Conium maculatum</i>	C	6	B
Henbit	<i>Lamium amplexicaule</i>	C	3	WA/B

Plateau, 8 to 12 oz per acre (CONT):

Common Name	Genus Species	PRE ¹	POST ²	Annual/ Biennial/ Perennial ³
BROADLEAVES				
Houndstongue, Bristly	<i>Cynoglossum officinale</i>	C	C	B
Indigo, Hairy	<i>Indigofera hirsuta</i>	C	2	P
Jimsonweed	<i>Datura stramonium</i>	C	6	SA
Knapweed, Russian ⁶	<i>Centaurea repens</i>	—	C*	P
Knotweed, Prostrate	<i>Polygonum aviculare</i>	C	C	SA
Kochia*	<i>Kochia scoparia</i>	C	3	SA
Lambsquarters, Common	<i>Chenopodium album</i>	C	3	SA
Morningglory				
Cypressvine	<i>Ipomoea quamoclit</i>	C	6	SA
Entireleaf	<i>Ipomoea hederacea</i>	C	6	SA
Ivyleaf	<i>Ipomoea hederacea</i>	C	6	SA
Pitted	<i>Ipomoea lacunosa</i>	C	6	SA
Smallflower	<i>Jacquemontia tamnifolia</i>	C	6	SA
Tall	<i>Ipomoea purpurea</i>	C	6	SA
Mustard, Wild	<i>Brassica kaber</i>	C	C	WA
Onion, Wild	<i>Allium canadense</i>	C	C	P
Pepperweed, Perennial	<i>Lepidium latifolium</i>	—	C	P
Pigweed ⁴	<i>Amaranthus</i> sp.	C	6	SA
Plantain, Narrowleaf	<i>Plantago lanceolata</i>	C	C	B
Poinsettia, Wild	<i>Euphorbia heterophylla</i>	C	6	SA
Puncture Vine	<i>Tribulus terrestris</i>	—	C	SA
Purslane, Common	<i>Portulaca oleracea</i>	C	4	SA
Pusley, Florida	<i>Richardia scabra</i>	C	4	SA
Queen Anne's Lace	<i>Daucus carota</i>	C	C	B
Ragweed				
Common	<i>Ambrosia artemisiifolia</i>	C	3	SA
Giant	<i>Ambrosia trifida</i>	S	6	SA
Western	<i>Ambrosia psilostachya</i>	—	C	A/P
Rocket, Yellow	<i>Barbarea vulgaris</i>	C	C	WA
Senna, Coffee	<i>Cassia occidentalis</i>	C	4	SA
Sicklepod	<i>Senna obtusifolia</i>	C	6	SA
Sida, Prickly	<i>Sida spinosa</i>	C	6	SA
Smartweed				
Ladysthumb	<i>Polygonum persicaria</i>	C	C	SA
Pennsylvania	<i>Polygonum pensylvanicum</i>	C	C	SA
Swamp	<i>Polygonum coccineum</i>	C	C	SA
Spurge				
Leafy	<i>Euphorbia esula</i>	—	FALL*	P
Spotted	<i>Euphorbia maculata</i>	C	4	SA
Toothed	<i>Euphorbia dentata</i>	C	4	SA
Starbur, Bristly	<i>Acanthospermum hispidum</i>	—	6	SA
Sunflower	<i>Helianthus annuus</i>	—	18	SA
Tansymustard	<i>Descurainia pinnata</i>	C	C	WA
Teasel, Common	<i>Dipsacus fullonum</i>	—	C	B
Thistle				
Bull	<i>Cirsium vulgare</i>	S	C	WA/B
Musk	<i>Carduus nutans</i>	S	C	B
Platt	<i>Cirsium canescens</i>	S	C	P
Russian*	<i>Salsola iberica</i>	C	3	A
Toadflax, Dalmatian	<i>Linaria dalmatica</i>	—	C*	P
Velvetleaf	<i>Abutilon theophrasti</i>	C	C	A
Vervain, Blue	<i>Verbena hastata</i>	—	S	WA
Vervain, prostrate	<i>Verbena bracteata</i>	—	C	P
Whitetop	<i>Cardaria</i> spp.	—	C	P
Willowherb	<i>Epilobium</i> spo.	—	C	P
Woodsorrel, Yellow	<i>Oxalis stricta</i>	C	C	P

Plateau® herbicide, 8 to 12 oz per acre (CONT):

Common Name	Genus Species	PRE ¹	POST ²	Annual/ Biennial/ Perennial ³
GRASS				
Bahiagrass	<i>Paspalum notatum</i>	S	C*	P
Barley, Little	<i>Hordeum pusillum</i>	C	4	WA
Barley, Squirrel Tail	<i>Hordeum jubatum</i>	—	C	P
Barnyardgrass	<i>Echinochloa crus-galli</i>	C	6	SA
Canarygrass, Reed	<i>Phalaris arundinacea</i>	—	C	P
Cheat	<i>Bromus secalinus</i>	C	—	WA
Crabgrass	<i>Digitaria</i> sp.	C	6	SA
Crowfootgrass	<i>Dactyloctenium aegyptium</i>	C	C	SA
Dallisgrass	<i>Paspalum dilatatum</i>	S	C*	P
Downy Brome	<i>Bromus tectorum</i>	C	—	WA
Dropseed, Tall	<i>Sporobolus cryptandrus</i>	S	C	A/P
Fescue, Tall	<i>Festuca arundinacea</i>	C	C*	P
Foxtail				
Giant	<i>Setaria faberi</i>	C	C	SA
Green	<i>Setaria viridis</i>	C	C	SA
Knotroot	<i>Setaria geniculatus</i>	S	6	SA
Purple Robust	<i>Setaria viridis</i>	S	S	SA
Yellow	<i>Setaria glauca</i>	C	4	SA
Garlic, Wild	<i>Allium vineale</i>	C	C	P
Goosegrass	<i>Eleusine indica</i>	C	3S	SA
Itchgrass	<i>Rottboellia cochinchinensis</i>	—	C*	SA
Johnsongrass				
Seedling	<i>Sorghum halepense</i>	C	C	SA
Rhizome	<i>Sorghum halepense</i>	—	C*	P
Medusahead	<i>Taeniatherum caput-medusae</i>	C	C	WA
Panicum				
Fall	<i>Panicum dichotomiflorum</i>	C	C	SA
Texas	<i>Panicum texanum</i>	C	C	SA
Ryegrass, Annual (Italian)	<i>Lolium multiflorum</i>	C	C	WA
Ryegrass, Perennial	<i>Lolium perenne</i>	—	C	P
Sandbur	<i>Cenchrus</i> sp.	S	C	A/P
Shattercane	<i>Sorghum bicolor</i>	C	C	SA
Signalgrass, Broadleaf	<i>Brachiaria platyphylla</i>	C	C	SA
Smutgrass	<i>Sporobolus indicus</i>	—	C	P
Stiltgrass, Japanese	<i>Microstegium vimineum</i>	C	C	A
Stinkgrass, Annual	<i>Eragrostis ciliaris</i>	C	2	SA
Torpedograss	<i>Panicum repens</i>	—	C	P
Vaseygrass	<i>Paspalum urvillei</i>	—	C	P
Wild Oats	<i>Avena fatua</i>	—	C	WA
SEDGES/RUSHES				
Nutsedge				
Yellow	<i>Cyperus esculentus</i>	C	C	P
Purple	<i>Cyperus rotundus</i>	C	C	P
Rush	<i>Juncus</i> sp.	S	4	A/P

¹C = control, S = suppression

²Maximum plant height in inches at time of application

³Growth habit: A=Annual, SA=Summer Annual, WA=Winter Annual, B=Biennial, P=Perennial

⁴Some species are tolerant and resistant biotypes are possible.

⁵For annual control. The addition of 1-2 pints of 2,4-D will aid in burndown.

⁶For best control apply in the fall.

*See "SPECIAL WEED CONTROL" section

Conditions of Sale and Warranty

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

To the extent consistent with applicable law, BASF makes no other express or implied warranty of fitness or merchantability or any other express or implied warranty.

To the extent consistent with applicable law, Buyer's exclusive remedy and BASF's exclusive liability, whether in contract, tort, negligence, strict liability, or otherwise, shall be limited to repayment of the purchase price of the product.

To the extent consistent with applicable law, BASF and the Seller disclaim any liability for consequential, special or indirect damages resulting from the use or handling of this product.

BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** which may be varied only by agreement in writing signed by a duly authorized representative of BASF.

0408

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USES WITH OTHER PRODUCTS (TANK MIXES)

If this product is used in combination with any other product except as specifically recommended in writing by BASF, then to the extent consistent with applicable law, BASF shall have no liability for any loss, damage, or injury arising out of its use in any such combination not so specifically recommended. If used in combination recommended by BASF, to the extent consistent with applicable law, the liability of BASF shall in no manner extend to any damage, loss or injury not directly caused by the inclusion of the BASF product in such combination use, and in any event, to the extent consistent with applicable law, shall be limited to return of the amount of the purchase price of the BASF product.

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Based on: NVA 2008-04-126-0219

BASF Corporation
26 Davis Drive
Research Triangle Park, NC 27709



The Chemical Company



Telar[®]
XP

HERBICIDE

Dry Flowable

Active Ingredient

Chlorosulfuron
2-Chloro-N-(4-methoxy-6-methyl-1,3,5-triazin-2-yl)acetamide
benzenesulfonamide

Other Ingredients

TOTAL

EPA Reg. No. 432-1561

EPA Est. No. 352-IL-001

Nonrefillable Container

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

If used in accordance with the directions on this label, it is expected that this product will not cause harm to humans or the environment. However, if you do not follow the directions on this label, the product may be harmful to you, your family, or the environment. Use this product only as directed on the label. Do not use this product in a way that is not intended.

See inside leaflet for complete First Aid, Precautionary Statements, Directions for Use, Storage and Disposal information.

Net Weight

1 Pound
84062022

A01788543 150718AV1

USER SAFETY RECOMMENDATIONS
Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS
Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

AGRICULTURAL USES

AGRICULTURAL USE REQUIREMENTS
Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:
Coveralls
Chemical resistant gloves made of any water proof material
Shoes plus socks

FIRST AID
IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything to an unconscious person.
IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-334-7577 for emergency medical treatment information.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION!
Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

PERSONAL PROTECTIVE EQUIPMENT (PPE)
Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA chemical-resistance category selection chart.
Mixers, loaders, applicators, and other handlers must wear:
Long-sleeved shirt and long pants
Shoes plus socks
Chemical resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exists, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

ENGINEERING CONTROL STATEMENTS
When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS. **IMPORTANT:** When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "Applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.

Produced for:
Bayer Environmental Science
A Division of Bayer CropScience LP
2 T. W. Alexander Drive
Research Triangle Park, NC 27709

Bayer



Telar[®] XP

HERBICIDE

Dry Flowable

Active Ingredient	By Weight
Chlorsulfuron	
2-Chloro-N-[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)aminocarbonyl]benzenesulfonamide	75%
Other Ingredients	25%
TOTAL	100%

EPA Reg. No. 432-1561

KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

FIRST AID

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything to an unconscious person.
IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-334-7577 for emergency medical treatment information.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION! Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA chemical-resistance category selection chart.

Mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exists, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

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USER SAFETY RECOMMENDATIONS

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

PRODUCT INFORMATION

Telar® XP Herbicide is a dry flowable that is mixed in water and applied as a spray.

Telar® XP Herbicide is for the control of many invasive and noxious broadleaf weeds in pasture, range, Conservation Reserve Program (CRP) lands, and non-crop industrial sites, including grazed areas on these sites.

These non-crop industrial sites include, industrial sites, banks of dry drainage ditches, airports, military installations, fence rows, roadsides and associated rights-of-way, lumberyards, petroleum tank farms, pipeline and utility rights-of-way, pumping installations, railroads, storage areas, and plant sites, including governmental and private lands.

Telar® XP Herbicide is noncorrosive, nonflammable, nonvolatile and does not freeze.

Telar® XP Herbicide can be applied as a preemergence or postemergence treatment. For best annual weed control, apply Telar® XP Herbicide during early stages of weed growth. The degree and duration of control may depend on the following:

- use rate
- weed spectrum and size at application
- environmental conditions at and following treatment

For control of perennial weeds with Telar® XP Herbicide alone, best results are obtained when weeds are treated in the bud to bloom or fall rosette stage.

This product may be applied on pasture, range, CRP and non-crop sites that contain areas of temporary surface water caused by the collection of water between planting beds, in equipment ruts, or in other depressions created by management activities. It is permissible to treat intermittent drainage, intermittently flooded low lying sites, seasonably dry flood plains and transitional areas between upland and lowland sites when no water is present. It is also permissible to treat marshes, swamps and bogs after water has receded as well as seasonally dry flood deltas. DO NOT make applications to natural or man-made bodies of water such as lakes, reservoirs, ponds, streams and canals.

Environmental Conditions and Biological Activity

Telar® XP Herbicide is absorbed by both the roots and foliage of plants, rapidly inhibiting the growth of susceptible weeds. Two to 3 weeks after application to weeds, leaf growth slows, and the growing points turn reddish-purple. Within 4 to 6 weeks of application, leaf veins and leaves become discolored, and the growing points subsequently die.

Warm, moist conditions following treatment enhance the effectiveness of Telar® XP Herbicide since moisture carries Telar® XP Herbicide into weed roots, preventing roots from developing. Cold, dry conditions delay the activity of Telar® XP Herbicide. Weeds hardened off by cold weather or drought stress are less susceptible to Telar® XP Herbicide.

Telar® XP Herbicide is safe to labeled grasses under normal conditions. However, grasses that are stressed from adverse environmental conditions (such as extreme temperatures or moisture), abnormal soil conditions, or cultural practices may be injured by applications of Telar® XP Herbicide. In addition, different species of grass may be sensitive to treatment with Telar® XP Herbicide under otherwise normal conditions. Application of Telar® XP Herbicide to these species may result in injury.

RESISTANCE

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field. Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of action.

To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it may be necessary to change cultural practices within and between crop seasons such as using a combination of tillage, retreatment, tank-mix partners and/or sequential herbicide applications that have a different site of action. Weed escapes that are allowed to go to seed will promote the spread of resistant biotypes.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative cultural practices or herbicide recommendations available in your area.

INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

INVASIVE SPECIES MANAGEMENT

This product may be used on public, private, and tribal lands to treat certain weed species infestations that have been determined to be invasive, consistent with the Federal Interagency Committee for the Management of Noxious and Exotic Weeds (FICMNEW) National Early Detection and Rapid Response (EDRR) System for invasive plants. Effective EDRR systems address invasions by eradicating the invader where possible, and controlling them when the invasive species is too established to be feasibly eradicated. Once an EDRR assessment has been completed and action is recommended, a Rapid Response needs to be taken to quickly contain, deny reproduction, and if possible eliminate the invader. Consult your appropriate state extension service, forest service, or regional multidisciplinary invasive species management coordination team to determine the appropriate Rapid Response provisions and allowed treatments in your area.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Telar® XP Herbicide must be used only in accordance with instructions on this label or in separately published BAYER CROPSCIENCE LP information.

BAYER CROPSCIENCE LP will not be responsible for losses or damages resulting from the use of this product in any manner not specified by BAYER CROPSCIENCE.

Do not apply this product through any type of irrigation system.

PREPARING FOR USE - Site Specific Considerations

Understanding the risks associated with the application of Telar® XP Herbicide is essential to aid in preventing off-site injury to desirable vegetation and agricultural crops. The risk of off-site movement both during and after application may be affected by a number of site specific factors such as the nature, texture and stability of the soil, the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, drainage patterns, and other local physical and environmental conditions. A careful evaluation of the potential for off-site movement from the intended application site, including movement of treated soil by wind or water erosion, must be made prior to using Telar® XP Herbicide. This evaluation is particularly critical where desirable vegetation or crops are grown on neighboring land for which the use of Telar® XP Herbicide is not labeled. If

prevailing local conditions may be expected to result in off-site movement and cause damage to neighboring desirable vegetation or agricultural crops, do not apply Telar® XP Herbicide.

Before applying Telar® XP Herbicide the user must read and understand all label directions, precautions and restrictions completely, including these requirements for a site specific evaluation. If you do not understand any of the instructions or precautions on the label, or are unable to make a site specific evaluation yourself, consult with your local BAYER CROPSCIENCE Crop Protection representative, local agricultural dealer, university cooperative extension service, land manager, professional applicator, agricultural consultant, or other qualified authorities familiar with the area to be treated. If you still have questions regarding the need for site specific considerations please call 1-800-331-2867.

AGRICULTURAL USES

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical resistant gloves made of any water proof material.
- Shoes plus socks.

APPLICATION INFORMATION FOR PASTURE, RANGE, CONSERVATION RESERVE PROGRAM (CRP)

Telar® XP Herbicide is for the control and suppression of weeds in permanent (non-rotational) pastures, range and CRP lands when applied according to the directions and under the conditions specified on this label. Best results are obtained when perennial weeds are treated in the bud to bloom stage or the fall rosette. Annual weeds are controlled best when treated early in their growth cycles.

Aerial application may be made to range and pasture land, and Conservation Reserve Program (CRP) lands.

There are no grazing or hay harvest restrictions for any livestock, including lactating animals, with application rates up to 1 1/3 ounces/acre of Telar® XP Herbicide. No enclosure is required for any animals.

Do not apply more than 1 1/3 ounces/acre of Telar® XP Herbicide per acre per year.

APPLICATION RATES

Telar® XP Herbicide may be applied on the the following forage grasses at the use rates shown below:

1/4 to 1 ounce/acre

Bahiagrass	<i>Paspalum notatum</i>
Bermudagrass	<i>Cynodon dactylon</i>
Blue gramma	<i>Bouteloua gracilis</i>
Bluegrass	<i>Poa spp.</i>
Bromegrass (meadow, smooth)	<i>Bromus spp</i>
Orchardgrass**	<i>Dactylis glomerata</i>
Wheatgrasses (crested, intermediate, pubescent, slender, streambank, tall, thick, spike, western)	<i>Agropyron spp.</i>

1/4 to 1/2 ounce/acre

Bluestems (big, little, plains, sand, ww spar)	<i>Andropogon spp.</i>
Buffalograss	<i>Buchloe dactyloides</i>
Fescue* (tall, Kentucky, hard, creeping)	<i>Festuca spp</i>
Green needlegrass**	<i>Stipa viridula</i>
Indiangrass	<i>Sorghastrum nutans</i>
Kleingrass**	<i>Panicum coloratum</i>
Lovegrasses (sand, weeping)	<i>Eragrostis spp.</i>
Sideoats gramma	<i>Bouteloua curtipendula</i>
Switchgrass	<i>Panicum virgatum</i>
Wildrye	<i>Elymus spp.</i>

* Some types of fescue are sensitive. Use rates at the lower end of the rate range.

** Except California.

Application rates higher than those as specified for specific grasses, up to 1 1/3 ounces/acre, may be made as a spot treatment provided the resulting injury and possible loss of forage can be tolerated by the grower.

WEEDS CONTROLLED

Refer to the WEEDS CONTROLLED BY Telar® XP Herbicide section of this label for rates to control various weeds.

IMPORTANT PRECAUTIONS AND RESTRICTIONS

Broadleaf forage species, such as clover and alfalfa, are sensitive to Telar® XP Herbicide and will be severely stunted or injured by Telar® XP Herbicide.

Forage grasses which are under stress from drought, insects, disease, cold temperature, or poor fertility may be injured by Telar® XP Herbicide.

Forage grasses should be well established before applying Telar® XP Herbicide as the newly emerged seedlings of some forage grasses are sensitive to Telar® XP Herbicide.

Telar® XP Herbicide applied before the initiation of flowering may cause the abortion or suppression of seedheads by some cool season grasses.

Varieties and species of forage grasses differ in their tolerance to Telar® XP Herbicide. Ryegrass (perennial and Italian) may be severely injured. Fescues may be temporarily stunted or yellowed. When using Telar® XP Herbicide on a particular grass for the first time, limit the area treated. If no injury occurs, larger areas may be treated in subsequent years.

NON-AGRICULTURAL USES

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Use on non-crop sites is not within the scope of the Worker Protection Standard.

Do not enter or allow entry into treated areas until sprays have dried.

APPLICATION INFORMATION FOR NON-CROP SITES

Telar® XP Herbicide is recommended for general weed control on private, public and military lands as follows: non-agricultural areas (such as airports, highway, railroad and utility rights-of way, sewage disposal areas, etc.); uncultivated agricultural areas non-crop producing (such as farmyards, fuel storage areas, fence rows, soil bank land, barrier strips, etc.); industrial sites outdoor (such as lumberyards, pipeline and tank farms, etc.) including grazed areas on these sites.

Application to non-crop sites, except rights-of-way, is restricted to ground application only. Rights-of-way may also be treated by helicopter.

Application Timing, Rates and Weeds Controlled

Apply Telar® XP Herbicide as a preemergent or early postemergent spray when annual weeds are actively germinating or growing. For control of perennial weeds with Telar® XP Herbicide alone, best results are obtained when weeds are treated in the bud to bloom or fall rosette stage.

* Do not apply more than three times per year.

* Do not apply more than 2.6 ounces product /acre per year.

APPLICATION INFORMATION FOR INDUSTRIAL TURF (UNIMPROVED ONLY)

Telar® XP Herbicide is used to control weeds on unimproved industrial turf, on roadsides, and on other non-crop sites.

Application Timing

Apply Telar® XP Herbicide when desirable grasses are well established, as premature treatment may result in top kill and stand reduction. For best results, treat turf at green-up.

Application Rates and Weeds Controlled

Refer to the WEEDS CONTROLLED BY Telar® XP Herbicide section below for rates to control various weeds. When applied at lower rates, Telar® XP Herbicide provides short term control of weeds listed; when applied at higher rates, weed control is increased.

Telar® XP Herbicide may be used on the following grasses when applied at the use rates shown below.

Note: The higher rates and/or the addition of surfactant may result in temporary chlorosis of desirable grasses.

1/4 to 1 ounce per acre

Bahiagrass	<i>Paspalum notatum</i>
Bermudagrass	<i>Cynodon dactylon</i>
Blue gramma	<i>Bouteloua gracilis</i>
Bluegrass	<i>Poa spp.</i>
Bromegrass (meadow, smooth)	<i>Bromus spp</i>
Orchardgrass	<i>Dactylis glomerata</i>
Wheatgrasses (crested, intermediate, pubescent, slender, streambank, tall, thick, spike, western)	<i>Agropyron spp.</i>

1/2 ounce per acre

Bentgrass	<i>Agrostis spp</i>
Bluestems (big, little, plains, sand, ww spar)	<i>Andropogon spp.</i>
Buffalograss	<i>Buchloe dactyloides</i>
Galleta	<i>Hilaria jamesii</i>
Needlegrass, green	<i>Stipa viridula.</i>
Green sprangletop	<i>Leptochloa dubia</i>
Indiangrass	<i>Sorghastrum nutans</i>
Indian ricegrass	<i>Oryzopsis hymenoides</i>
Kleingrass	<i>Panicum coloratum</i>
Lovegrasses (sand, weeping)	<i>Eragrostis spp.</i>
Prairie sandreed	<i>Calamovilfa longifolia</i>
Sheep fescue	<i>Festuca ovina</i>
Sideoats gramma	<i>Bouteloua curtipendula</i>
Switchgrass	<i>Panicum virgatum</i>
Wildrye grasses (beardless, Russian)	<i>Elymus spp.</i>

1/4 to 1/2 ounce per acre

Fescue	<i>Festuca spp</i>
Smooth brome	<i>Bromus inermis</i>

- * Do not apply more than three times per year.
- * Do not apply more than 2.6 ounces product/acre per year.

APPLICATION INFORMATION FOR GROWTH SUPPRESSION AND SEEDHEAD INHIBITION

Telar® XP Herbicide may be used as a tank mix with other herbicides registered for the use site to suppress grass growth (chemical mowing) and inhibit seedhead formation.

Application Timing

Apply Telar® XP Herbicide to turf at green-up and before seed heads emerge (boot stage). Ensure that desirable grasses are well established at application, as premature treatment may result in top kill and stand reduction.

Application Rates and Weeds Controlled

Refer to the WEEDS CONTROLLED BY Telar® XP Herbicide section below for rates to control various weeds. When applied at lower rates, Telar® XP Herbicide provides short term control of weeds listed; when applied at higher rates, weed control is increased.

Telar® XP Herbicide may be used on the following grasses when applied at the use rates shown below.

1/4 ounce per acre Telar® XP Herbicide + 1/4 - 1/2 pt per acre "Embark" 2S

Fescue	<i>Festuca spp</i>
Bluegrass	<i>Poa spp.</i>

1/2 ounce per acre Telar® XP Herbicide + 1/2 - 1 pt per acre "Embark" 2S (PNW Only)

Fescue	<i>Festuca spp</i>
Annual bluegrass	<i>Poa annua</i>
Perennial ryegrass	<i>Lolium perenne</i>
Smooth brome	<i>Bromus inermis</i>
Orchardgrass	<i>Dactylis glomerata</i>
Reed canarygrass	<i>Phalaris arundinacea</i>

IMPORTANT PRECAUTIONS AND RESTRICTIONS (Industrial Turf Only)

- Do not use Telar® XP Herbicide or Telar® XP Herbicide in a tank mix with "Embark" on bahiagrass turf or turf that is under stress from drought, insects, disease, cold temperature, or poor fertility, as injury may result.
- Do not apply Telar® XP Herbicide to turf less than 1 year old.
- Grass seed may be planted in treated areas 6 months after treatment, cultivation is recommended.
- For broadcast applications, do not exceed 1/2 ounce Telar® XP Herbicide per acre within a 12-month period. For those weeds listed under the 1 to 2.6 ounces per acre use rate in the Non-crop, Industrial Sites section of this label, spot treatment (at that rate) can be used. Do not make broadcast applications to turf at 1 to 2.6 ounces per acre as this may cause excessive turf injury.

WEEDS CONTROLLED BY Telar® XP Herbicide

Telar® XP Herbicide effectively controls the following weeds when applied at the use rates shown. When applied at lower rates, Telar® XP Herbicide provides short term control of weeds listed; when applied at higher rates, weed control is increased.

1/4 to 1/2 ounce per acre

Annual sowthistle	<i>Sonchus oleraceus</i>
Blue mustard	<i>Chorispora tenella</i>
Common chickweed	<i>Stellaria media</i>
Common speedwell	<i>Veronica officinalis</i>
Common spikeweed**	<i>Hemizonia pungens</i>
Conical catchfly**	<i>Silene conoidea</i>
Cutleaf eveningprimrose**	<i>Oenothera laciniata</i>
Fiddleneck (tarweed)**	<i>Amsinckia lycopsoides</i>
Field pennycress	<i>Thlaspi arvense</i>
Flixweed	<i>Descurainia sophia</i>
Hempnettle**	<i>Galeopsis spp.</i>
Henbit	<i>Lamium amplexicaule</i>
London rocket**	<i>Sisymbrium irio</i>
Mayweed**	<i>Anthemis cotula</i>
Miner's lettuce**	<i>Montia perfoliata</i>
Pineapple-weed**	<i>Matricaria matricarioides</i>
Prostrate pigweed**	<i>Amaranthus blitoides</i>
Redroot pigweed	<i>Amaranthus retroflexus</i>
Shepherd's purse**	<i>Capsella bursa-pastoris</i>
Smooth pigweed**	<i>Amaranthus chlorostachys</i>
Treacle mustard**	<i>Erysimum spp.</i>
Tumble mustard (Jim Hill)	<i>Sisymbrium altissimum</i>
Wild mustard	<i>Sinapis arvensis</i>

** Except California.

1/2 to 1 ounces per acre

Bouncingbet	<i>Saponaria officinalis</i>
Bur beakchervil**	<i>Anthriscus caucalis</i>
Buttercup	<i>Ranunculus spp.</i>
Carolina geranium**	<i>Geranium carolinianum</i>
Common lambsquarter	<i>Chenopodium album</i>
Common sunflower	<i>Helianthus annuus</i>
Dandelion (common)*	<i>Taraxacum officinale</i>
Erect knotweed**	<i>Polygonum erectum</i>
Goldenrod	<i>Solidago spp.</i>
Groundsel (common)**	<i>Senecio vulgaris</i>
Halogeton	<i>Halogeton glomeratus</i>
Musk thistle	<i>Carduus nutans</i>
Sicklepod	<i>Senna obtusifolia</i>
Smallseed falseflax**	<i>Camelina microcarpa</i>
Sweet clover*	<i>Melilotus spp.</i>
Tumble pigweed**	<i>Amaranthus albus</i>
Turkey mullein*	<i>Eremocarpus setigerus</i>
Whitetop (hoary cress)†	<i>Cardaria draba</i>
Wild buckwheat**	<i>Polygonum convolvulus</i>
Wild parsnip	<i>Pastinaca sativa</i>

* Partial control only.

** Except California.

† Prebloom to bloom and fall rosette.

1 to 2.6 ounces per acre

Asters	<i>Aster spp.</i>
Bedstraw*	<i>Galium spp.</i>
Black mustard	<i>Brassica nigra</i>
Bull thistle	<i>Cirsium vulgare</i>
Burclover	<i>Medicago spp.</i>
Canada thistle	<i>Cirsium arvense</i>
Common cinquefoil	<i>Potentilla canadensis</i>
Common mallow	<i>Malva neglecta</i>
Common mullein	<i>Verbascum thapsus</i>
Common ragweed*	<i>Ambrosia elatior</i>
Common tansy	<i>Tanacetum vulgare</i>

(continued)

1 to 2.6 ounces per acre (continued)

Common teasel	<i>Dipsacus fullonum</i>
Common yarrow	<i>Achillea millefolium</i>
Corn spurry	<i>Spergula arvensis</i>
Cow cockle	<i>Vaccaria pyramidata</i>
Curly dock	<i>Rumex crispus</i>
Dyer's woad	<i>Isatis tinctoria</i>
False chamomile**	<i>Matricaria maritima</i>
Foxtails*	<i>Setaria spp</i>
Horetail (<i>Equisetum spp.</i>)	<i>Equisetum spp.</i>
Houndstongue, common	<i>Cynoglossum officinale</i>
Italian ryegrass*	<i>Lolium multiflorum</i>
Marestail/horseweed	<i>Conyza canadensis</i>
Pepperweed**	<i>Lepidium spp.</i>
Pepperweed (perennial)	<i>Lepidium latifolium</i>
Poison-hemlock	<i>Conium maculatum</i>
Prostrate knotweed	<i>Polygonum aviculare</i>
Puncturevine	<i>Tribulus terrestris</i>
Red clover**	<i>Trifolium pratense</i>
Russian knapweed†	<i>Acroptilon repens</i>
Scotch thistle	<i>Onopordum acanthium</i>
Scouringrush	<i>Equisetum hyemale</i>
Sickleweed	<i>Falcaria vulgaris</i>
Spreading orach	<i>Atriplex patula</i>
Tansymustard	<i>Descurainia pinnata</i>
Tansy ragwort**	<i>Senecio jacobaea</i>
White clover	<i>Trifolium repens</i>
Wild carrot	<i>Daucus carota</i>
Wild garlic/ wild onion	<i>Allium vineale</i>
Yellow starthistle*	<i>Centaurea solstitialis</i>

* Partial control only.

** Except California.

† Prebloom to bloom and fall rosette.

SPECIFIC WEED PROBLEMS

Dalmatian Toadflax (*Linaria genistifolia*): Apply 2 to 2.6 ounces of Telar® XP Herbicide per acre as a high volume foliar spray using a minimum of 24 gallons of water per acre. Use of a surfactant, as directed on this label, is recommended. Fall applications of Telar® XP Herbicide appear to provide the most consistent control.

Yellow Toadflax (*Linaria vulgaris*): Apply a minimum of 1.5 ounces of Telar® XP Herbicide per acre.

Kochia, Russian Thistle, and Prickly Lettuce: Tank mix Telar® XP Herbicide with herbicides with different modes of action (such as 2,4-D plus dicamba), and apply postemergence before weeds form mature seeds.

Yellow Starthistle (*Centaurea solstitialis*): Apply Telar® XP Herbicide at 1/2 to 2.6 ounces per acre in combination with the specified rates of other herbicides registered for this use (such as, "Transline", "Tordon" 22K or 2,4-D). For application method and other use instructions, use the most restrictive directions for the intended use. To improve postemergence control, a spray adjuvant should be added at the manufacturer's specified use rate.

When applied at lower rates, Telar® XP Herbicide provides short term control; when applied at higher rates, weed control spectrum and residual is increased.

Note: Do not apply more than 1 1/3 ounces/acre of Telar® XP Herbicide per year in pasture, range and Conservation Reserve Program treated acres.

Rainfall is needed following the application for activation of Telar® XP Herbicide to provide the preemergence control of yellow starthistle. Applications should be made from early emergence to bolting stage of growth.

TANK MIXTURES

Telar® XP Herbicide may be applied with other herbicides registered for use in pasture, range, Conservation Reserve Program, or non-crop sites. For application method and other use specifications, use the most restrictive directions for the intended combination. Do not tank mix Telar® XP Herbicide with Hyvar® X-L Herbicide.

Always perform a jar test to insure the compatibility of products to be used in tank mixture with Telar® XP Herbicide. Use a clear jar with lid and mix the tank mix ingredients in their relative proportions. The tank mixture is compatible if the materials mix readily when the jar is inverted several times. The mixture should remain stable after standing for 1/2 hour or, if separation occurs, should readily mix if agitated. An incompatible mixture is indicated by separation into distinct layers which do not readily remix when agitated and/or the presence of flakes, precipitates, gels, or heavy oily film on the jar.

GRASS REPLANT INTERVALS

Following an application of Telar® XP Herbicide to non-crop areas, the treated sites may be replanted with various species of grasses at the minimum intervals below.

For soils with a pH of 7.5 or less observe the following replant intervals:

Species	Telar® XP Herbicide Rate ounces/acre	Replant Interval (Months)
Brome, meadow <i>Bromus erectus</i>	1/2-1 1-2	1 2
Brome, smooth <i>Bromus inermis</i>	1/2-1 1-2	2 4
Fescue, alta/tall <i>Festuca arundinacea</i>	1/2 1 2	2 3 5
Fescue, sheep <i>Festuca ovina</i>	1/2-1 1-2	2 4
Foxtail, meadow <i>Alopecurus pratensis</i>	1/2 1 2	3 4 6
Needlegrass, green <i>Stipa viridula</i>	1/2-2	1
Orchardgrass <i>Dactylis glomerata</i>	1/2 1-2	2 3
Russian wildrye <i>Elymus spp.</i>	1/2-2	1
Switchgrass <i>Panicum virgatum</i>	1/2-2	3
Timothy <i>Phleum pratense</i>	1/2 1 2	2 4 6
Wheatgrass, western <i>Agropyron smithii</i>	1/2 1 2	1 2 4

For soils having a pH of 7.5 and greater observe the following minimum replant intervals:

Species	Telar® XP Herbicide Rate ounces/acre	Replant Interval (Months)
Alkali sacaton <i>Sporobolus airoides</i>	1/2 1 2	1 3 >3
Bluestern, Big <i>Andropogon gerardii</i>	1/2	3
Brome, Mountain <i>Bromus marginatus</i>	1/2 1 2	1 2 >3
Gamma, Blue <i>Bouteloua gracilis</i>	1/2 1 2	1 2 >3
Gamma, Sideoats <i>Bouteloua curtipendula</i>	1-2	>3
Switchgrass <i>Panicum virgatum</i>	1-2	>3
Wheatgrass, Bluebunch <i>Agropyron spicatum</i>	1 1/3	1
Wheatgrass, Crested <i>Agropyron cristatum</i>	2/3 1 1/3	1 1
Wheatgrass, Intermediate <i>Agropyron intermedium</i>	1 1/3	1
Wheatgrass, Slender <i>Elymus trachycaulum</i>	1 1/3	1
Wheatgrass, Siberian <i>Agropyron fragile</i>	1 1/3	1
Wheatgrass, Streambank <i>Agropyron riparium</i>	1 1/3	1
Wheatgrass, Thickspike <i>Agropyron dasystachyum</i>	1/2-2	
Wheatgrass, Western <i>Agropyron smithii</i>	1/2 1 2	1 2 4

The minimum intervals are for applications made in the spring to early summer. Because Telar® XP Herbicide degradation is slowed by cold or frozen soils, applications made in the late summer or early fall should consider the intervals as beginning in the spring following treatment.

Testing has indicated that there is a considerable variation in response among the species of grasses when seeded onto areas treated with Telar® XP Herbicide. If species other than those listed above are to be planted into areas treated with Telar® XP Herbicide a field bioassay should be performed, or previous experience may be used to determine the feasibility of replanting treated sites.

ADDITIONAL USE INSTRUCTIONS FOR AGRICULTURAL AND NON-AGRICULTURAL USES

SPRAY EQUIPMENT

Application to non-crop sites, except rights-of-way, is restricted to ground application only, unless otherwise directed by Supplemental or Special Local Need labeling. Rights-of-way may also be treated by helicopter.

In pasture, range or Conservation Reserve Program (CRP), treatments of Telar® XP Herbicide may be applied by either ground equipment, fixed wing aircraft, or helicopter.

Equipment used to apply Telar® XP Herbicide should not be used for applications to crops following a Telar® XP Herbicide application, as low rates of Telar® XP Herbicide may kill or severely injure most crops (except pasture, range, and small grains).

For specific application equipment, refer to the manufacturer's specifications for additional information on GPA, pressure, speed, nozzle types and arrangements, nozzle heights above the target canopy, etc.

Be sure to calibrate air or ground equipment before application. Select a spray volume and delivery system that will ensure a uniform spray pattern and thorough coverage of weed pests. Use higher spray volumes to obtain better coverage when the weed canopy is dense. Avoid swath overlapping, and shut off spray booms while starting, slowing, or stopping to avoid crop injury.

Do not make applications using equipment and/or spray volumes or under weather conditions that might cause spray drift onto nontarget sites. For additional information on spray drift, refer to the Spray Drift Management section of the label.

Continuous agitation is required to keep Telar® XP Herbicide in suspension.

GROUND APPLICATION BROADCAST APPLICATION

Use sufficient spray volume (minimum of 10 gallons per acre) to help provide uniform coverage of the target weeds. For areas with heavy weed infestations, best results are achieved with higher spray volumes, generally 20 to 40 gallons per acre. Be sure to calibrate sprayers before application. When spraying industrial turf, avoid overlapping and shut off spray booms while starting, turning, slowing, or stopping to avoid injury to desired species.

HIGH VOLUME HANDGUN APPLICATION

Use 50 to 300 gallons of spray solution per broadcast acre. Mix Telar® XP Herbicide at 1 to 2.6 ounces per acre. Determine spray volume application amount needed for coverage of the site prior to adding Telar® XP Herbicide to the spray tank. Ensure thorough weed and/or site coverage for best results and use the higher rate for harder to control species.

INVERT SPRAY APPLICATION

Apply the high viscosity invert solution as a total volume of 10 to 40 gallons per acre. Mix 1/4 to 2.6 ounces of Telar® XP Herbicide per acre in the water phase of the invert solution. Refer to the Weeds Controlled sections of this label for selecting the appropriate use rate for the target weeds. Follow all use directions and cautionary statements appearing on the labels of the inverting oils and additives or listed in the operators manual of the inverting equipment by its manufacturer.

SPOT APPLICATION

PASTURE, RANGE AND CONSERVATION RESERVE PROGRAM (CRP)

Telar® XP Herbicide is to be used for control of the previously listed weeds in pasture, range, and CRP using spot applications. Spot applications may be made by using equipment such as back pack sprayers.

Telar® XP Herbicide should be applied as a spray to the foliage and stems. The application volume will vary with the height and density of the weeds and the application equipment used. Regardless of the application volume and equipment used, thorough coverage of the foliage and stems is required to optimize results. To improve postemergence control of weeds, a spray adjuvant should be added at 0.25% volume or at the manufacturer's specified rate.

Use the measuring guide enclosed with the Telar® XP Herbicide container to mix one gram of Telar® XP Herbicide per one gallon of water along with a suitable surfactant. Spray to the point of wetting the entire surface of the target weeds, approximately 35 gallons of solution per acre.

NON-CROP SITES

Spot applications in non-crop sites may be applied at an equivalent broadcast rate of up to 5.2 ounces product per acre per year but not more than 50% of an acre may be treated. Do not apply more than 2.6 ounces product per broadcast acre per year as a result of broadcast, spot or repeat applications.

To prevent misapplication, spot applications should be applied with either a calibrated boom sprayer, a boom-less sprayer, or a hand-held or backpack sprayer.

For smaller areas, the application rates in Table 1 are based on treating an area of 1000 square feet (sq ft). Mix Telar® XP Herbicide in 0.3 to 3 gallons of water, depending on the spray volume necessary to uniformly treat 1000 sq ft. A spray volume of 0.3 to 3 gallons per 1000 sq ft is equivalent to 13 to 130 gallons per acre.

Table 1. Spot Spray Rate Chart - Small Area

Amount of Telar® XP Herbicide per 1000 square feet
to Equal a Broadcast Rate

Broadcast Rate (ounces/acre)	Amount Telar® XP Herbicide needed per 1000 sq ft	
	(ounces)	(grams)
1.0	0.02	0.6
2.0	0.05	1.3
3.0	0.07	2.0
4.0	0.09	2.6
5.0	0.11	3.1

AERIAL APPLICATION

Use nozzle types and arrangements that provide optimum spray distribution and maximum coverage.

Use a minimum of 3 GPA.

When applying Telar® XP Herbicide by air in areas adjacent to sensitive crops, use solid stream nozzles oriented straight back. Adjust the swath to avoid spray drift damage to sensitive crops downwind and/or use ground equipment to treat the border edge of fields. See the Spray Drift Management section of this label.

SPRAY ADJUVANTS

To improve postemergence weed control, a high quality spray adjuvant should be added at the manufacturer's specified use rate. Do not use LI-700 or any acidifying spray adjuvants with Telar® XP Herbicide.

CROP ROTATION

Before using Telar® XP Herbicide, carefully consider your rotation plans and options. If rotational flexibility is desired, do not treat all of your pasture, rangeland, or CRP acres at the same time.

BIOASSAY

A field bioassay must be completed before rotating to any crop or grass species/variety not listed in this label.

To conduct a field bioassay, grow test strips of the crop(s) or grass(es) you plan to grow the following year in fields previously treated with Telar® XP Herbicide. Crop or grass response to the bioassay will indicate whether or not to rotate to the crop(s) or grass(es) grown in the test strip.

If a field bioassay is planned, check with your local dealer or BAYER CROPS SCIENCE LP representative for information detailing the field bioassay procedure.

GRAZING/HAYING

There are no grazing or hay harvest restrictions for any livestock, including lactating animals, with application rates up to 1 1/3 ounces/acre of Telar® XP Herbicide. No enclosure is required for any animals.

PESTICIDE HANDLING

- Calibrate sprayers only with clean water away from the well site.
- Make scheduled checks of spray equipment.
- Assure accurate measurement of pesticides by all operation employees.
- Mix only enough product for the job at hand.
- Avoid over-filling of spray tank.
- Do not discharge excess material on the soil at a single spot in the field/grove or mixing/loading station.
- Dilute and agitate excess solution and apply at labeled rates/uses.
- Avoid storage of pesticides near well sites.
- When triple rinsing the pesticide container, be sure to add the rinsate to the spray mix.

MIXING INSTRUCTIONS

1. Fill the tank 1/4 to 1/3 full of water.
2. While agitating, add the required amount of Telar® XP Herbicide.
3. Continue agitation until the Telar® XP Herbicide is fully dispersed, at least 5 minutes.
4. Once the Telar® XP Herbicide is fully dispersed, maintain agitation and continue filling tank with water. Telar® XP Herbicide should be thoroughly mixed with water before adding any other material.
5. As the tank is filling, add tank mix partners (if desired) and then add the necessary volume of spray adjuvants. Always add spray adjuvants last.
6. If the mixture is not continuously agitated, settling will occur. If settling occurs, thoroughly re-agitate before using.
7. Apply Telar® XP Herbicide spray mixture within 24 hours of mixing to avoid product degradation.
8. If Telar® XP Herbicide and a tank mix partner are to be applied in multiple loads, pre-slurry the Telar® XP Herbicide in clean water prior to adding to the tank. This will prevent the tank mix partner from interfering with the dissolution of the Telar® XP Herbicide.

Do not use Telar® XP Herbicide with spray additives that reduce the pH of the spray solution to below 5.0.

SPRAYER CLEANUP

Spray equipment must be cleaned before Telar® XP Herbicide is sprayed. Immediately following application of Telar® XP Herbicide, follow the cleanup procedures specified on the labels of previously applied products. If no directions are provided, follow the steps outlined in the SPRAYER CLEANUP section of this label.

AT THE END OF THE DAY

When multiple loads of Telar® XP Herbicide are applied, it is recommended that at the end of each day of spraying, the interior of the tank be rinsed with fresh water and then partially filled, and the boom and hoses flushed. This will prevent the buildup of dried pesticide deposits that can accumulate in the application equipment.

Thoroughly clean all mixing and spray equipment immediately following applications of Telar® XP Herbicide as follows:

1. Drain tank; rinse interior surfaces of tank; then flush tank, boom, and hoses with clean water for a minimum of 5 minutes.

2. Fill the tank with clean water and add the cleaning solution*. Flush the boom, hoses, and nozzles with the cleaning solution. Allow them to sit for 15 minutes with agitation running, and then drain the tank.
3. Repeat Step 2.
4. Repeat Step 1.
5. Remove the nozzles and screens and clean separately. To remove traces of cleaning solution, rinse the tank thoroughly with clean water and flush through the hoses and boom.

* Use cleaning solutions such as the following:

1. One gal ammonia (containing 3% active) per 100 gal of water.
2. "Nutra-sol" (carefully read and follow "Nutra-sol" label directions).
3. Loveland Spray Tank Cleaner (carefully read and follow Loveland Spray Tank Cleaner label directions).
4. "Tank-Cleaner" (carefully read and follow "Tank-Cleaner" label directions).

To reduce the amount of water required in the above procedure, see separate BAYER CROPS SCIENCE LP bulletin, "Reduced Volume Cleanout Procedure for Large Sprayers."

Note: This sprayer cleanup procedure is only effective for Telar® XP Herbicide and for general uses specified under "Directions for Use". Do not use the sprayer on food crops (except wheat, barley and oats), feed crops (except rangeland, CRP and pasture), fine turf, ornamentals and other desirable plants.

SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. **APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS!** See **Wind, Temperature and Humidity**, and **Temperature Inversions** sections of this label.

CONTROLLING DROPLET SIZE GENERAL TECHNIQUES

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application and produces a COARSE to VERY COARSE droplet size spectrum (ASAE S572) under application conditions. With most nozzle types, narrower spray angles produce larger droplets. Consider using lowdrift nozzles.

CONTROLLING DROPLET SIZE AIRCRAFT

- **Number of Nozzles** - Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is emitted backwards, parallel to the airstream, will produce larger droplets than other orientations.
- **Nozzle Type** - Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.

BOOM LENGTH AND HEIGHT

- **Boom Length (helicopter)** - For helicopters, the boom length must not exceed 90% of the rotor blade diameter. Using shorter booms decreases drift potential.
- **Boom Height (helicopter)** - Application more than 10 ft above the canopy increases the potential for spray drift. Make applications no higher than 10 feet above the top of the target vegetation, unless a greater height is required for helicopter safety.
- **Boom Height (ground)** - Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. The boom should remain level with the crop and have minimal bounce. Limit nozzle height to no greater than 4 feet above the top of the largest plants.

WIND

Drift potential increases at wind speeds of less than 3 mph (due to variable direction and inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. AVOID GUSTY OR WINDLESS CONDITIONS.

Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they effect spray drift.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

SURFACE TEMPERATURE INVERSIONS

Applications must not occur during a local surface temperature inversion because drift potential is high. Surface inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Surface inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates a surface inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

SENSITIVE AREAS

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

DRIFT CONTROL ADDITIVES

Drift control additives may be used with all spray equipment with the exception of controlled droplet applicators. When a drift control additive is used, read and carefully observe cautionary statements and all other information on the label. It is recommended that drift control additives be certified by the Chemical Producers and Distributors Association (CPDA). Do not use an adjuvant which increases viscosity with Microfoil, Thru-Valve booms, or other systems that cannot accommodate viscous sprays.

SWATH ADJUSTMENT

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the application equipment upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

IMPORTANT PRECAUTIONS AND RESTRICTIONS

- Injury to or loss of desirable trees or other plants may result if equipment is drained or flushed on or near desirable trees or other plants, on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- Treatment of powdery, dry soil and light, sandy soils when there is little likelihood of rainfall soon after treatment may result in off target movement and possible damage to susceptible crops when soil particles are moved by wind or water. Injury to crops may result if treated soil is washed, blown or moved onto land used to produce crops. Exposure to Telar® XP Herbicide may injure or kill most crops (except small grains). Injury may be more severe when crops are irrigated. Do not apply Telar® XP Herbicide when conditions are identified and powdery, dry soil or light or sandy soils are known to be prevalent in the area being treated.
- Applications made during periods of intense rainfall, to soils saturated with water, surfaces paved with materials such as asphalt or concrete, or soils through which rainfall will not penetrate may result in runoff and movement of Telar® XP Herbicide.
- Do not treat frozen or snow covered soil.

- Treated soil should be left undisturbed to reduce the potential for Telar® XP Herbicide movement by soil erosion due to wind or water.
- Applications made where runoff water flows onto agricultural land may injure crops.
- When Telar® XP Herbicide is applied at rates of 1 1/3 ounces/acre and less there is no restriction on grazing or haying of forage grasses.
- Grass species or varieties may differ in their response to various herbicides. BAYER CROPSCIENCE LP recommends that you first consult your state experiment station, university, or extension agent as to sensitivity to any herbicide. If no information is available, limit the initial use of Telar® XP Herbicide to a small area. Components in a grass seed mixture will vary in tolerance to Telar® XP Herbicide so the final stand may not reflect the seed ratio.
- Under certain conditions such as heavy rainfall, high pH, prolonged cold weather, or wide fluctuations in day/night temperatures prior to or soon after Telar® XP Herbicide application, temporary discoloration and/or grass injury may occur. Telar® XP Herbicide should not be applied to grass that is stressed by severe weather conditions, drought, low fertility, water-saturated soils, disease, or insect damage, as grass injury may result. Severe winter stress, drought, disease, or insect damage before or following application may also result in grass injury.
- Applications of Telar® XP Herbicide to pastures, range or CRP undersown with legumes may cause injury to the legumes. Legumes in a seeding mixture may be severely injured or killed following an application of Telar® XP Herbicide.
- Do not use on lawns, walks, driveways, tennis courts, or similar areas.
- Do not apply in or on irrigation or drainage ditches or canals including their outer banks.
- Do not allow Telar® XP Herbicide to drift or move into irrigation or drainage ditches.
- Do not apply through any type of irrigation system.
- Do not use this product in the following counties of Colorado: Saguache, Rio Grande, Alamosa, Costilla, and Conejos.
- Do not apply this product in a way that will contact any person or pet, either directly or through drift. Keep people and pets out of the area during application.
- Do not allow people or pets to enter the treated area until sprays have dried.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage: Store product in original container only. Store in a cool, dry place.

Pesticide Disposal: Waste resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING: Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.

Nonrefillable Plastic and Metal Containers (Capacity Equal to or Less Than 50 Pounds): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Plastic and Metal Containers (Capacity Greater Than 50 Pounds): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

STORAGE AND DISPOSAL *(continued)*

Nonrefillable Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down): Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying the contents from this container into application equipment or mix tank and before final disposal using the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Paper or Plastic Bags, Fiber Sacks including Flexible Intermediate Bulk Containers (FIBC) or Fiber Drums With Liners: Nonrefillable container. Do not reuse or refill this container. Completely empty paper or plastic bag, fiber sack or drum liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer for recycling if available or dispose of empty paper or plastic bag, fiber sack or fiber drum and liner in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

Refillable Fiber Drums With Liners: Refillable container (fiber drum only). Refilling Fiber Drum: Refill this fiber drum with Telar® XP Herbicide containing chloresulfuron only. Do not reuse this fiber drum for any other purpose. Cleaning before refilling is the responsibility of the refiller. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Disposing of Fiber Drum and/or Liner: Do not reuse this fiber drum for any other purpose other than refilling (see preceding). Cleaning the container (liner and/or fiber drum) before final disposal is the responsibility of the person disposing of the container. Offer the liner for recycling if available or dispose of liner in a

(continued)

STORAGE AND DISPOSAL *(continued)*

sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner. To clean the fiber drum before final disposal, completely empty the fiber drum by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer the fiber drum for recycling if available or dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

All Other Refillable Containers: Refillable container. Refilling Container: Refill this container with Telar® XP Herbicide containing chlorsulfuron only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. If damage is found, do not use the container, contact BAYER CROPSCIENCE LP at the number below for instructions. Check for leaks after refilling and before transporting. If leaks are found, do not reuse or transport container, contact BAYER CROPSCIENCE LP at the number below for instructions. Disposing of Container: Do not reuse this container for any other purpose other than refilling (see preceding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, use the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

STORAGE AND DISPOSAL *(continued)*

Outer Foil Pouches of Water Soluble Packets (WSP): Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available or dispose of the empty outer foil pouch in the trash as long as WSP is unbroken. If the outer pouch contacts the formulated product in any way, the pouch must be triple rinsed with clean water. Add the rinsate to the spray tank and dispose of the outer pouch as described previously. Do not transport if this container is damaged or leaking. If the container is damaged, leaking or obsolete, or in the event of a major spill, fire or other emergency, contact BAYER CROPSCIENCE LP at 1-800-334-7577, day or night.

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Transline® and Tordon® are registered trademarks of Dow AgroSciences LLC.

CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, plant injury, other property damage, as well as other unintended consequences may result because of factors beyond the control of Bayer CropScience LP. Those factors include, but are not limited to, weather conditions, presence of other materials or the manner of use or application. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

For product information call: 1-800-331-2867

Produced for:
Bayer Environmental Science
A Division of Bayer CropScience LP
2 T. W. Alexander Drive
Research Triangle Park, NC 27709

Bayer



Telar[®] XP

HERBICIDE

Dry Flowable	
Active Ingredient	By Weight
Chlorsulfuron	
2-Chloro-N-[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)aminocarbonyl]benzenesulfonamide	75%
Other Ingredients	25%
TOTAL	100%

EPA Reg. No. 432-1561
EPA Est. No. 352-JL-001
Nonrefillable Container

KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

See inside leaflet for complete First Aid Instructions, Precautionary Statements, Directions for Use and Storage and Disposal Instructions.

Net Weight
1 Pound
84062022
A01788543 150716AV1

USER SAFETY RECOMMENDATIONS
Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS
Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

AGRICULTURAL USES

AGRICULTURAL USE REQUIREMENTS
Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:
Coveralls
Chemical resistant gloves made of any water proof material
Shoes plus socks

FIRST AID
IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything to an unconscious person.
IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-334-7577 for emergency medical treatment information.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION!
Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

PERSONAL PROTECTIVE EQUIPMENT (PPE)
Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA chemical-resistance category selection chart.
Mixers, loaders, applicators, and other handlers must wear:
Long-sleeved shirt and long pants
Shoes plus socks
Chemical resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride.
Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

ENGINEERING CONTROL STATEMENTS
When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR part 170.240 (j)(4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS. **IMPORTANT:** When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "Applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.

Produced for:
Bayer Environmental Science
A Division of Bayer CropScience LP
2 T. W. Alexander Drive
Research Triangle Park, NC 27709

Bayer

OPEN HERE

Specimen Label

RESTRICTED USE PESTICIDE

May Injure (Phytotoxic) Susceptible, Non-Target Plants. For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification. Commercial certified applicators must also ensure that all persons involved in these activities are informed of the precautionary statements.



Tordon[®] 22K

Specialty Herbicide

®Trademark of Dow AgroSciences LLC

For control of susceptible broadleaf weeds, woody plants and vines on rangeland and permanent grass pastures, fallow cropland, Conservation Reserve Program (CRP) acres, non-crop areas including forest planting sites, industrial manufacturing sites, rights-of-way such as electrical power lines, communication lines, pipelines, roadsides, railroads, and wildlife openings in forest and non-crop areas

Active Ingredient:

picloram: 4-amino-3,5,6-trichloropicolinic acid,
potassium salt 24.4%

Other Ingredients 75.6%

Total Ingredients 100.0%

Acid Equivalent

picloram: 4-amino-3,5,6-trichloropicolinic acid - 21.1% - 2 lb/gal

EPA Reg. No. 62719-6

Keep Out of Reach of Children

CAUTION

Precautionary Statements

Hazards to Humans and Domestic Animals

Causes Moderate Eye Irritation

Avoid contact with eyes or clothing. Prolonged or frequent repeated skin contact may cause allergic skin reactions in some individuals.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof materials
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Controls

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the WPS (40 CFR 170.240(d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

First Aid

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

Environmental Hazards

This pesticide is toxic to some plants at very low concentrations. Non-target plants may be adversely affected if pesticide is allowed to drift from areas of application. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Do not contaminate water used for irrigation or domestic purposes by cleaning of equipment or disposal of wastes. Do not allow run-off or spray to contaminate wells, irrigation ditches or any body of water used for irrigation or domestic purposes. Do not make application when circumstances favor movement from treatment site.

Picloram is a chemical which can travel (seep or leach) through soil and has the potential to contaminate groundwater which may be used for irrigation and drinking purposes. Users should especially avoid application of picloram where soils have a rapid to very rapid permeability throughout the profile (such as loamy sand to sand) and the water table of an underlying aquifer is shallow or to soils containing sinkholes over limestone bedrock severely fractured surfaces, and substrates which would allow direct introduction into an aquifer. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

This chemical can contaminate surface water through spray drift. Under some conditions, picloram may also have a high potential for runoff into surface water (primarily via dissolution in runoff water). These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

Note: Use in Hawaii limited exclusively to Supplemental Labeling. See "General Use Precautions" for details.

Notice: Read the entire label. Use only according to label directions. **Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies elsewhere on this label. If terms are unacceptable, return at once unopened.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for Agricultural Pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Entry Restrictions for Non-WPS Uses: For applications on rangeland, permanent grass pastures, and non-cropland, do not enter or allow worker entry into treated areas until sprays have dried, unless applicator and other handler PPE is worn.

Storage and Disposal

Do not contaminate water, food, feed or fertilizer by storage or disposal. Open dumping is prohibited.

Pesticide Storage: If this product is exposed to subfreezing temperatures, the active ingredient may crystallize and settle out of solution. Under these conditions the product should be warmed to at least 40°F and agitated well to dissolve any crystallized material prior to use.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Nonrefillable containers 5 gallons or less:

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable containers larger than 5 gallons:

Container Disposal: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transporting. If the container cannot be refilled, follow cleaning instructions for nonrefillable containers.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

Nonrefillable containers larger than 5 gallons:

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

General Information

Use Tordon® 22K herbicide to control noxious, invasive, or other broadleaf weeds and listed woody plants and vines on rangeland and permanent grass pastures, fallow cropland, Conservation Reserve Program (CRP) acres, non-crop areas including forest planting sites, industrial manufacturing sites, rights-of-way such as electrical power lines, communication lines, pipelines, roadsides, railroads, and wildlife openings in forest and non-crop areas.

This product is NOT for sale or use in the San Luis Valley of Colorado.

Use Precautions and Restrictions

Use this product only as specified on this label or EPA-accepted Dow AgroSciences supplemental labeling. Observe any special use and application restrictions and limitations, including method of application and permissible areas of use as promulgated by state or local authorities.

Use In Hawaii: In Hawaii, approved uses of Tordon 22K are limited to those described in Supplemental Labeling which may be obtained from your Dow AgroSciences representative or chemical dealer. Refer to this Supplemental Labeling for specific use directions and precautions.

To prevent damage to crops and other desirable plants, read and follow all directions and precautions on this label and container before using.

Do not use this product for impregnation of dry fertilizer, unless otherwise specified in use directions on Dow AgroSciences supplemental labeling.

Chemigation: Do not apply this product through any type of irrigation system.

Grazing Restrictions:

- Meat animals grazing for up to two weeks after treatment should be removed from treated areas three days prior to slaughter.
- Do not graze lactating dairy animals on treated areas within two weeks after treatment.
- When applying more than 0.5 lb a.i. picloram (1 quart of Tordon 22K) per acre, do not cut grass for feed within two weeks after treatment. There are no restrictions for rates below 1 quart per acre.

Grass Tolerance: Tordon 22K at rates over 1 quart per acre may suppress certain established grasses, such as bromegrass and blue gramma. However, subsequent grass growth should be improved by release from weed competition.

Grazing Poisonous Plants: Herbicide application may increase palatability of certain poisonous plants. Do not graze treated areas until poisonous plants are dry and no longer palatable to livestock.

Maximum Use Rates:

- **Non-cropland Areas:** Total use of Tordon 22K, including retreatments or spot treatments, must not exceed 1.0 lb a.i. picloram (2 quarts) per acre per annual growing season on rights-of-way and other non-crop areas.
- On forest sites, no more than 1.0 lb a.i. picloram (2 quarts) per acre may be applied within a period of 2 annual growing seasons.
- **Rangeland and Permanent Grass Pastures:** For control of noxious or invasive weeds as defined by federal, state, or local authorities, do not apply more than 1.0 lb active ingredient (2 quarts of Tordon 22K) per acre per annual growing season as a broadcast treatment. Spot treatments may be applied at the equivalent broadcast rate of up to 1.0 lb active ingredient (2 quarts) per acre.

For control of other broadleaf weeds and woody plants, do not apply more than 0.5 lb active ingredient (1 quart of Tordon 22K) per acre per annual growing season. Spot treatments may be applied at an equivalent broadcast rate of up to 1.0 lb active ingredient (2 quarts) per acre per annual growing season, but not more than 50% of an acre may be treated. Repeat treatments may be applied as necessary, but total use must not exceed the maximum amount specified.

- **Fallow Cropland (Not Rotated to Broadleaf Crops):** Do not apply more than 0.25 lb a.i. picloram (1 pint) per acre as a broadcast treatment per annual growing season.
- **Conservation Reserve Program (CRP) for Seeding to Permanent Grasses Only:** Do not broadcast apply more than 0.5 lb active ingredient (1 quart) per acre of Tordon 22K per annual growing season or apply more than 1.0 lb active ingredient (2 quarts) per acre per annual growing season as a spot application. To reduce potential damage to subsequent small grain crops, use the lower rate or discontinue the use of Tordon 22K at least 2 years prior to the seeding of small grain crops. After CRP, do not plant broadleaf crops in treated acres until an adequately sensitive bioassay (such as planting strips of the intended broadleaf crop in the treated area) shows that no detectable picloram is present in the soil.

Precautions for Avoiding Injury to Non-target Plants

- Do not apply to areas that may be rotated to any broadleaf crop.
- Do not use manure from animals grazing treated areas or feeding on treated hay on land used for growing broadleaf crops, ornamentals, orchards or other susceptible, desirable plants. Manure may contain enough picloram to cause injury to susceptible plants.
- Do not use grass or hay from treated areas for composting or mulching of susceptible broadleaf plants or crops.
- Do not transfer livestock from treated grazing areas (or feeding of treated hay) onto sensitive broadleaf crop areas without first allowing 7 days of grazing on an untreated grass pasture (or feeding of untreated hay). Otherwise, urine and manure may contain enough picloram to cause injury to sensitive broadleaf plants.
- Do not contaminate water intended for irrigation or domestic purposes. To avoid injury to crops or other desirable plants, do not treat or allow spray drift or run-off to fall onto banks or bottoms of irrigation ditches, either dry or containing water, or other channels that carry water that may be used for irrigation or domestic purposes.
- Do not use on flood or sub-irrigated land (such as pastures/meadows areas irrigated by periodic flooding or a shallow water table).
- Do not rotate to food or feed crops on treated land if they are not registered for use with picloram until an adequately sensitive bioassay or chemical test shows that no detectable picloram is present in the soil.
- Do not spray if the loss of forage legumes, including clover cannot be tolerated. Tordon 22K may injure or kill legumes. New legume seedlings may not grow for several years following application of this herbicide.
- Do not apply to snow or frozen ground. Application during very cold (near freezing) weather is not advisable.
- Tordon 22K should not be applied on residential or commercial lawns or near ornamental trees and shrubs. Untreated trees can occasionally be affected by root uptake of herbicide through movement into the topsoil or by excretion of the product from the roots of nearby treated trees. Do not apply Tordon 22K within the root zone of desirable trees unless such injury can be tolerated.
- Do not move treated soil to areas other than sites for which Tordon 22K is registered for use. Also, do not use treated soil to grow plants for which use of Tordon 22K is not registered until an adequately sensitive bioassay or chemical test shows that no detectable residue of picloram is present in the soil.
- Do not make application when circumstances favor movement from treatment site.
- Do not apply this product through a mist blower.

Precautions for Avoiding Spray Drift

Do not apply or otherwise permit Tordon 22K or sprays containing Tordon 22K to contact crops or other desirable broadleaf plants, including but not limited to alfalfa, beans, grapes, melons, peas, potatoes, safflower, soybeans, sugar beets, sunflower, tobacco, tomatoes, and other vegetable crops, flowers, fruit plants, ornamentals or shade trees or the soil containing roots of nearby valuable plants.

Avoid spray drift. Exposure to very small quantities of spray or drift, which may not be visible, may cause serious injury to susceptible plants during active growth or dormant periods. To minimize spray drift, use low nozzle pressure; apply as a coarse spray; and use nozzles designed for herbicide application that do not produce a fine droplet spray. To aid in further reducing spray drift, a drift control or deposition aid may be used with this product, especially when water alone is used as the carrier. If a drift control aid is used, follow all use recommendations and precautions on the product label. Do not use a thickening agent with Microfoil or Thru-Valve booms, or other systems that cannot accommodate thick sprays.

Ground Equipment: With ground equipment spray drift can be lessened by keeping the spray boom as low as possible; by applying 10 gallons or more of spray per acre; by keeping the operating spray pressures at the manufacturer's recommended minimum pressures for the specific nozzle type used (low pressure nozzles are available from spray equipment manufacturers); by spraying when the wind velocity is low (follow state regulations). Avoid calm conditions which may be conducive to air inversions. Direct sprays no higher than the tops of target vegetation and keep spray pressures low enough to provide coarse spray droplets to minimize drift. A drift control or deposition aid may be used to further reduce the potential for drift.

Aerial Application: Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications:

1. The distance of the outer most operating nozzles on the boom must not exceed 3/4 the length of the wingspan or 90% of rotor width.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they must be observed.

The applicator should be familiar with and take into account the information covered in the following **Aerial Drift Reduction Advisory**. [This information is advisory in nature and does not supersede mandatory label requirements.]

Aerial Drift Reduction Advisory

Information on Droplet Size: The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

Controlling Droplet Size:

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

- **Pressure** - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from direction of air flow will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Length: For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height: Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment: When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

Wind: Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature And Humidity: When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions: Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of the smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas: The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

Woody Plants and Broadleaf Weeds Controlled

Woody Plants and Vines:

acacia, blackbrush	guava	poplar spp.
acacia, catclaw	gums	pine, pinyon
acacia, twisted	haw	plum, java
aspen	hemlock	rabbitbrush, Douglas
blackberry	hickory	rose, Macartney
broom, Scotch	huisache	rose, multiflora
buttonbush	(suppression	sagebrush, fringed
cactus spp.	only)junipers/cedars	salmonberry
camellthorn	lantana	sassafras
cedars (Juniper)	locust	sourwood
chaparral spp.	maple spp.	spruce
dogwood	mesquite	sumac
Douglas fir	oak spp.	tallowtree, Chinese
fir spp.	oak, live	trumpetreepeper
gorse	oak, poison	willows
granjeno	persimmon	wormwood, absinth
guajillo	pine	

Annual and Perennial Broadleaf Weeds:

bindweed, field (p)	horsenettle, white (p)	ragweed, western (a)
bitterweed (a)	horsetweed (a)	ragwort, tansy (b)
bouncingbet (a)	ironweed (p)	Russian thistle (a)
broomweed,	knapweed, diffuse (a)	sage
annual (a)	knapweed,	Mediterranean (b)
buckwheat, wild (a)	meadow (p)	skeletonweed,
buffalobur (a)	knapweed,	rush (p)
bullnettle (p)	Russian (p)	smartweed (a)
bursage (a)	knapweed,	snakeweed,
burroweed (p)	spotted (p)	broom (p)
cactus sp. (p)	knapweed,	sneezeweed,
cactus, cholla (p)	squarrose (p)	bitter (a)
camphorweed (a)	lambquarters (a)	sowthistle,
carrot, wild (b)	larkspur, geyer (p)	perennial (p)
chicory (a)	larkspur, plains (p)	spurge, leafy (p)
cinquefoil, sulfur (p)	larkspur, tall (p)	St. Johnswort (p)
clover (p)	lettuce, prickly (a)	starthistle, Iberian (a)
cocklebur (a)	licorice, wild (p)	starthistle, purple (a)
coneflower,	locoweeds (p)	starthistle, yellow (a)
upright prairie (p)	loco, woolly (p)	sunflower (a)
croton (a)	loco, Wooten	tasajillo (p)
crupina, common (a)	(garbancillo) (p)	thistles, annual
daisy, ox-eye (p)	lupines (p)	or biennial,
fleabane (a,b)	marshelder	including:
dock, curly (p)	(sumpweed) (a)	thistle, artichoke (b)
garbancillo	mayweed (a)	thistle, bull (b)
(Wooten loco) (p)	milkweed (p)	thistle, distaff (a)
goldaster, gray (p)	mullein (b)	thistle, Italian (b)
goldaster,	mustard, wild (a)	thistle, musk (b)
narrowleaf (p)	nightshade,	thistle,
goldenrod,	silverleaf (p)	plumeless (b)
common (p)	parsnip, wild (b)	thistle, Scotch (b)
goldenweed,	pennycress (a)	thistles, perennial,
Drummond (p)	pigweed (a)	including
groundsel (p)	pricklypear, plains (p)	thistle, Canada (p)
henbane, black (a,b)	pricklypear,	thistle, wavy leaf (p)
horsenettle,	lindheimer (p)	toadflax,
Carolina (p)	ragweed, bur (a)	dalmation (p)
horsenettle,	ragweed, common (a)	toadflax, yellow (p)
western (p)	ragweed, lanceleaf (a)	yankeeweed (p)

(a) - annual; (b) - biennial; (p) - perennial

Non-Cropland Areas

Use Tordon 22K to control susceptible broadleaf weeds and woody plants on non-cropland areas such as roadsides or other rights-of-way, fence rows, and around farm buildings. Up to 2 quarts of Tordon 22K per acre may be applied. **For general non-crop weed and brush control, See the Rangeland and Permanent Grass Pastures section for specific target weed or woody plant species treatment instructions.** See specific use directions for Forest Site Preparation below.

Broadcast Treatments for Forest Site Preparation (Not for Conifer Release)

For broadcast applications apply the specified rate of Tordon 22K in a total spray volume of 5 to 25 gallons per acre by air or 10 to 100 gallons per acre by ground. Use spray volumes sufficient to provide thorough coverage of treated foliage. Use application systems designed to prevent spray drift to off-target sites. Nozzles or additives that produce larger droplets may require higher spray volumes to provide adequate coverage.

Southern States (Alabama, Arkansas, Delaware, Georgia, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas and Virginia):

To control susceptible woody plants and broadleaf weeds, apply Tordon 22K at a rate of 2 quarts per acre. To broaden the spectrum of woody plants and broadleaf weeds controlled, apply 2 quarts per acre of Tordon 22K in tank mix combination with 2 to 4 quarts of Garlon 4 herbicide. Where grass control is desired, Tordon 22K, alone or in combination with Garlon 4 herbicide, may be tank mixed with 1 to 4 quarts per acre of Accord or Roundup herbicides, or 8 to 16 fluid ounces per acre of Arsenal Applicator's Concentrate herbicide. Susceptible woody plants, broadleaf weeds and grasses may also be controlled using a tank mix of 2 quarts per acre of Tordon 22K with 3 to 5 quarts per acre of Accord or Roundup herbicides, or 16 to 24 fluid ounces of Arsenal Applicator's Concentrate. When applying tank mixes, follow use directions and precautions on each product label.

In Western, Northeastern, and North Central and Lake States (States Not Listed Above As Southern States):

To control susceptible woody plants and broadleaf weeds, apply Tordon 22K at a rate of 1 to 2 quarts per acre. To broaden the spectrum of woody plants and broadleaf weeds controlled, apply 1 to 2 quarts per acre of Tordon 22K in tank mix combination with 1.5 to 3 quarts per acre of Garlon 4 herbicide. Where grass control is also desired, Tordon 22K, alone or in tank mix combination with Garlon 4, may be applied with 1 to 3 quarts per acre of Accord or Roundup herbicide, 2 to 4 ounces per acre of Oust, a combination of Accord (or Roundup) plus Oust at the rates listed, or 8 to 16 fluid ounces of Arsenal Applicator's Concentrate. When applying tank mixes, follow the use directions and precautions on each product label.

Rangeland and Permanent Grass Pastures

Use Tordon 22K on rangeland and permanent grass pastures to control susceptible broadleaf weeds and woody plants including, but not limited to those shown in the following tables. Many annual weeds at the seedling stage can be controlled at the rate of 1 pt per acre. Where a rate range is specified, choose the higher rate for dense weed infestations, and for more dependable, longer lasting control. Lower rates will perform best when applied under favorable conditions and at the optimum growth stage, but may provide a lower level of control and require retreatment. For best results treat when weeds are small and actively growing in the spring before full bloom, however, certain weeds may also be treated in late summer to fall. Treatments during full bloom or seed stage of some weeds may not provide acceptable control.

Table 1: Rate Instructions for Noxious, Invasive, or Other Weed Species Predominant in the Plains and Northern States.

Weed Species	Broadcast Application (Rate/acre)	Specific Use Directions
Annual and Biennial Weeds:		
bursage (bur ragweed) crupina, common henbane, black horseweed starthistle, Iberian starthistle, purple starthistle, yellow	1-2 pt Tordon 22K	Apply when there is adequate soil moisture and weeds are actively growing.
thistles, including, bull distaff Italian musk plumeless scotch	Fall: 1/2-3/4 pt Tordon 22K Spring: 1/2-3/4 pt Tordon 22K + 1 lb ae 2,4-D	General: Apply at the rosette stage before bolting in the spring or in the fall prior to soil freeze up. Distaff Thistle: Apply at rosette stage in spring only. Bolting Musk Thistle: Apply before flowering at the rate of 3/4-1 pt of Tordon 22K + 1 lb ae of 2,4-D/acre.
Mullein, common	1 - 1.5 pt Tordon 22K + 1 lb ae 2,4-D	Apply at the rosette stage with surfactant and use at least 30 gallons per acre of water carrier.
Perennial Weeds:		
pricklypear, plains	1/2-1 pt Tordon 22K	Apply at peak of flowering. Use of an oil-water emulsion spray mixture may improve control. Lower rate will provide partial control (stand reduction) and high rate more complete control. Treatment response is slow and may continue for 2 years or longer.
sagebrush, fringed	1/2-1 pt Tordon 22K + 1 lb ae 2,4-D ester	Apply after seed stalk elongation and early flowering and throughout the summer if growing conditions are favorable.
cinquefoil, sulfur larkspur, geyer larkspur, plains locoweeds snakeweed, broom	1 pt Tordon 22K	General: Apply when weeds are actively growing. Sulfur cinquefoil: Apply during active growth or fall regrowth. Geyer larkspur: Apply when plant is actively growing between rosette stage and flower bud formation. Locoweeds: Apply from early bud to early bloom stage. See "General Use Precautions" section for note on grazing treated poisonous plants. Broom snakeweed: Apply during active growth between full leaf to early bloom stage.
burweed daisy, ox-eye goldenrod, common knapweed, diffuse knapweed, meadow knapweed, spotted knapweed, squarrose rabbitbrush, Douglas sage, Mediterranean thistle, artichoke thistle, Canada thistle, wavy leaf wormwood, absinth	1-2 pt Tordon 22K	General: Apply during active growth prior to bud stage. Lower rates in rate range may require annual spot treatments. Control with lower rates may be improved by tank mixing with 1.0 lb ae per acre of 2,4-D. Diffuse or spotted knapweed: Optimum time for application is from rosette to mid-bolting stage or when applied to fall regrowth. Under favorable growing conditions, application in summer can be effective if higher application volumes are used. Thistle (Canada and Wavy Leaf): Apply when most basal leaves have emerged, but before bud stage, or apply to regrowth in the fall. Apply rates less than 1 1/2 pt/acre only under favorable conditions and in combination with 1 lb ae/acre of 2,4-D. Retreatment may be required. Absinth wormwood: Apply in spring or early summer when plants are actively growing. Oxeye Daisy: Use 1.5-2 pt/acre with at least 30 gallons per acre of water.
licorice, wild milkweed	2 pt Tordon 22K	Wild Licorice: Apply at bloom stage. Milkweed: Treat during active growth and tank mix specified rate of Tordon 22K with 1 lb ae/acre 2,4-D and surfactant.
bindweed, field gorse lupines knapweed, Russian ragwort, tansy skeletonweed, rush spurge, leafy St. Johnswort toadflax, dalmation	2-4 pt Tordon 22K	General: Annual retreatment of these species will be required at rates at low end of rate range. Control at low end of rate range may be improved by tank mixing with 1 lb ae/acre 2,4-D. Russian Knapweed: Apply during active growth from bud to mid-flowering, or to fall regrowth. Leafy Spurge: Apply at true flower stage of growth or apply to fall regrowth. Re-apply when level of control falls below 80 percent. Dalmation Toadflax: Apply in the fall or summer when plants are actively growing through full bloom stage of growth.

Weed Species	Broadcast Application (Rate/acre)	Specific Use Directions
Perennial Weeds: (Cont.)		
larkspur, tall sowthistle, perennial toadflax, yellow	4 pt Tordon 22K	General: A retreatment program may be necessary for satisfactory control of these species. Tall Larkspur: For best results apply from 6 inches tall to late bloom stage. For increased control, apply in tank-mix with Ally or Escort herbicide and non-ionic surfactant. See General Use Precautions for note on grazing treated poisonous plants.
Woody Plants:		
juniper	4 qt Tordon 22K per 100 gallons of spray †	† Apply as a high volume foliar spray / individual plant treatment
redcedar, eastern	Eastern redcedar can be controlled with spot concentrate applications of Tordon 22K in either the spring (April-May) or fall (September-October). For best results, use 3 ml to 4 ml of Tordon 22K (undiluted) per 3 feet of plant height. Application should precede periods of expected rainfall. Apply directly to soil within the dripline and on the upslope side of the tree. Application to trees taller than 15 feet is not recommended. Do not use more than 2 pints of Tordon 22K per acre in any one year.	

Table 2: Rate Instructions for Broadleaf Weeds and Woody Species in the Southern U.S. (Alabama, Arkansas, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas and Virginia)

Tordon 22K can be applied alone or in combination with 2,4-D amine or ester or other products labeled for rangeland and pastures to enhance control of certain species. When Tordon 22K is applied alone, herbicide symptoms will appear more slowly than when tank mixed with 2,4-D

Weed Species	Broadcast Application (Rate/acre)	Specific Use Directions
Annual and Biennial Weeds:		
bitterweed, western broomweed, annual buffalobur bursage (bur ragweed) camphorweed carrot, wild cocklebur croton horsetweed lettuce, prickly ragweed, common ragweed, lanceleaf smartweed sneezeweed, bitter sunflower thistle, bull thistle, musk	Early Season 3/4 - 1 1/2 pt Tordon 22K Mid to Late Season 1-2 pt Tordon 22K	General: Apply when there is adequate soil moisture and weeds are actively growing. Early Season: Apply only for very early in the season when weeds are no more than 2 to 3 inches tall. Mid to Late Season: Apply to weeds from 3 inches tall to early flowering. Thistles: Apply the lower rate in the rate range when thistles are in the rosette stage before bolting. When bolting, increase rate and add 2,4-D. Lanceleaf Ragweed: Use the higher rate within the specified rate range.
Perennial Weeds:		
snakeweed, broom	Fall, Early Winter 1 pt Tordon 22K	Fall and Early Winter: If rainfall is less than average prior to flowering, apply after flowering is complete. If rainfall is average to above average prior to or during flowering, apply during full flower and/or active pollination, before resumption of new top growth.
bullnettle coneflower, upright prairie dock, curly horsenettle, Carolina horsenettle, western horsenettle, white ironweed nightshade, silverleaf ragweed, western yankeeweed	1-2 pt Tordon 22K	General: Apply when there is adequate soil moisture and weeds are actively growing. Nettles and Silverleaf Nightshade: Apply when plants begin to flower in spring. Upright Prairie Coneflower: Apply when plants are 2-6 in. tall, before flowering. Curly Dock: Apply up to bolting Ironweed: Apply up to bud stage. Yankeeweed: Apply when plants are 8 to 10 in. tall.

Weed Species	Broadcast Application (Rate/acre)	Specific Use Directions
Perennial Weeds: (Cont.)		
goldaster, gray goldaster, narrowleaf goldenweed, common goldenweed, Drummond (Isocoma spp.)	1-2 pt Tordon 22K	Gray and Narrowleaf Goldaster: Apply in oil-water emulsion in spring during bud stage (prebloom). Thorough coverage is essential. Goldenweed: Apply in spring (April-June) when there is substantial canopy development as a result of good growing conditions. Add an agricultural surfactant at 0.25%-0.5% or apply in oil-water emulsion. Increase spray volume, 4-5 gpa by air or 15-20 gpa by ground, to ensure thorough coverage.
Poisonous Plants such as groundsel (Senecio spp.) lambert crazyweed loco, woolly loco, Wooton (garbancillo)	1 1/2-2 pt Tordon 22K	General: Apply in fall or winter when there is adequate soil moisture and weeds are actively growing. Herbicide application may increase palatability of poisonous plants. Do not graze treated areas until poisonous plants are dry and no longer palatable to livestock. See General Use Precautions for note on grazing treated poisonous plants. Locoweeds: To improve wetting of locoweeds, use an agricultural surfactant at 0.25%-0.5% or apply in oil-water emulsion.

Cactus	Broadcast Application (Rate/acre)	High Vol. Foliar (Rate/100 gal)	Specific Use Directions
cactus sp. cactus, cholla	--	4 qt Tordon 22K	Apply any time of the year with water and surfactant. Good coverage is essential.
Woody Plants: Note: Consult local recommendations for specific rates within listed rate ranges.			
huisache (suppression)	2 pt Tordon 22K + 1 pt Remedy	2 qt Tordon 22K + 1 qt Remedy	Fall application is recommended, however, fall applications will not provide satisfactory control of other woody species in the South Texas mixed brush complex. Performance can be erratic.
juniper, including, alligator redberry Utah one-seeded eastern redcedar pinon pine	--	4qt Tordon 22K	Apply May through July. Complete coverage is essential. Results with ashe juniper may be variable with high volume foliar application.
pricklypear, lindheimer (unburned rangeland)	2 pt Tordon 22K	4 qt Tordon 22K	Application may be made anytime, but optimum time is late August to early November. Onset of herbicidal activity is very slow and may continue for two years or longer. Good coverage is essential.
pricklypear, lindheimer (burned rangeland)	1 pt Tordon 22K	2 qt Tordon 22K	Conduct intense controlled burns from December through March and apply Tordon 22K mid-April through May. Rainfall following burning can also stimulate prolific resprouting of the burned plants. Good coverage is also essential.
Pricklypear, plains	1 1/2 - 2 pt	4 qt	Optimum time for treatment is during flowering. Control may be improved by use of an oil-water emulsion spray mixture. Lower rate will provide partial control (stand reduction) and high rate more complete control. Treatment response is slow and may continue for 2 years or longer.
rose, Macartney rose, multiflora	1 qt Tordon 22K + 2 lb ae 2,4-D	1-2 qt Tordon 22K + 2-4 lb ae 2,4-D	Apply in the spring or fall when conditions are favorable for plant growth. Use an agricultural surfactant (0.5% v/v) or apply as an oil-water emulsion. Ensure thorough and uniform coverage by applying at higher spray volume, 5 or more gpa by air or 20 or more gpa by ground. Avoid treatment less than 9 to 12 months after mowing when plants have a high percentage of new growth. Repeat treatment as necessary.
tallowtree, Chinese	1 qt Tordon 22K + 2 lb ae 2,4-D or 1 pt Remedy	2 qt Tordon 22K or 1-2 qt Tordon 22K + 2-4 lb ae 2,4-D or 1 qt Remedy	Apply in the spring or fall, when conditions are favorable for plant growth. Use an agricultural surfactant (0.5% vol/vol) or use an oil-water emulsion and higher spray volumes, 5 gpa or more by air and 20 gpa or more by ground.

	Broadcast Application (Rate/acre)	High Vol. Foliar (Rate/100 gal)	Specific Use Directions
Woody Plants: (Cont.)	Note: Consult local recommendations for specific rates within listed rate ranges.		
South Texas mixed brush, including, acacia, blackbrush acacia, catclaw acacia, twisted granjeno guajillo mesquite prickly pear tasajillo	2 pt Tordon 22K + 2/3 -1 1/3 pt Reclaim or 1 to 2 pt Remedy	2 qt Tordon 22K + 2-3 pt Remedy or 1-2 qt Reclaim	Apply in of oil-water emulsion. Use 4 or more gpa by air or 20 or more gpa by ground. For application timing for mesquite, see comments in section on mesquite control. Tank mixing Tordon 22K with Reclaim will provide improved control of pricklypear and legume species such as mesquite and acacias while tank mixing with Remedy will provide improved control of non-legume species such as granjeno, oaks and hackberry.
mesquite	1-2 pt Tordon 22K + 2/3-1 1/3 pt Reclaim or 2 pt Tordon 22K + 1 pt Remedy	1-2 qt Tordon 22K + 1-2 qt Reclaim or 1 1/2-3 pt Remedy	Tordon 22K Alone: Apply as a water spray or oil-water emulsion (see Mixing Instructions) in 4 or more gpa by air or 10 or more gpa by ground. Increase spray volumes with increasing brush density and height to ensure adequate coverage. Where control of pricklypear cactus is desired, use the 2 pint/acre rate of Tordon 22K.

Tordon 22K in Tank Mix: Tank mixing with Reclaim will provide control of pricklypear and improved control of legume species such as mesquite and acacias while tank mixing with Remedy will provide improved control of non-legume species such as granjeno, oaks and hackberry. Regrowth mesquite should be at least 4 ft tall prior to treatment. See labels for Reclaim and Remedy for additional treatment instructions and information on mesquite control. Within rate ranges given for Tordon 22K and tank mix products, consult local recommendations.

Timing and Factors in Control: The herbicidal response of mesquite is strongly influenced by environmental conditions as well as foliage condition and stage of growth. For best results, apply when new growth foliage has turned from light to dark green, when the soil temperature has reached 75°F to 83°F at a depth of 12-18 inches, and soil moisture is adequate for plant growth. Application should be made within 45 days after the critical soil temperature at the 12-18 inch depth has been reached or, if Tordon 22K is applied in combination with Reclaim, within 60 days. Product performance may be adversely affected if application is made before mesquite foliage has turned from light to dark green or if foliage has been injured or removed by late frost, insects, hail or plant diseases. Do not apply if mesquite exhibits new (light green) growth in response to significant rainfall during the growing season. Soil temperatures at the 12-18 inch depth may vary with soil texture and drainage. Coarse-textured (sandy) soils warm up sooner than fine-textured soils (clay) soils and dry soils warm up more quickly than wet soils.

Re-application: Do not reapply in the same growing season. Retreatment will not be effective until woody plants develop sufficient new foliage for interception, uptake, and translocation of the herbicide to plant roots.

Spot Concentrate Application for Juniper Control

ashe juniper eastern redcedar eastern persimmon	General: Apply Tordon 22K undiluted as a spot concentrate application prior to periods of expected rainfall. Apply directly to the soil within the dripline and on the upslope side of the tree. Application to trees taller than 12 feet is not recommended. See directions for "Soil Spot Concentrate" in "Application Methods" section. Ashe Juniper: Apply 4 to 6 ml per 3 ft of plant height in the spring (April-May) Eastern Redcedar: Apply 3 to 4 ml per 3 ft of plant height in either spring (April-May) or fall (September-October) Eastern Persimmon: Apply 2 to 4 ml per inch of stem diameter in spring (March through May)
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Seeding to Permanent Grasses, Including Conservation Reserve Program (CRP) Acres

Newly Seeded Grasses:

Tordon 22K should be applied only after perennial grasses are well established as indicated by development of a good secondary root system and vigorous growth (usually 45 to 60 days after planting). Most perennial grasses show improved tolerance to the post emergence applications at this stage of development. Generally, wheatgrass species are more tolerant to Tordon soil residues.

For best results, apply to actively growing weeds in a spray volume of 2 or more gallons of water per acre by air or 10 or more gallons of water per acre by ground. Refer to the weeds rate chart for information on target weed species and application rates.

Perennial Broadleaf Weeds: Apply Tordon 22K to actively growing perennial broadleaf weeds at up to 2 pints per acre after the grass is well established. Risk of grass injury is greatest when using the maximum of 2 pint per acre rate.

Annual Broadleaf Weeds: Apply Tordon 22K at 1/2 to 3/4 pint per acre to actively growing susceptible annual broadleaf weeds, (including Russian thistle). Tordon 22K can also be tank mixed with 1/2 to 1 pound ae per acre of 2,4-D where 2,4-D sensitive species are present. Read and follow all directions for use and use precautions on other product labels.

Weed Control Prior to Seeding Cool Season Perennial Grasses: Weed control with Tordon 22K fits into grass re-vegetation programs where perennial range or reclamation grass species are to be established in non-cropland, rangeland, permanent grass pastures, or CRP areas. Tordon 22K may be applied in the spring or early summer, depending on the target weed species, and grass seed planted in the fall when conditions are favorable for grass establishment. Alternatively, Tordon 22K may be applied in the fall and grass seed planted in the winter or spring when conditions are favorable for grass establishment.

Apply Tordon 22K at 1 qt/acre or less. Refer to the weeds rate chart for information on target weed species and application rates. When Tordon 22K is applied at 1 qt/acre there may be temporary injury to new plantings of certain perennial grass species, depending on sensitivity. However, temporary grass injury will be more than offset by the benefits to grasses due to decreased weed competition. Germination of annual grass species may be suppressed after treatment.

To optimize weed control it is suggested the application area be disturbed as little as possible by the seeding operation. After application, the site should be left undisturbed for a minimum of 14 days prior to seedbed preparation or seeding. Potential for injury to sensitive grass species can be decreased by increasing the interval between application and seeding operations.

Precautions:

- Do not use Tordon 22K if legumes are a desired cover during CRP.
- Conditions that stress grasses, such as drought, will increase potential for injury to the grass at all stages of growth.
- Do not rotate to grain sorghum (milo) if greater than 1 pint per acre of Tordon 22K has been applied. Do not plant grain sorghum within 8 months after application. Do not use this product for sweet sorghum production or on land that will be rotated to sweet sorghum.
- **To reduce potential damage to subsequent small grain crops or grain sorghum (milo),** use the lower rate or discontinue the use of Tordon 22K at least 2 years prior to the seeding of small grain crops. After CRP, do not plant broadleaf crops in treated acres until an adequately sensitive bioassay shows that no detectable picloram is present in the soil.
- Tordon 22K at rates over 2 pints per acre may suppress certain established grasses such as bromegrass and blue gramma. However, subsequent grass growth should be improved by release from weed competition.

Fallow Cropland (Not Rotated to Broadleaf Crops)

Apply Tordon 22K as a post harvest or fallow treatment in continuous grain or during the fallow period. Tordon 22K may be applied alone or in tank mix combination with 2,4-D or other herbicides registered for this use. Apply in 2 or more gallons of water per acre by air or 5 or more gallons per acre by ground.

Application Rates

Annual Weeds: To control annual weeds such as Russian thistle and wild buckwheat, apply 1/4 to 1/2 pint per acre of Tordon 22K in tank mix combination with 1/2 to 1 lb ae of 2,4-D or other herbicides registered for use on fallow land. Apply when weeds are actively growing.

Field Bindweed: Apply 1/2 to 1 pint per acre of Tordon 22K plus 1/2 to 1 lb ae per acre of 2,4-D when bindweed is actively growing. Optimum time for treatment is when plant runners reach 8 to 12 inches. Use 1/2 pint per acre to control light to moderate infestations under good growing conditions or to reduce the potential for crop injury. Use 1 pint per acre for heavy infestations and to start a treatment program for long-term control. Some regrowth will occur the following season and a re-treatment program of 1/2 pint of Tordon 22K plus 1/2 lb ae of 2,4-D for one to two years will provide stand reduction.

Canada thistle: Apply 1 pint per acre of Tordon 22K plus 1 lb ae per acre of 2,4-D when the majority of thistle plants are emerged but prior to bud stage.

Crop Rotation

Use only on land to be planted the following year to grass, barley, oats, wheat, grain sorghum (milo) or fallowed. Do not plant grain sorghum within 8 months after application. Do not use this product for sweet sorghum production or on land that will be rotated to sweet sorghum. Many broadleaf crops are extremely sensitive to soil residues of Tordon 22K. Do not plant sensitive broadleaf crops for 36 months after treatment or until soil residues have declined to a safe level as indicated by an adequately sensitive bioassay using the intended broadleaf crop. A bioassay is recommended following treatment prior to planting any sensitive broadleaf crop.

Preplant Interval

A preplant interval following application of Tordon 22K prior to planting small grains is recommended to reduce or eliminate potential crop injury and/or yield reduction. The possibility for crop injury or yield reduction to occur depends on application rate, soil organic matter, rainfall, temperature and incidence of cereal diseases. Adequate soil moisture and soil temperature during the preplant interval is important in reducing, but may not eliminate, the risk of crop injury. When considering use of Tordon 22K on fallow land, growers should consider the benefit of weed control against the risk of crop damage and treat only if the risk of injury to small grains can be tolerated. The following preplant intervals are recommended:

For applications up to 1/2 pint per acre, allow a minimum of **45 days** of soil temperatures above 40°F between application and planting.

For applications of greater than 1/2 pint and up to 1 pint per acre, allow a minimum of **60 days of soil temperatures above 40°F** between application and planting, except in the states of Idaho, North Dakota, Nebraska, Montana, Oregon, South Dakota, Washington and Wyoming, where the minimum preplant interval is **90 days**.

Restrictions:

- Do not apply more than 1 pint per acre as a broadcast treatment per annual growing season.
- **Spot Treatment:** See "Spot Treatment" in "Mixing and Application Methods" section for directions for calibration, spray volume determination and mixing. Spot treatments of Tordon 22K at rates over 1 pint per acre can be made on fallow, non-irrigated cropland if the treated areas comprise less than 10% of the immediate field in any one year. Tordon 22K should not be applied to cropland at rates exceeding 2 quarts per acre. When Tordon 22K is applied at rates above 1 pint per acre, injury to small grains may result for periods up to two years after treatment.

Mixing and Application Directions

Mixing Instructions

Mix the required amount of Tordon 22K in water and apply as a coarse, low-pressure spray using ground equipment or aircraft. Use enough spray volume to provide uniform coverage of the weeds.

Use with Surfactants: Under certain conditions, such as drought or dusty plant surfaces, the addition of a surfactant may improve efficacy. However, if foliar burn occurs too rapidly, translocation of Tordon 22K will be impaired and control of perennial weeds, such as field bindweed, may be reduced.

Mixing with Water

To prepare the spray, add about half the desired amount of water in the spray tank. Then with agitation, add the specified amount of Tordon 22K and other registered tank mix herbicides. Finally, with continued agitation, add the rest of the water and additives such as surfactants or drift control and deposition aids.

Mixing Oil-Water Emulsions (Ground and Aerial Applications)

For aerial application, add oil to the total spray mix at the ratio of 1 part oil to 5 parts water (1:5 ratio). For ground application, add oil to the spray mix at a rate of 5 to 10% of the total mix. **Do not use more than 1 gallon of oil per acre for aerial or ground application.** Use agricultural spray emulsifiers such as Sponto 712 or Triton X-100 according to mixing instructions given below.

Batch Mixing Instructions

With continuous, vigorous agitation:

1. Add half the amount of water to be used to the spray tank.
2. Add the required amount of water-soluble herbicides such as Tordon 22K, Garlon 3A, Reclaim[®] herbicide or 2,4-D Amine.
3. With continued, vigorous agitation slowly add a premix of oil, emulsifier and oil soluble herbicides such as Garlon 4, Remedy[®] herbicide or a 2,4-D ester as required. **Note:** Do not add water or mixtures containing water to the premix or oil soluble herbicide since a thick "invert" (water in oil) emulsion may be formed that will be difficult to break. An invert emulsion will also form if the premix is added to the mixing tank before the addition of water.
4. Finish filling the spray tank and maintain sufficient agitation to ensure uniformity of the spray mixture during application.

Invert Emulsions (Non-food Crop Use Only)

Tordon 22K may be applied with Evert 171 Woody Plant Herbicide an approved inverting agent to provide a thick invert water-in-oil spray emulsion designed to minimize spray drift. Consult label directions for Evert 171 or inverting agent for use directions. Invert emulsions may be used only for non-food uses.

Where root-suckering species such as sumac, sassafras, locust and black gum predominate, mix 3 gallons of Evert 171 plus 1 1/2 quarts Tordon 22K with 9 gallons of water for each acre to be sprayed.

Where harder-to-control species such as red maple, elm or oaks are present, mix 5 to 6 gallons of Evert 171 plus 1 to 2 quarts of Tordon 22K with 15 to 18 gallons of water for each acre to be sprayed.

Mixing With Sprayable Liquid Fertilizer Solutions

Tordon 22K is compatible with most non-pressurized liquid fertilizer solutions; however, a compatibility test (jar test) should be made prior to mixing. Jar tests are particularly important when a new batch of fertilizer or pesticide is used, when water sources change, or when tank mixture ingredients or concentrations are changed. Compatibility may be determined by mixing the spray components in the desired order and proportions in a clear glass jar before large scale mixing of spray components in the spray tank. **Note:** The lower the temperature of the liquid fertilizer, the greater the likelihood mixing problems. Use of a compatibility aid such as Unite or Compex may help obtain and maintain a uniform spray solution during mixing and application. Compatibility is best with straight liquid nitrogen fertilizer solutions. Mixing with N-P-K fertilizer solutions or suspensions is more difficult and should not be attempted without first conducting a successful jar test. Agitation in the spray tank must be vigorous to be comparable with jar test agitation. For best results, liquid fertilizer rates should not exceed 50% of the total spray volume. Premix Tordon 22K with water and add to the liquid fertilizer/water mixture while agitating contents of the spray tank. Apply the spray the same day it is prepared while maintaining continuous agitation. Rinse spray tank thoroughly after use.

Note: Foliar applied liquid fertilizers used as carrier for Tordon 22K can cause yellowing or leaf burn of grass foliage.

Tank Mixing

Tordon 22K may be applied in tank mix combination with labeled rates of 2,4-D or other products provided (1) the tank mix product is labeled for the timing and method of application for the use site to be treated; and (2) tank mixing is not prohibited by the label of the tank mix product.

Tank Mixing Precautions:

- Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels.
- Do not exceed specified application rates. If products containing the same active ingredient are tank mixed, do not exceed the maximum allowable active ingredient use rates.
- For products packaged in water soluble packaging, do not tank mix with products containing boron or mix in equipment previously used to apply a product mixture containing boron unless the tank and spray equipment has been adequately cleaned. (See "Sprayer Clean-Out" below.)
- For direct injection or other spray equipment where the product formulations will be mixed in undiluted form, special care should be taken to ensure tank mix compatibility.
Note: Undiluted Tordon 22K can be incompatible with certain amine formulations of 2,4-D. This incompatibility can usually be overcome by diluting one or both products with 50% water prior to mixing.
- Always perform a (jar) test to ensure the compatibility of products to be used in tank mixture.

Tank Mix Compatibility Testing: A jar test is recommended prior to tank mixing to ensure compatibility of Tordon 22K and other pesticides or carriers. Use a clear glass jar with lid and mix the tank mix ingredients in their relative proportions. The tank mixture is compatible if the materials mix readily when the jar is inverted several times. The mixture should remain stable after standing for 1/2 hour or, if separation occurs, should readily mix if agitated. An incompatible mixture is indicated by separation into distinct layers which do not readily remix when agitated and/or the presence of flakes, precipitates, gels, or heavy oily film on the jar.

Do not use spray equipment used to apply Tordon 22K for other applications to land planted to, or to be planted to susceptible crops or desirable sensitive plants, unless it has been determined that all phytotoxic residue of this herbicide has been removed by thorough cleaning of equipment.

Local conditions may affect the use of herbicides. State agricultural experiment stations or extension service weed specialists in many states issue instructions to fit local conditions. Be sure that use of this product conforms to all applicable regulations.

Sprayer Clean-Out

To avoid injury to desirable plants, equipment used to apply Tordon 22K herbicide should be thoroughly cleaned before reusing to apply any other chemicals.

1. Rinse and flush application equipment thoroughly after use. Dispose of rinse water in non-cropland area away from water supplies.
2. Rinse a second time, adding 1 quart of household ammonia for every 25 gallons of water. Circulate the solution through the entire system so that all internal surfaces are contacted (15 to 20 minutes). Let the solution stand for several hours, preferably overnight.
3. Flush the solution out the spray tank through the boom.
4. Rinse the system twice with clean water, recirculating and draining each time.
5. Nozzles and screens should be removed and cleaned separately.

Application Methods

Ground or Aerial Broadcast

Use Tordon 22K as a broadcast treatment by ground or by air to control listed broadleaf weeds and woody plants. Apply Tordon 22K as a coarse low-pressure spray at the specified rates in a spray volume of 2 or more gallons per acre by air or 10 or more gallons per acre by ground. For non-crop applications it is recommended that ground applications of Tordon 22K be made in 15 or more gallons of total spray mixture per acre. For aerial applications, the use of 5 to 20 gallons per acre of spray mixture is recommended.

High-Volume Foliar Applications

Spray to thoroughly wet foliage and stems of individual plants. An approved surfactant should be added at the manufacturer's recommended rate. Do not apply more than the maximum application rate of Tordon 22K specified for a given treatment site.

Modified High Volume Applications

For modified high volume leaf-stem treatments of woody brush mix 1 to 3 quarts of Tordon 22K in 100 gallons of water. To control a wider range of plant species, mix 1 to 3 quarts of Tordon 22K with 1-3 quarts of Garlon® 4 herbicide or 1 to 4 quarts of Garlon 3A herbicide and dilute to make 100 gallons of spray. Apply after the foliage is well developed and in a manner which thoroughly wets all leaves, stems, and root collars.

The amount of spray mixture applied per acre will vary with plant size and density. It is recommended that the total amount of spray mixture applied per acre is 40 to 60 gallons. **The total use of Tordon 22K must not exceed 2 quarts per acre.**

Spot Treatment

Use application rates specified in the "Approved Uses" section of this label or specified by your area weed control specialist. Apply in a total spray volume of 20 to 100 gallons per acre. To prevent misapplication, spot treatments should be applied with a calibrated boom or with hand sprayers according to directions provided below. Do not exceed maximum application rates for Tordon 22K for a given treatment site. On rangeland and permanent grass pastures, spot treatments may be applied at an equivalent broadcast rate of up to 2 quarts per acre per annual growing season, but not more than 50% of an acre may be treated (unless the target weed is a noxious weed which allows higher broadcast use rates). Repeat treatments may be applied as necessary, but total use must not exceed the maximum amount specified.

Hand-Held Sprayers: Hand-held or backpack sprayers may be used for spot applications of Tordon 22K if care is taken to apply the spray uniformly and at a rate equivalent to a broadcast application. Application rates in the table are based on an area of 1,000 sq ft. Mix the amount of Tordon 22K (fl oz or ml) corresponding to the desired broadcast rate in 0.5 to 2.5 gallons of water, depending on the spray volume required to treat 1000 sq ft. To calculate the amount of Tordon 22K required for larger areas, multiply the table value (fl oz or ml) by the area to be treated in "thousands" of square feet, e.g., if the area to be treated is 3,500 sq ft, multiply the table value by 3.5 (calc. $3,500 \div 1,000 = 3.5$). An area of 1000 sq ft is approximately 10.5 X 10.5 yards (strides) in size.

Amount of Tordon 22K per 1,000 sq ft to Equal Specified Broadcast Rate					
1/4 pt/ acre	1/3 pt/ acre	1/2 pt/ acre	2/3 pt/ acre	1 pt/ acre	1 qt/ acre
1/10 fl oz † (2.7 ml)	1/8 fl oz (3.6 ml)	1/5 fl oz (5.4 ml)	1/4 fl oz (7.3 ml)	3/8 fl oz (11 ml)	3/4 fl oz (22 ml)

† 1 fl oz = 29.6 (30) ml

Special Application Methods

Soil Spot Concentrate: Tordon 22K may be applied undiluted as a spot concentrate application to control ashe juniper, eastern redcedar and eastern persimmon. (See specific use directions for these plant species under the Rangeland and Permanent Grass Pasture section of this label.) Applications should precede periods of expected rainfall. Apply directly to the soil within the dripline and on the upslope side of the tree. Applications to trees taller than 12 feet is not recommended.

Broadcast Cut Stubble Treatment

To prevent re-sprouting of susceptible woody species after mowing or hand cutting on non-crop areas and rights-of-way, use Tordon 22K herbicide at the rate of 2 quarts per acre in 15 or more gallons of a water spray mixture. Best results may be obtained when applications are made before or during periods of active root growth. Applications should not be made when the soil is frozen or covered by snow or standing water. It is recommended that applications be made soon after cutting, before sprouting of woody species has occurred. The "Brown Brush Monitor" is recommended for this type of application.

Special Ground Sprayer Equipment: To control annual and perennial weed species using special low-volume, minimum drift equipment, such as the hooded Forage Chemical Mower, apply 1 to 2 pt of Tordon 22K in total volumes ranging from 1 gal to 5 gal per acre in water alone or as an oil-water emulsion at a 1:5 and 1:4 oil-to-water ratio for a 1 gal and 5 gal per acre solutions, respectively.

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If terms of the following Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. To the extent permitted by law, otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies.

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Label Code: D02-111-014
Replaces Label: D02-111-013
LOES Number: 010-00094

EPA accepted 04/01/09

Revisions:

1. Remove picloram training statement
2. Remove reference to company website

Memorandum

To: OSAB

From: Ember Brignull, Open Space Manager

Date: Wednesday, December 14th

Re: Discussion Item IX: Candidate Open Space Property Ranking Scores

The attached spreadsheet has been revised to include additional OSAB member input for candidate open space property scoring. Board member scores have been averaged and the spreadsheet has been sorted from highest to lowest scoring candidate properties. The attached map has been color coded to generally reflect first priority properties (yellow), second priority properties (orange), and third priority properties (green).

For OSAB Discussion in December:

- 1) In general, does this reflect OSAB's top five "property" priorities (which may or may not have multiple parcels)?
- 2) Would OSAB members like to review and re-evaluate any specific parcel scores?

For OSAB Discussion in January:

- 1) Would OSAB like any changes made to the existing map or spreadsheet?

For example:

- a. Line items on the spreadsheet could be color coded by property to visually display which parcels belong together.
- b. The note section on the spreadsheet could indicate if a parcel is of interest individually or only if grouped with other parcels.

FOR OSAB PLANNING PURPOSES ONLY

Letter	Properties	Acreage	STRATEGIC COMMUNITY VALUES														RESOURCE VALUES						Total for Resource Values	Total Score	Note				
			Ecological Significance	Conservation/Restoration Potential	Buffer	Potential for Partners	Trail Connections	Recreational Potential	Agricultural Preservation	Public Visibility	Scenic	View	Comp. Plan	Threat of Development	Undefined Unique Features	Historical Significance	Existing Conditions	Vegetation	Wetlands	Riparian	Wildlife Habitat	Connectivity				Open Water	Topographic & Geological Significance		
D	Mayhoffer-N & S of Empire Road	200	2	2	2	2	2	2	2	2	2	2	2	1	2	1	2	2	26.33	2	1	2	2	2	1	2	10.83	37.17	Missy
D.1	Mayhoffer-N of Empire Road	50	2	2	2	2	1	1	2	2	2	2	2	2	2	2	2	2	26.33	1	1	2	2	2	1	1	9.33	35.67	Missy
D.2	Empire Road adj. to Mayhoffer	3	2	2	2	1	1	1	1	2	1	2	1	1	1	2	1	20.67	1	1	1	2	2	1	1	7.83	28.50		
N.2	SE of HWY 42 & 96 th St.-western	8	1	2	1	1	2	2	1	2	2	1	1	1	1	0	1	16.33	2	1	2	2	2	1	1	9.50	25.83		
N.3	SE of HWY 42 & 96 th St.-eastern	10	1	2	1	1	1	2	1	2	2	1	1	1	1	0	1	16	2	2	2	2	2	1	1	9.67	25.67		
A.2	Phillips 66 NE section	80	2	1	1	1	1	1	2	1	2	1	2	1	0	1	17.43	1	1	1	1	1	1	1	7.86	25.29	Missy		
D.3	Empire Road adj. to Mayhoffer	5	1	1	2	1	1	1	1	2	1	2	1	1	1	1	18.67	1	0	0	2	2	0	1	6.00	24.67			
N.1	SE of HWY 42 & 96 th St.-western small	2	1	1	1	1	1	1	1	2	1	1	1	1	1	0	1	14.5	1	1	1	2	2	1	1	7.33	21.83		
A.1	Phillips 66 SW section	77	1	1	1	1	1	1	0	2	1	2	1	2	0	0	0	15.43	1	0	1	1	1	1	1	6.00	21.43	Missy	
A	Phillips 66 NW and SE sections	228	1	1	1	1	1	1	1	2	1	2	1	2	0	0	0	16.29	1	0	0	1	1	0	1	4.86	21.14	Missy	
XX	W of and adjacent to Davidson Mesa	19	1	1	2	1	1	2	1	2	1	2	1	1	1	0	1	16.67	1	0	0	1	2	0	1	4.17	20.83		
MM	SE of Dillon & 96th St.	73	1	1	2	1	1	1	2	2	1	1	1	1	0	0	1	16	1	0	0	1	1	0	0	4.00	20.00	Missy	
ll	N of Paradise Lane- Eastern most	9	1	2	1	1	1	1	2	2	1	1	1	2	0	0	1	15	1	0	0	1	1	0	0	4.00	19.00		
WW	Centennial- Middle	20	1	1	2	0	1	2	0	1	1	1	1	1	1	0	1	14.83	1	0	0	1	1	0	1	3.67	18.50		
WW.1	Centennial-Western	6	1	2	2	0	1	2	0	1	1	1	1	1	0	0	1	14.5	1	0	0	1	1	0	1	3.83	18.33		
WW.2	Centennial-Eastern	20	1	2	2	0	1	1	0	2	1	1	1	1	0	0	1	14.5	1	0	0	1	1	0	1	3.67	18.17		
GG	N of Paradise Lane- Middle	19	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	12.17	2	1	1	1	1	1	0	5.33	17.50		
KK	S of Paradise Lane- Eastern most	9	1	1	1	1	1	1	1	1	1	1	0	1	0	0	1	12.17	1	1	1	1	1	1	0	5.33	17.50		
ZZ.1	West of GHX	5	1	1	1	0	1	1	0	2	1	2	1	1	0	0	1	13.83	1	0	0	1	1	0	1	3.50	17.33		
C.1	Between S 96th & S. Arthur Ave.- North	5	1	1	1	0	1	1	1	2	1	1	0	1	0	0	1	13.33	1	0	0	1	1	0	0	3.67	17.00		
F	Santillies- SE of S.Bldr Rd & 95th St.	9	1	1	2	1	1	1	1	1	0	2	1	1	0	0	1	13	1	0	0	1	1	0	0	3.00	16.00	Missy	
C.3	Between S 96th & S. Arthur Ave.- South	33	1	1	2	0	1	1	1	2	1	1	0	2	0	0	1	12.83	1	0	0	1	1	0	0	2.67	15.50		
C.2	Between S 96th & S. Arthur Ave.- Middle	14	1	1	2	0	1	1	1	2	1	1	0	2	0	0	1	12.33	1	0	0	1	1	0	0	2.83	15.17		
J	NW of Hwy 42 & 287-Eastern most	30	1	1	1	1	0	1	1	1	1	1	0	1	0	0	1	12.17	1	0	0	1	1	0	0	2.67	14.83		
JJ	S of Paradise Lane- 2nd in from east	10	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	10.83	1	0	1	1	1	0	0	4.00	14.83		
EE	N of Paradise Lane- Western most	10	1	1	1	1	1	1	1	1	1	1	0	1	0	0	1	10.67	1	0	0	1	1	0	0	3.33	14.00		
H	NW of Hwy 42 & 287-2nd in from west	8	1	1	1	1	0	0	1	1	1	1	0	1	1	0	1	11.5	1	0	0	1	1	0	0	2.33	13.83		
FF	S of Paradise Lane- Western most	10	1	1	1	1	1	1	1	0	1	1	0	1	0	1	1	10.83	1	0	0	1	1	0	0	3.00	13.83		
ZZ	Between Damaynovich and D. Mesa	22	1	1	1	0	1	1	0	1	1	1	0	1	0	0	1	9.5	1	0	0	1	1	0	0	4.17	13.67		
K	NW of Hwy 42 & 287-2nd in from east	12	1	1	1	1	0	1	1	1	1	1	0	1	0	0	0	10.83	1	0	0	1	1	0	0	2.50	13.33		

G	NW of Hwy 42 & 287- Western most	3	1	1	1	1	1	0	0	1	1	1	1	1	1	0	1	0	10.5	1	0	0	1	1	0	0	2.50	13.00
HH	S of Paradise Lane- 2nd in from west	10	1	1	1	1	1	0	1	1	0	1	1	0	1	0	0	0	9.667	1	0	0	1	1	0	0	2.67	12.33
I	NW of Hwy 42 & 287-3rd in from west	17	1	1	1	1	1	0	0	1	1	0	1	0	2	0	0	0	9.667	1	0	0	1	1	0	0	2.50	12.17
B.1	PSOC -Western	3	1	1	1	0	1	1	0	2	0	1	0	1	1	0	0	0	9.167	1	0	0	1	1	0	0	2.83	12.00
O	Dillon Road Homestead (within Trillium)	5	1	1	0	1	0	1	1	1	1	1	0	1	0	1	1	1	9.333	1	0	0	1	1	0	0	2.67	12.00
B	PSOC on Dillon West of Warembourg	5	1	1	0	0	0	1	1	1	0	1	0	1	1	0	0	0	8.167	1	0	0	0	1	0	0	2.00	10.17

FOR OSAB PLANNING PURPOSES ONLY

Priority Tiers: Although listed in numerical order, preference for acquisition will be based on the tier level. Tier one (in yellow) reflects the highest priorities for acquisition followed by tier two (in green) and tier three (in blue).

Rating Scale: The scale consist of a 0-2 rating, zero meaning the feature/quality is not present; one meaning the feature/quality is partially represented; and two meaning the feature/quality is fully present.

Strategic Community Values & Resource Values Definitions

Ecological Significance - land with natural areas, wildlife and native plant habitat, important wetlands or watershed lands, potential for sustainable wildlife and native plant populations, and stream corridors.

Conservation/Restoration Potential- well maintained land, well situated to be protected and managed so as to preserve the natural conditions and has opportunities for passive, low-impact types of recreation.

Buffer - Natural divisions providing a discernable break between or within communities.

Potential for Partners - The likelihood that other entities would share the financial burden of acquisition and/ or management of the property.

Trail Connections - land with potential to connect local and regional trail sections and corridors.

Recreation Potential - Feasibility and quality of appropriate recreational use.

Agricultural Preservation - Value in maintaining the active use of farming or ranching and/or preserving the history of prior agricultural use.

Public Visibility - The degree in which a prospective open space parcel can be viewed from public roads or facilities.

Scenic - An area that provides for natural visual enjoyment to an observer while not on the property.

View - An area that provides for natural visual enjoyment to an observer while on the property.

Comp. Plan- The City of Louisville Comprehensive Plan designation for this property is as open space.

Threat of Development- Possibility or probability of new development in the near term.

Undefined Unique Features - Value not captured in other category.

Historical Significance - Contains physical reminders, archeological sites, or historical structures, or there is knowledge of significant past use that is of public value.

Existing Conditions- How close the current state of the property is to the desired state.

Vegetation- The abundance / diversity of native plant species.

Wetlands- Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetation.

Riparian - Riparian vegetation and land adjacent to natural flowing water.

Wildlife Habitat - Area that provides sustainable shelter, food, or protection for indigenous wildlife

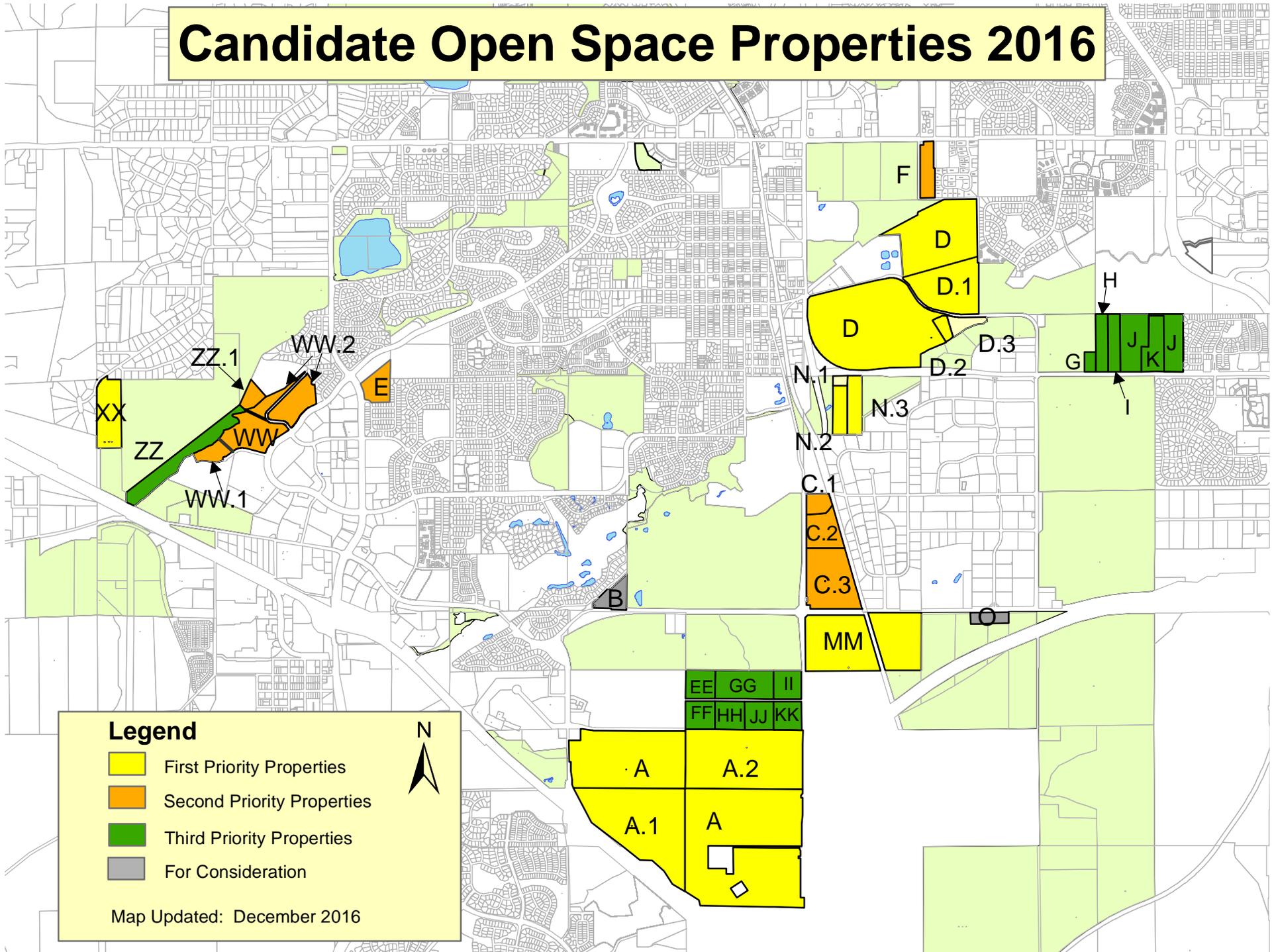
Connectivity- A piece of land that contributes to an overall open space and or community recreational network.

Open Water - A standing body of water present year round or seasonal that is important to the sustenance of vegetation, wildlife, or recreational opportunities.

Topographic & Geological Significance - Features that act as visual markers, aesthetic formations, geological uniqueness, or vantage points deemed of public value.

Size - Small, medium or large.

Candidate Open Space Properties 2016



Legend

- First Priority Properties
- Second Priority Properties
- Third Priority Properties
- For Consideration

Map Updated: December 2016

Lake Park Interpretive Panel
City of Louisville Open Space & Trails
ECOS Communications
Design and Layout for Interpretive Panel
OSAB Review: December 14th, 2016

Review Objectives

Per our contracted scope of work, ECOS has provided a design, text, and layout for an interpretive panel to be installed at Lake Park Open Space. The goal of the panel is three-fold:

1. Acknowledge the Harney family's contribution to Louisville's history,
2. Make visitors aware of the pond's origin and prior use of the land for agriculture, and
3. Speak to the purpose of the property today (recreation, open space preservation, wildlife habitat).

We will seek comment on design, messages, visuals, and copy (in that order of priority). The next step for ECOS will be to revise and finalize the sign for future fabrication and installation—per direction by Open Space staff.

Process for Collecting Comments

We will solicit comment through facilitated discussion.

This Pond—From Farm to Park



Great blue heron

Look out on this scene of lake, trails, and houses. Can you imagine seeing grazing cows, hay bales, and cornfields instead? The Harney family farmed this land for several decades, constructing the pond in the 1950s for crop irrigation.



From 1948 to 1972, the farm here produced corn, alfalfa, and grains to feed livestock—using equipment like this harvester and tractor.



Steve & Martha Harney, Colorado Farmers



Great horned owl (chick behind adult)

Lake Park hosts lots of wildlife! Great horned owls, great blue herons, belted kingfishers, coyotes—these are just a few species you might see here.



Belted kingfisher



Coyote

Since 1972, Lake Park has served the City of Louisville as a nature escape. Help us take care of this special place for people and wildlife. Enjoy your visit!



MEMORANDUM

To: Open Space Advisory Board
From: Lauren Trice, Associate Planner
Subject: Wayfinding Update
Date: December 6, 2016

As part of the Small Area Plan processes, the City has been working with ArtHouse Design to engage the community and develop a draft wayfinding plan. An initial draft of the program is attached. Staff's intent is to review this draft with City Boards and Commissions before bringing a final proposal back to City Council.

Design

ArtHouse Design presented three sign "families" to the community during the Small Area Plan process. The attached draft sign package is in response to the public comments. ArtHouse Design also collaborated with designer for the Open Space, Parks & Trails Wayfinding Plan to ensure the designs were compatible.

Approved Funding for Wayfinding

The 2016 budget includes funding for fabrication and installation of an initial phase of sign installation. Based on the approved budget and cost estimates, staff developed a Phase I implementation plan. Draft location plans for Phase I along with the full draft sign package (Phase I and II) are attached.

Questions for OSAB

1. Are there any of the proposed Phase I sign locations that conflict with Open Space, Parks & Trails Wayfinding Plan?
2. Are there any of the proposed Phase I signs that could enhance Open Space, Parks & Trails Wayfinding Plan?
3. Do you have any other suggestions?

Attached:

1. Draft Location Plan & Sign Package
2. Supplemental Renderings



ARTHOUSE DESIGN

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CITY OF LOUISVILLE, COLORADO | SIGNAGE & WAYFINDING
OCTOBER 11, 2016



LOCATION PLANS

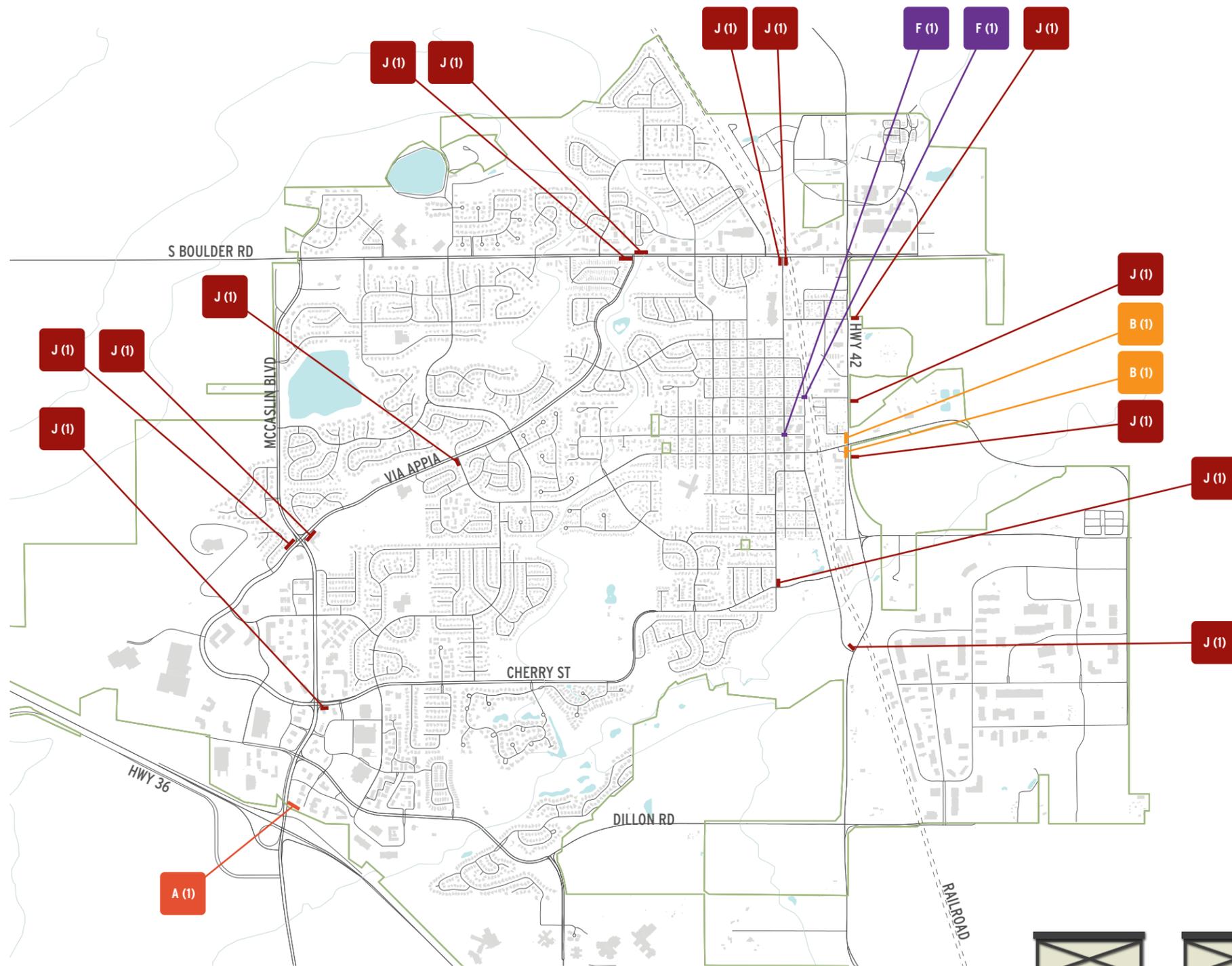


LOCATION PLAN - PHASE 1

CITY OF LOUISVILLE, CO

SIGN TYPE LEGEND

- A Sign Type A: Primary Monument Sign
- B Sign Type B: Secondary Monument Sign
- F Sign Type F: Directory Kiosk
- J Sign Type J: Vehicular Pole Mounted Wayfinding Sign



1 Louisville, CO Site Plan
Scale: NTS



2 Proposed Phase 1 Sign Types
Scale: 1/4" = 1' - 0"

SYMBOL KEY

- 129 } Location Number
- A } Sign Type

Package Issue Date
10.11.16

Sheet Revision Date

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PHASE I & II LOCATION PLAN

CITY OF LOUISVILLE, CO

SIGN TYPE LEGEND

- A Sign Type A: Primary Monument Sign
- B Sign Type B: Secondary Monument Sign
- C Sign Type C: Tertiary Monument Sign
- D Sign Type D: Illuminated Bollard
- E Sign Type E: Directional Marker
- F Sign Type F: Directory Kiosk
- G Sign Type G: Interpretive Sign
- G.1 Sign Type G.1: Small Interpretive
- H Sign Type H: Pedestrian Pole Mounted Wayfinding Sign
- J Sign Type J: Vehicular Pole Mounted Wayfinding Sign
- L Sign Type L: District Seal
- M Sign Type M: Pole Mounted Banners

GENERAL NOTES

SIGN TYPES PROPOSED FOR PHASE 2 ARE SHOWN AT A REDUCED OPACITY FOR VISUAL DISTINCTION BETWEEN THE TWO PHASES.

SYMBOL KEY

- 129 } Location Number
- A } Sign Type

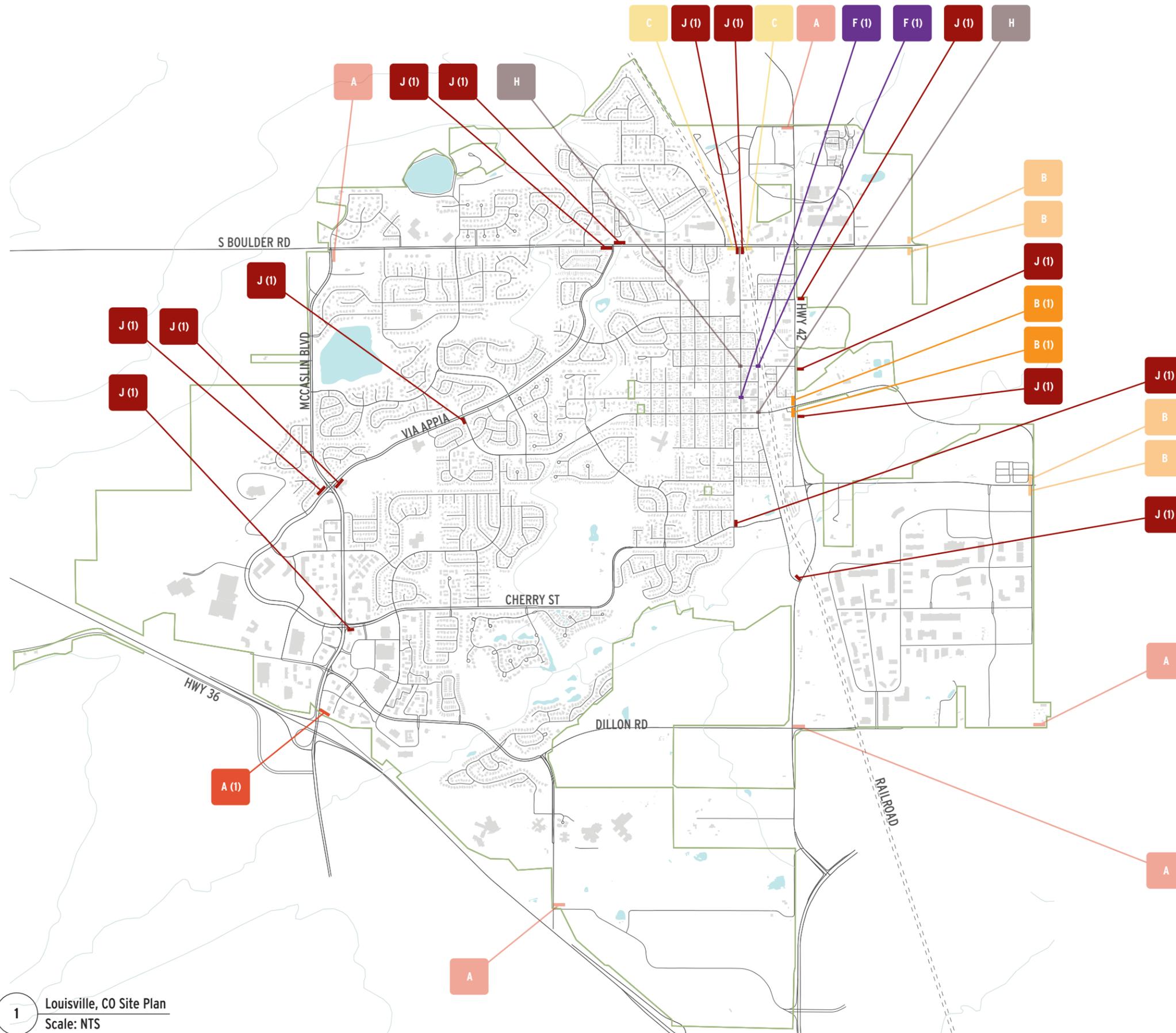
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1 Louisville, CO Site Plan
Scale: NTS

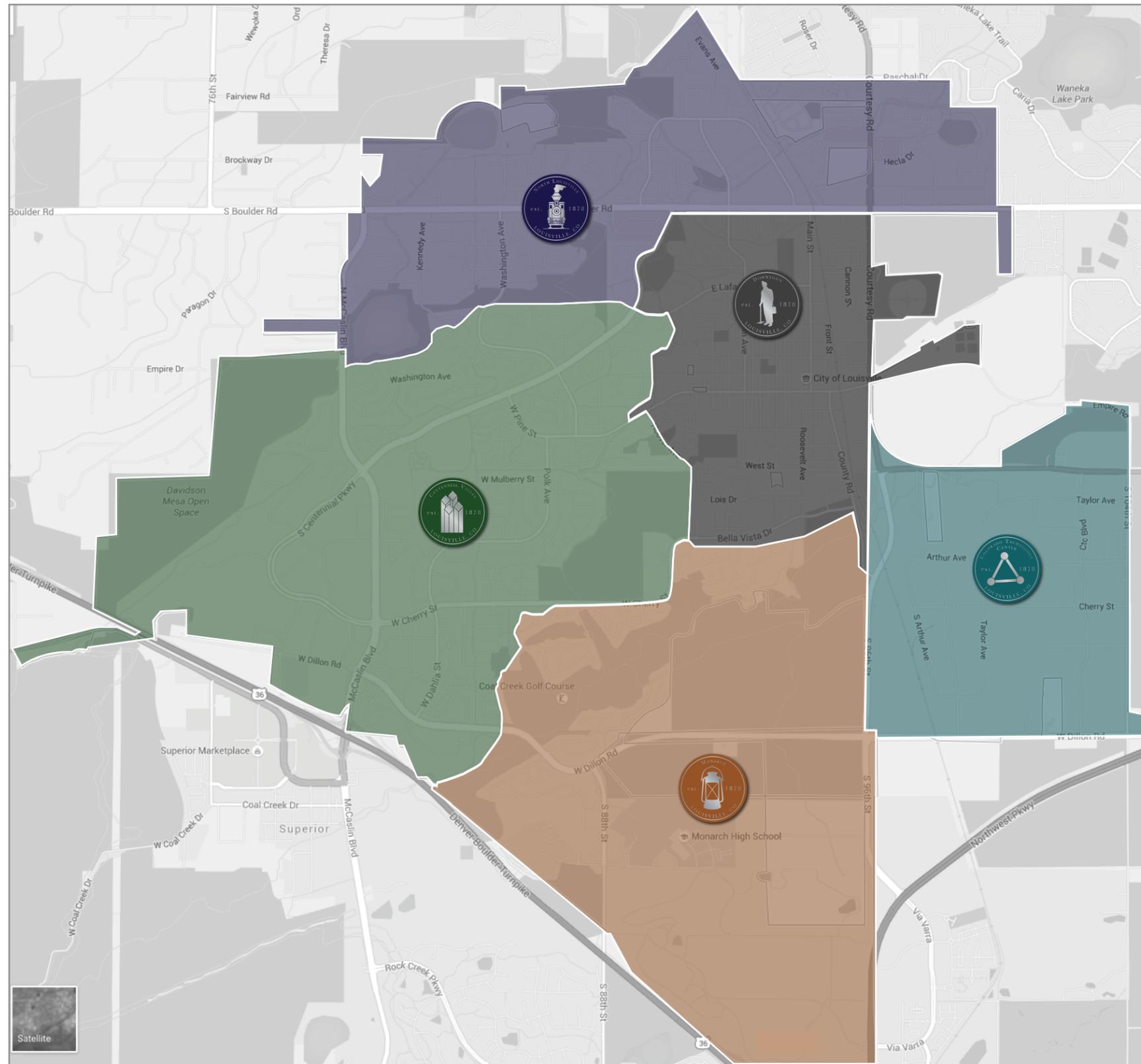
All locations shown are approximate. The Fabricator is responsible for field verification and coordination of all final locations. The Fabricator shall notify the Owner and ArtHouse Design of any discrepancies between ArtHouse Design's drawings, location plans, or message schedule and field conditions prior to installation.

LOCATION PLAN

CITY OF LOUISVILLE, CO

SIGN TYPE LEGEND

-  North Louisville District
-  Downtown District
-  Centennial Valley District
-  Colorado Technology Center District
-  Monarch District



SYMBOL KEY

-  Location Number
-  Sign Type

Package Issue Date
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Sheet Revision Date

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1 Louisville, CO District Plan
Scale: NTS

All locations shown are approximate. The Fabricator is responsible for field verification and coordination of all final locations. The Fabricator shall notify the Owner and Arthouse Design of any discrepancies between Arthouse Design's drawings, location plans, or message schedule and field conditions prior to installation.

SIGNAGE & WAYFINDING FAMILY



SIGNAGE & WAYFINDING

CITY OF LOUISVILLE, CO

INSET PHOTOS



2 Sign Type A: Primary Monument Sign - Isometric View
Scale: NTS



1 Sign Type A: Primary Monument Sign
Scale: 1/2" = 1' - 0"

Package Issue Date	Sheet Revision Date
04.28.15	06.09.15 11.25.15



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SIGNAGE & WAYFINDING

CITY OF LOUISVILLE, CO

INSET PHOTOS



1 Sign Type B: Secondary Monument Sign
Scale: 1/2" = 1' - 0"

2 Sign Type B: Secondary Monument Sign - Alt.
Scale: 1/2" = 1' - 0"

Package Issue Date	Sheet Revision Date
04.28.15	06.09.15 11.25.15



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SIGNAGE & WAYFINDING

CITY OF LOUISVILLE, CO

INSET PHOTOS



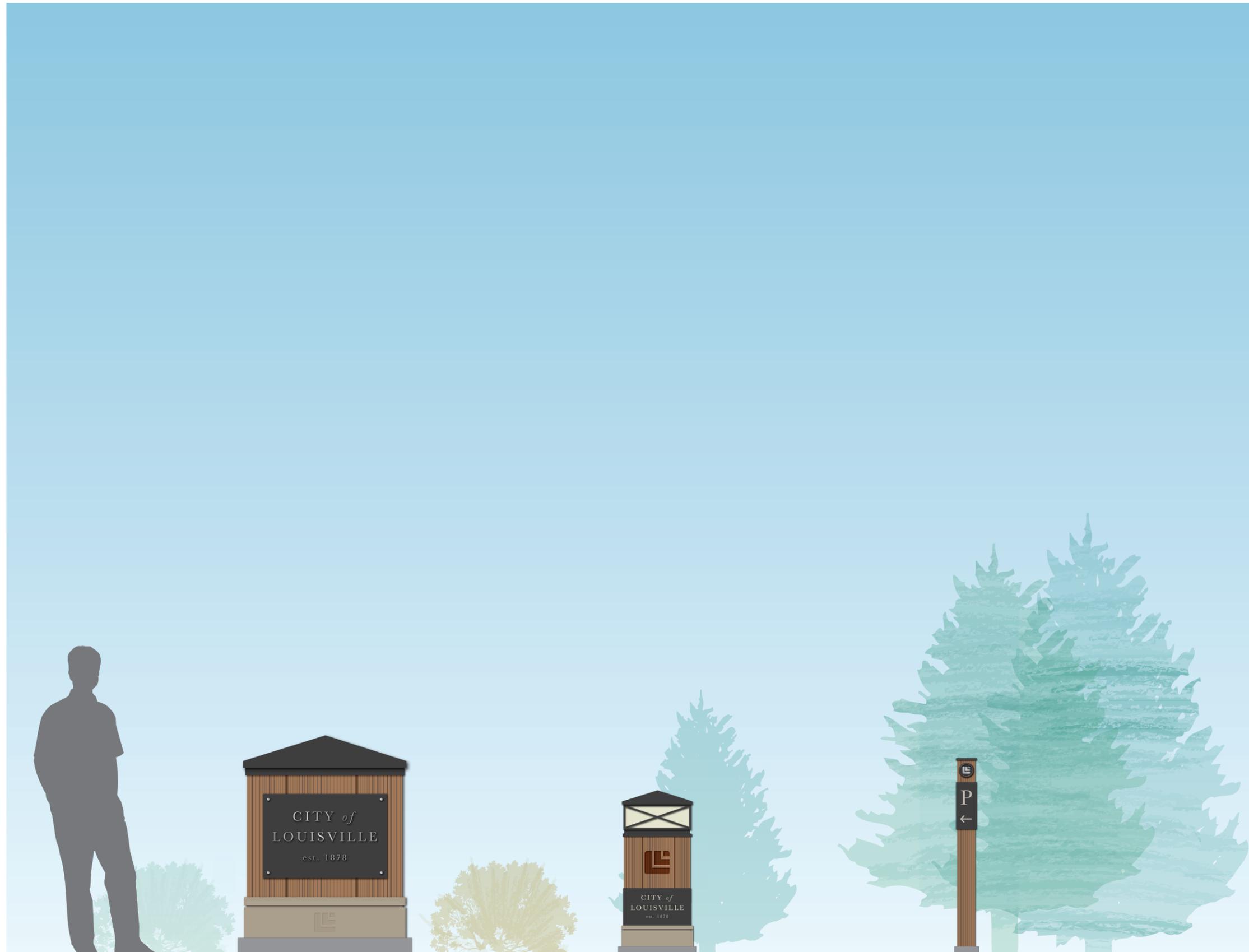
Package Issue Date
04.28.15

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1 Sign Type C: Tertiary Monument Sign
Scale: 1/2" = 1' - 0"

2 Sign Type D: Illuminated Bollard
Scale: 1/2" = 1' - 0"

3 Sign Type E: Directional Marker
Scale: 1/2" = 1' - 0"

SIGNAGE & WAYFINDING

CITY OF LOUISVILLE, CO

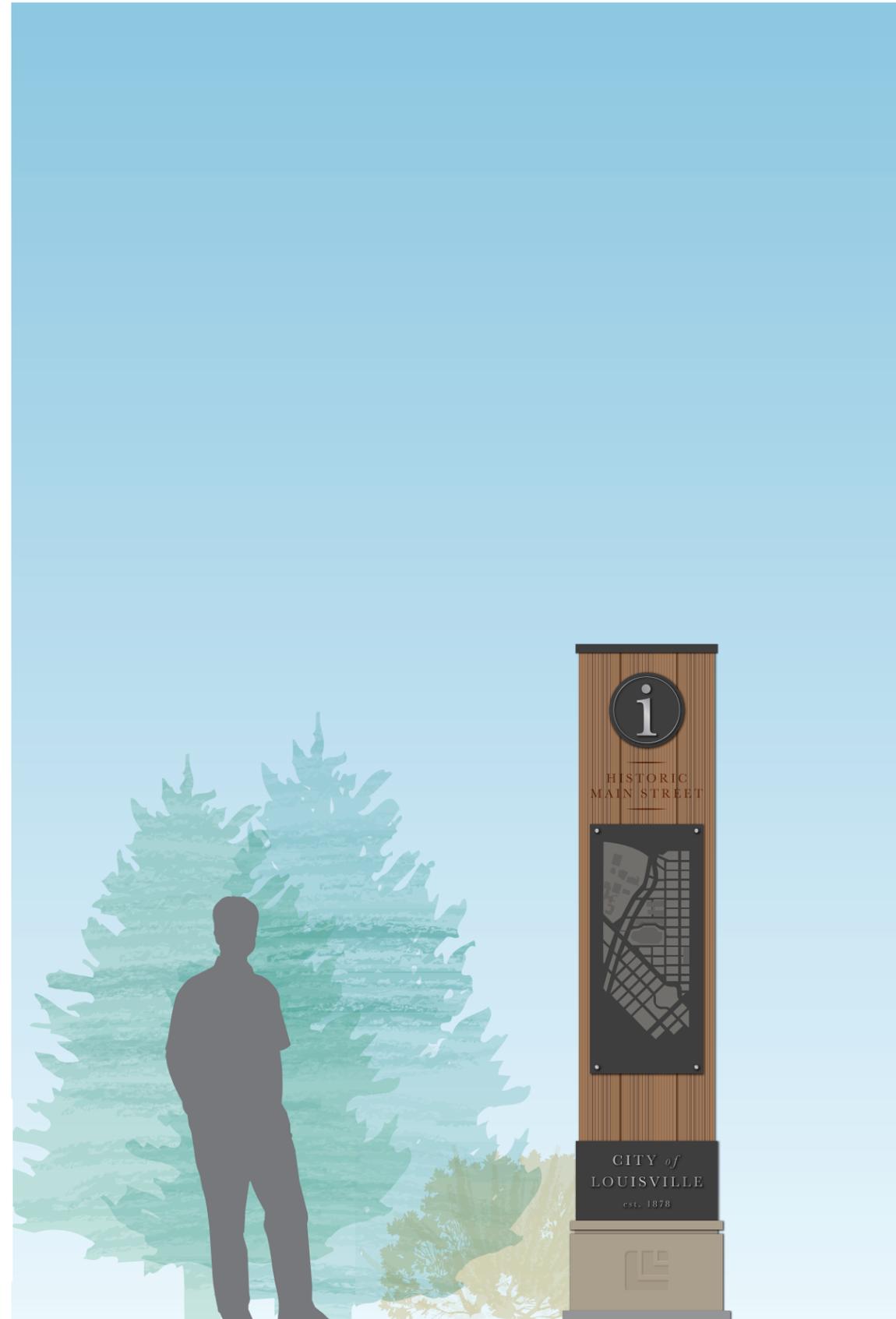
INSET PHOTOS



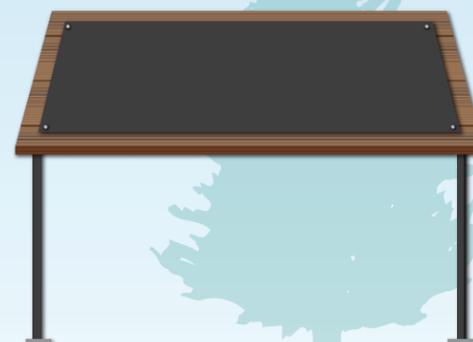
4 Sign Type F: Directory Kiosk - Isometric View
Scale: NTS



5 Sign Type G: Interpretive Sign - Isometric View
Scale: NTS



1 Sign Type F: Directory Kiosk
Scale: 1/2" = 1' - 0"



2 Sign Type G: Interpretive Sign
Scale: 1/2" = 1' - 0"



3 Sign Type G: Interpretive Sign - Side View
Scale: 1/2" = 1' - 0"

Package Issue Date	Sheet Revision Date
04.28.15	06.09.15
	11.25.15



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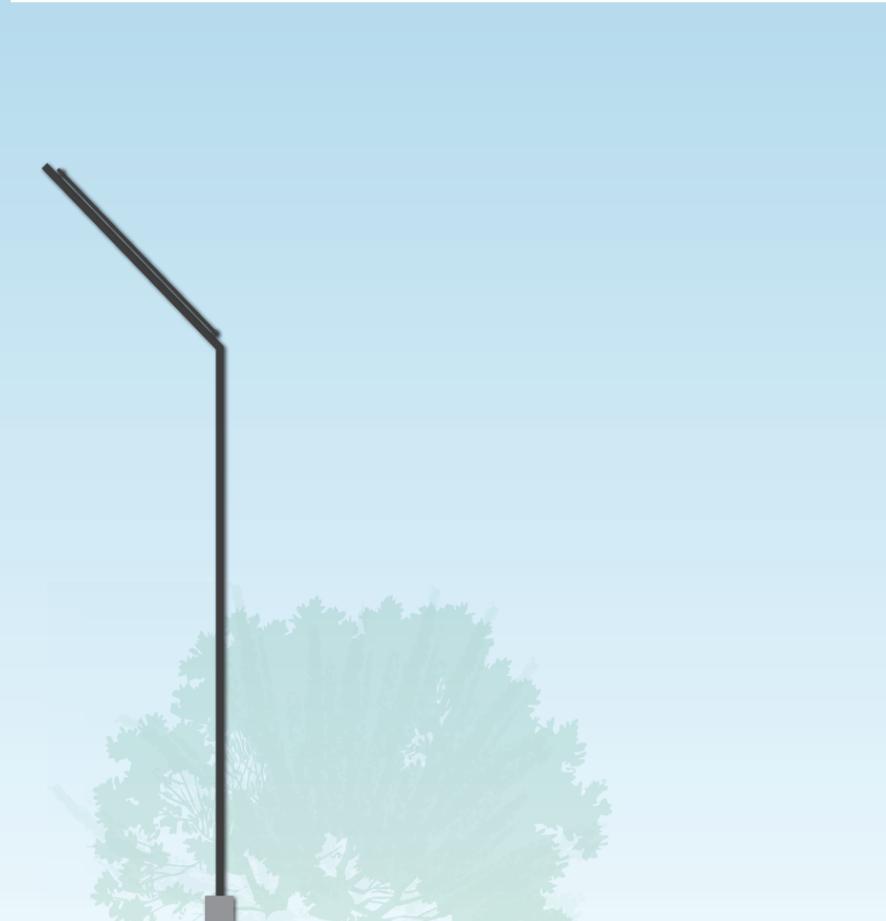
INSET PHOTOS



1 Sign Type G.1: Small Interpretive Sign
Scale: 1" = 1' - 0"



3 Sign Type G.1: Small Interpretive Sign - Isometric View
Scale: NTS



2 Sign Type G.1: Small Interpretive Sign - Side View
Scale: 1" = 1' - 0"

Package Issue Date	Sheet Revision Date
04.28.15	06.09.15 11.25.15



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SIGNAGE & WAYFINDING

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INSET PHOTOS



4 Sign Type L: District Seal - Detail
Scale: NTS

Package Issue Date
04.28.15

Sheet Revision Date
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1 Sign Type H: Pedestrian Pole Mounted Directional
Scale: 1/2" = 1' - 0"

2 Sign Type J: Vehicular Pole Mounted Directional
Scale: 1/2" = 1' - 0"

3 Sign Type M: Pole Mounted Banners
Scale: 1/2" = 1' - 0"

DISTRICT SEALS

CITY OF LOUISVILLE, CO



1 Sign Type L: Distric Seal - North Louisville
Scale: NTS



2 Sign Type L: Distric Seal - Centennial Valley
Scale: NTS



3 Sign Type L: Distric Seal - Monarch
Scale: NTS



4 Sign Type L: Distric Seal - Downtown
Scale: NTS



5 Sign Type L: Distric Seal - Colorado Tech Center
Scale: NTS

Package Issue Date	Sheet Revision Date
04.28.15	06.09.15 11.25.15



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SIGNAGE & WAYFINDING

CITY OF LOUISVILLE, CO

INSET PHOTOS



1 Select Signage In Context
Scale: NTS

Package Issue Date	Sheet Revision Date
04.28.15	06.09.15 11.25.15

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CITY OF LOUISVILLE
EST. 1878

STARS BULLY
PET CATERING
THE ANIMAL PET SALON
CITY OF LOUISVILLE

SPEED LIMIT
25

CITY OF LOUISVILLE
EST. 1878



CITY of
LOUISVILLE
EST. 1878

CITY of
LOUISVILLE
EST. 1878



CITY of LOUISVILLE
est. 1878

CENTENARY GATEWAY

Hampton Inn

COURTYARD

BEGIN
RIGHT TURN LANE
YIELD TO BIKES

RIGHT LANE
MUST
TURN RIGHT



BEGIN
RIGHT TURN LANE
YIELD TO BIKES

RIGHT LANE
MUST
TURN RIGHT

SENTINEL
GATEWAY
FRANCIS
CANTON


CITY *of* LOUISVILLE
est. 1878

Memorandum

To: Rob Zuccaro, Planning & Building Safety Department Director
From: Allan Gill, RLA, and Park's Project Manager
Date: December 2, 2016
Re: Clementine Subdivision Redevelopment, Preliminary PUD

The Parks & Recreation Department has reviewed the Clementine Subdivision Redevelopment; Preliminary PUD dated September 1, 2016 and has the following comments:

Summary:

The applicant is proposing to provide enhanced landscaping and a trail (from Lock Street to the northern edge of the clementine Development) as a public benefit in addition to maintenance on an undeveloped City owned parcel of land adjacent to the east side of the development located at 301-333 East Street. In return the applicants are asking to use a portion of the area for stormwater detention. As some stormwater detention basins tend to be very noticeable as a fairly deep hole the proposed detention area would be about a twelve to eighteen inches in depth.

The triangular shaped parcel is approximately 1.4 acres +/- in size and is identified as "Parks" in the Parks, Recreation, Open Space and Trails (PROST) master plan. Typically public land cannot be used for permanent, private purposes. In this instance the applicants are proposing what they believe is a win / win situation.

Currently the City owned parcel of land is undeveloped and does not have high Recreation or Parks value as the parcel is too small to be developed and maintained for active Park or Recreation purposes and the triangular shape further limits what the parcel can be used for.

Pros:

1. A constructive use of a 'remnant parcel' of land.
2. Enhanced landscaping would serve as a more aesthetically pleasing gateway to the City.
3. Construction of the trail to Lock Street where an existing two track can be accessed to connect to the Coal Creek Trail which provides safe pedestrian access to Community Park without crossing the railroad tracks.
4. Detention could be sized to accommodate runoff not only from the Clementine Subdivision but for the areas to the north as well as paving the way for redevelopment in those areas.

Cons:

1. Use of the parcel for detention provides limited benefit to the general public.
2. Private use of public land is typically not allowed.
3. The City has encountered problems in the past when dealing with HOA's that become unresponsive or defunct over time resulting in substandard maintenance or the City, by default assuming maintenance responsibility.
4. City maintenance standards may be difficult to enforce.

Park and Recreation Department staff supports **conditional** use of the City owned parcel of land as proposed and subject to the applicant addressing the following:

1. The parcel of land requires an appraisal at the applicant's expense to determine market value. Improvements and benefit provided by the applicants to the City would need to meet or exceed market value.
2. The applicants or their designee will be responsible for maintenance of the City owned parcel of land and trail which meets City standards in perpetuity including any and all improvements.
3. The trail connection to the Coal Creek trail as shown on sheet A1.0 (existing two-track road south of Lock Street) would need to be constructed as part of the project and at applicant's expense.
4. Parks department staff initially recommended improving the existing pedestrian walk on the west side of East Street extending from the site north to Pine Street as the walk in some places is only three feet wide. Construction of the improved wider walk was to be at the applicant's expense. Public Works; however, does not support this recommendation and proposes that improvements to the entire walk on the west side of East Street be included in a street improvement project and not tied to the subdivision.
5. If the applicant cannot or will not agree to these conditions, staff recommends that the applicant address detention requirements without the use of publically owned land or explore purchasing the parcel from the City.

Staff recommendations are subject to review and comment by the Open Space Advisory Board (OSAB) and the Parks and Public Landscape Advisory board (Parks Board).

OSAB concurs with staff recommendations on comment #1 Yes No
OSAB Comments:

OSAB concurs with staff recommendations on comment #2 Yes No
OSAB Comments:

OSAB concurs with staff recommendations on comment #3 Yes No
OSAB Comments:

OSAB concurs with Public Works recommendations on comment #4 Yes No
OSAB Comments:

OSAB concurs with staff recommendations on comment #5 Yes No
OSAB Comments:

OSAB recommends the following with regard to the Clementine Subdivision Preliminary PUD and Plat.

CLEMENTINE SUBDIVISION REDEVELOPMENT LOUISVILLE, CO 80027

**PRELIMINARY PUD SUBMITTAL
SEPTEMBER 1, 2016**



**HARTRONFT
ASSOCIATES**
A Professional Corporation

*Planning
Architecture
Interior Design*

950 Spruce Street, #2A
Louisville, CO 80027
TEL: 303.673.9304
FAX: 303.673.9319

**CLEMENTINE SUBDIVISION
REDEVELOPMENT
LOUISVILLE, CO 80027**

PRELIMINARY
PUD

**PROJECT # 1553
DATE: 4/16
DRAWN BY: HAPC
CHECKED BY: JEH
REVISIONS:**

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**COVER SHEET
PROJECT DATA
SIG BLOCKS**

Sheet
A0.1
of Sheets

PROJECT DATA			
PROJECT LOCATION:	301-333 EAST ST.		
LEGAL DESCRIPTION:	LOTS 1A, 1B, AND 1C CLEMENTINE SUBDIVISION FILING 2, AND LOT 2 CLEMENTINE SUBDIVISION LOCATED IN SE 1/4, SE 1/4 SECTION, T1S, R69W OF THE 6TH P.M. CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO		
PROJECT DESCRIPTION:	THIS PROPOSED PRELIMINARY PUD INCLUDES REDEVELOPMENT OF APPROXIMATELY 3.7 ACRES. NEW CONSTRUCTION INCLUDES (44) TOWNHOMES ALONG WITH COMMON AREAS.		
ZONING:	RM	(RESIDENTIAL MEDIUM DENSITY WHICH PRIMARILY PERMITS TOWNHOUSE DENSITIES)	
PROPOSED USE:	MULTI-UNIT DWELLINGS		
OVERLAYS?	NO		
TOTAL LAND AREA	# OF D.U.'s	DENSITY	
3.7 ACRES (160,705 SF)	44*	11.9 D.U./ACRE	
TOTAL BLD'G COVERAGE OF SUBDIVISION:	56,250 SF = 35% OF TOTAL LAND AREA		
TOTAL OPEN SPACE OF SUBDIVISION:	64,011 SF = 40% OF TOTAL LAND AREA		
*NOTE: @3,500SF MIN PER D.U. PER 17.12.040 FOR RM DISTRICTS, 46 UNITS WOULD BE ALLOWED			
PUD YARD & BULK REQUIREMENTS			
	Clementine North	Clementine Perimeter	Clementine Central District
Building Type:	A	B	C
Min. Lot Area	3,140 SF	1,775 SF	1,440 SF
Min. Lot Width	32'	24'	24'
Max. Lot Coverage	65% ²	70% ²	85% ²
Max. Footprint	1,875 SF	1,625 SF	1,200 SF
Maximum Height	35'	35'	35'
Building Setbacks			
Front Yard			
To Private Drive	15' to porch		
To Common Open Space			
To Public ROW	10'		
Rear Yard			
To Private Drive	15'		
To Common Open Space			
To Public ROW	20'		
Side Yard			
Between Units	0' ¹		
Abutting Public ROW	7'		
Abutting Private Drive	5'		
Abutting Commons	5'		
Parking Requirements			
Parking Required per D.U.	2	2	2
Parking Provided per D.U.	2	2	2
<small>Note: Using Louisville Mixed Use Standards for guest parking, 1 space per 8 dwelling units to be provided.</small>			
Guest Parking Required:			
(site-wide)	44 D.U. / 8 = 6		
Guest Parking Provided:			
(site-wide)	16*		
<small>* This does not include two spaces per D.U. provided in the driveways of the D.U.'s of Buildings A1 & A2</small>			
NOTES			
1. IF FEE SIMPLE LOTS ARE CREATED WITHIN BLDG'S, THERE IS NO SETBACK REQUIREMENT BETWEEN INTERNAL UNITS.			
2. ON SITE OPEN SPACE IS AGGREGATED IN COMMON AREAS & OVERALL BUILDING COVERAGE FOR THIS SUBDIVISION SHALL NOT BE GREATER THAN 35%			

PROJECT DIRECTORY	
OWNER	LOUISVILLE GATEWAY, LLC PO Box 270067 Louisville, CO 80027 Mike Eisenstein (310) 488-0737 Mike Jones (303) 995-3900
ARCHITECT/PLANNER	Harttront Associates, p.c. 950 Spruce Street, #2A, Louisville, CO 80027 (303) 673-9304 / Fax (303) 673-9319 Contact: J. Erik Harttront, AIA Email: erik@hapcdesign.com
CIVIL ENGINEER	Scott Cox & Associates, Inc. 1530 55th Street, Boulder, CO 80303 (303) 444-3051 / Fax (303) 444-3387 Contact: Don Ash Email: ash@scottcox.com

SHEET INDEX	
SHEET	DESCRIPTION
A0.1	Cover Sheet, Signature Blocks, Project Data
1	ALTA Survey
CIVIL	
C1.01	PRELIMINARY GRADING, DRAINAGE, & EROSION CONTROL PLAN
C1.02	PRELIMINARY UTILITY PLAN
C1.03	PRELIMINARY TRUCK TURNING ANALYSIS
ARCHITECTURAL	
A1.1	CONTEXTUAL SITE PLAN
A1.2	PUD PLAN & LANDSCAPE PLAN

SIGNATURE BLOCKS		
<p>OWNERSHIP SIGNATURE BLOCK</p> <p>By signing this PUD, the owner acknowledges and accepts all the requirements and intent set forth in this PUD. Witness my/our hand(s) seal(s) this ___ day of _____, 20__.</p> <p>Owner Name and Signature _____</p> <p>Notary Name (print) _____ (Notary Seal)</p> <p>Notary Signature _____</p> <p>My Commission Expires _____</p>	<p>CLERK AND RECORDER CERTIFICATE (COUNTY OF BOULDER, STATE OF COLORADO)</p> <p>I hereby certify that this instrument was filed in my office at _____ o'clock, ____ M., this ___ day of _____, 20__, and is recorded in Plan File _____, Fee _____ paid, _____ Film No. _____ Reception.</p> <p>Clerk & Recorder _____</p> <p>Deputy _____</p>	<p>PLANNING COMMISSION CERTIFICATE</p> <p>Approved this ___ day of _____, 20__ by the Planning Commission of the City of Louisville, Colorado.</p> <p>Resolution No. _____, Series _____</p> <p>CITY COUNCIL CERTIFICATE</p> <p>Approved this ___ day of _____, 20__ by the City Council of the City of Louisville, Colorado.</p> <p>Resolution No. _____, Series _____</p> <p>Mayor Signature _____ (City Seal)</p> <p>City Clerk Signature _____</p>



LEGEND

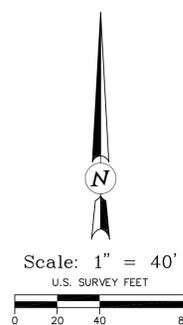
- 5.330 --- EXISTING CONTOUR
- SET #5 REBAR WITH 1" RED PLASTIC CAP STAMPED SCOTT COX ASC PLS 24302 (P&C) (UNLESS NOTED)
- FOUND MONUMENT AS NOTED
- ⊙ EXISTING BOLLARD
- ⊙ EXISTING ELECTRIC METER
- ⊙ EXISTING WATER VALVE
- ⊙ EXISTING GAS METER
- △ CONTROL POINT
- ⊙ EXISTING POWER POLE
- ⊙ EXISTING SIGN
- ⊙ EXISTING FIRE HYDRANT
- X --- X --- EXISTING FENCE
- Po --- Po --- EXISTING OVERHEAD POWER LINE
- SS --- SS --- EXISTING SANITARY SEWER W/MANHOLE
- W --- W --- EXISTING WATER W/FIRE HYDRANT
- ST --- ST --- EXISTING STORM SEWER W/MANHOLE
- (R) RECORD COURSE
- (M) MEASURED COURSE PER THIS SURVEY

LEGAL DESCRIPTION

ALL OF CLEMENTINE SUBDIVISION FILING 2 AND LOT 2 CLEMENTINE SUBDIVISION, CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO.

SURVEY NOTES

1. THE BASIS OF BEARINGS IS THE EAST LINE OF THE SE 1/4 OF SECTION 8 BETWEEN THE FOUND MONUMENTS SHOWN HEREON AND BEARS N01°31'11"E.
2. BENCH MARK: CITY OF LOUISVILLE LP2: ELEV.=5323.16' NAVD88. CONTOURS SHOWN ARE FROM A GROUND SURVEY.
3. THE SIZE AND TYPE OF MONUMENTS FOUND ARE SHOWN HEREON.
4. BUILDING MEASUREMENTS ARE AT GROUND LEVEL. ROOF OVERHANGS AND ARCHITECTURAL PROJECTIONS OF THE BUILDINGS ARE WITHIN THE BOUNDARY OF THE SITE BUT ARE NOT SHOWN ON THIS SURVEY UNLESS NOTED.
5. NOTICE: ACCORDING TO COLORADO LAW, YOU MUST COMMENCE ANY LEGAL ACTION BASED ON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVERED SUCH DEFECT. IN NO EVENT, MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON. CRS-13-80-105 (3)(c)
6. ALL OF THE PROPERTY LIE WITHIN ZONE X. REFERENCE FIRM MAP NUMBER 0801300582U, MAP REVISED DECEMBER 18, 2012.
7. THE LOCATION OF THE ABOVE GROUND UTILITIES SHOWN HEREON ARE BASED ON THE FIELD SURVEY BY SCOTT, COX & ASSOCIATES, INC. THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON SAID SURVEY AND INFORMATION PROVIDED BY UNCC, CITY OF LOUISVILLE, XCEL AND QWEST MAPPING. SCOTT, COX & ASSOCIATES, INC. IS NOT RESPONSIBLE FOR UTILITY INFORMATION PROVIDED BY OTHERS. SCOTT, COX & ASSOCIATES, INC. RECOMMENDS THAT THE LOCATION OF THE UTILITIES BE FIELD VERIFIED PRIOR TO ANY DIGGING ON, OR ADJACENT TO THE SUBJECT PROPERTY.
8. PLATS AND LAND SURVEY PLATS DEPOSITED AT BOULDER LAND USE DEPARTMENT, REFERENCED OR USED FOR THIS SURVEY: CLEMENTINE SUBDIVISION, RECEPTION NO. 878733; CLEMENTINE SUBDIVISION FILING NO. 2, RECEPTION NO. 2872178; SCOTT, COX & ASSOCIATES INC. LAND SURVEY PLAT, LS-95-0214.
9. ALL ADJOINING STREETS ARE PUBLIC.
10. NO OBSERVED EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS. NO OBSERVED EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS. NO OBSERVED EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL. NO OBSERVED EVIDENCE OF WETLAND AREAS AS DELINEATED BY APPROPRIATE AUTHORITIES. NO RECORD OF OFFSITE EASEMENTS OR SERVITUDES BENEFITING THE SURVEYED PROPERTY.



**ALTA/ACSM LAND TITLE SURVEY
ALL OF CLEMENTINE SUBDIVISION
FILING 2 AND
LOT 2, CLEMENTINE SUBDIVISION
LOCATED IN THE SE 1/4, SE 1/4 OF
SECTION 8
T1S, R69W OF THE 6TH P.M.
CITY OF LOUISVILLE
COUNTY OF BOULDER
STATE OF COLORADO**

CERTIFICATION

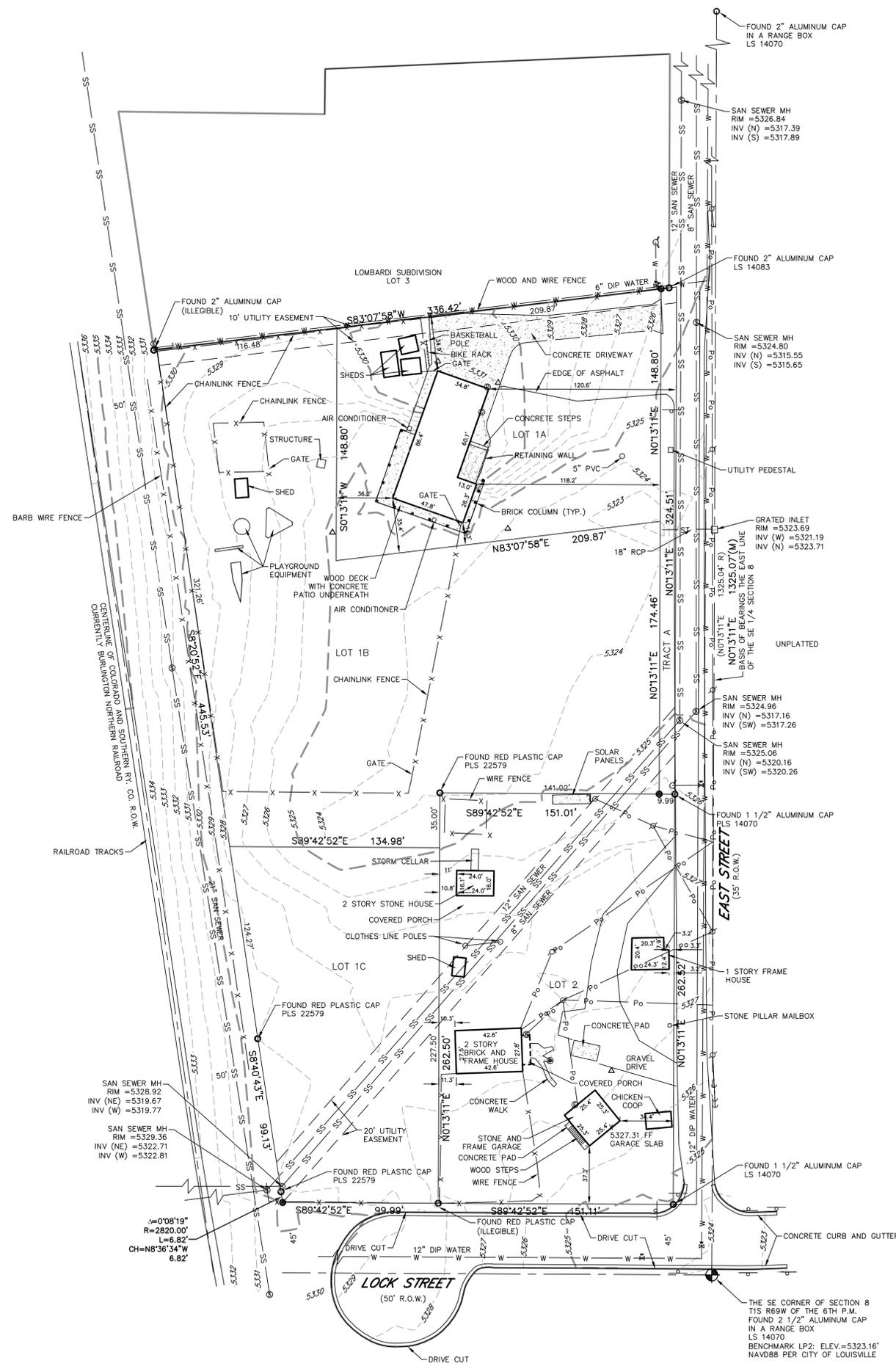
TO: MICHAEL D. JONES; MICHAEL F. AND CHRISTINA R. EISENSTEIN; LOUISVILLE GATEWAY, LLC.

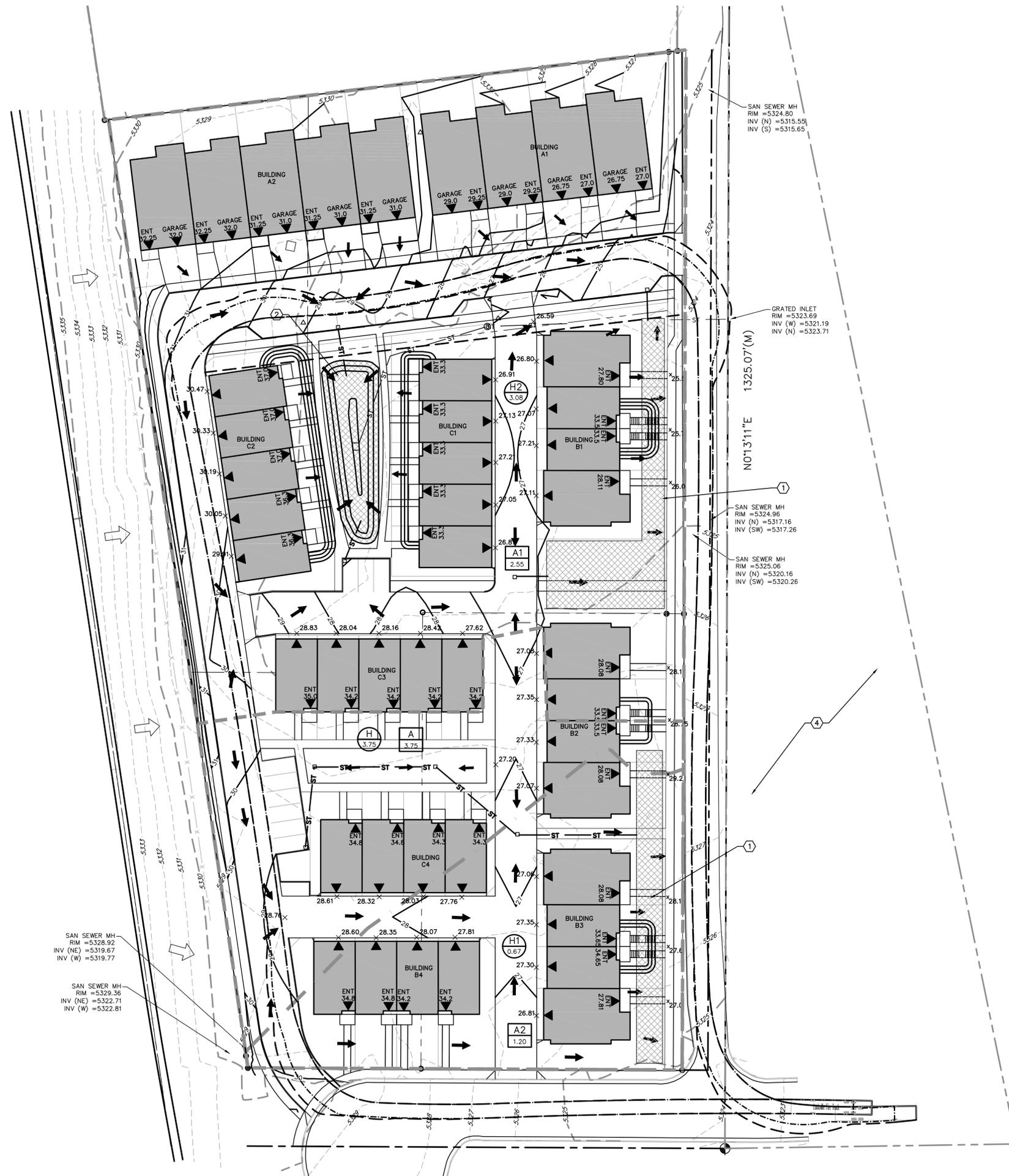
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1-5, 6a, 8, 11a, 11b AND 13 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON OCTOBER 6, 2015.

A. JOHN BURI, PLS 24302
FOR AND ON BEHALF OF
SCOTT, COX & ASSOCIATES, INC.

SCOTT, COX & ASSOCIATES, INC.
consulting engineers • surveyors
1530 55th Street • Boulder, Colorado 80303
(303) 444 - 3051

Designed by	AJB	Date	09/01/16	Scale	1"=40'	Drawing no.	15537A-1	Sheet	1
Drawn by	JAS	Revision		Description		Date		Project no.	15537A
Checked by	AJB								





LEGEND

- EXISTING DECIDUOUS TREE
- EXISTING PINE TREE
- EXISTING CONTOUR
- PROPOSED CONTOUR
ADD 5300 TO ALL CONTOURS
- POINT WHERE PROPOSED GRADE MEETS EXISTING GRADE
- PROPOSED SPOT ELEVATION
ADD 5200 TO ALL SPOT ELEVATIONS
- EXISTING SPOT ELEVATION
- HISTORIC SHEET FLOW
- PROPOSED FLOW DIRECTION
- DRAINAGE BASIN BOUNDARY (HISTORIC)
- PROPOSED BASIN BOUNDARY
- SUB-BASIN DESIGNATION (HISTORIC)
- AREA IN ACRES
- PROPOSED SUB-BASIN DESIGNATION
- AREA IN ACRES
- PROPOSED DETENTION
- PROPOSED STORM SEWER W/MANHOLE

KEYED NOTES ①

1. PROPOSED UNDERGROUND DETENTION.
2. PROPOSED ABOVE GROUND DETENTION.
3. PROPOSED STORM SEWER.
4. EXPLORE OPTION FOR OFF-SITE DETENTION AT CITY OWNED PROPERTY EAST OF EAST STREET. SUBJECT TO NEGOTIATIONS WITH THE CITY OF LOUISVILLE.

GRADING NOTES

1. GRADE AWAY FROM BUILDINGS AT A MINIMUM 10% SLOPE IN THE FIRST 10 FEET AT LANDSCAPE AREAS AND AT A MINIMUM 2% SLOPE IN THE FIRST 10 FEET AT IMPERVIOUS AREAS, EXCEPT AS NOTED.
2. TOP OF FOUNDATION ELEVATION SHALL BE SET AT LEAST 8" ABOVE THE PROPOSED GRADING AT THE EXTERIOR OF THE FOUNDATION AT LANDSCAPE AREAS.
3. ALL OF THE PROPERTY LIE WITHIN ZONE X. REFERENCE FIRM MAP NUMBER 08013C0582J, MAP REVISED DECEMBER 18, 2012.
4. ALL CITY UTILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF BOULDER STANDARD SPECIFICATIONS.
5. THE LOCATION OF THE ABOVE GROUND UTILITIES SHOWN HEREON ARE BASED ON THE TOPOGRAPHIC SURVEY BY SCOTT, COX AND ASSOCIATES ON 10/6/15. THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON SAID SURVEY AND INFORMATION PROVIDED BY OTHERS (WHICH MAY INCLUDE THE UTILITY OWNER OR UTILITY LOCATING SERVICES). SCOTT, COX & ASSOCIATES, INC. IS NOT RESPONSIBLE FOR UTILITY INFORMATION PROVIDED BY OTHERS. SCOTT, COX & ASSOCIATES, INC. RECOMMENDS THAT THE LOCATION OF THE UTILITIES BE FIELD VERIFIED PRIOR TO ANY DIGGING ON, OR ADJACENT TO THE SUBJECT PROPERTY.
6. BENCH MARK: CITY OF LOUISVILLE LP2: ELEV.=5323.16' NAVD88. CONTOURS SHOWN ARE FROM A GROUND SURVEY.
7. IF REQUIRED, ALL APPLICABLE CITY AND/OR STATE PERMITS PERTAINING TO THE DISCHARGE OF GROUNDWATER MUST BE OBTAINED PRIOR TO PREPARATION OF BUILDING PERMIT PLANS.



Scale: 1" = 30'

SCOTT, COX & ASSOCIATES, INC.
 consulting engineers • SURVEYORS
 1530 15th Street • Boulder, Colorado 80302
 (303) 444-3001
 JOB NO. 15537B DRAWING NO. 15537B-1
 9/1/16

**CLEMENTINE SUBDIVISION
 REDEVELOPMENT**
 LOUISVILLE, CO 80027

PRELIMINARY
 PLAN

PROJECT # 15537B
 DATE 9/1/16
 DRAWN BY: MRF
 CHECKED BY: DPA
 REVISIONS:

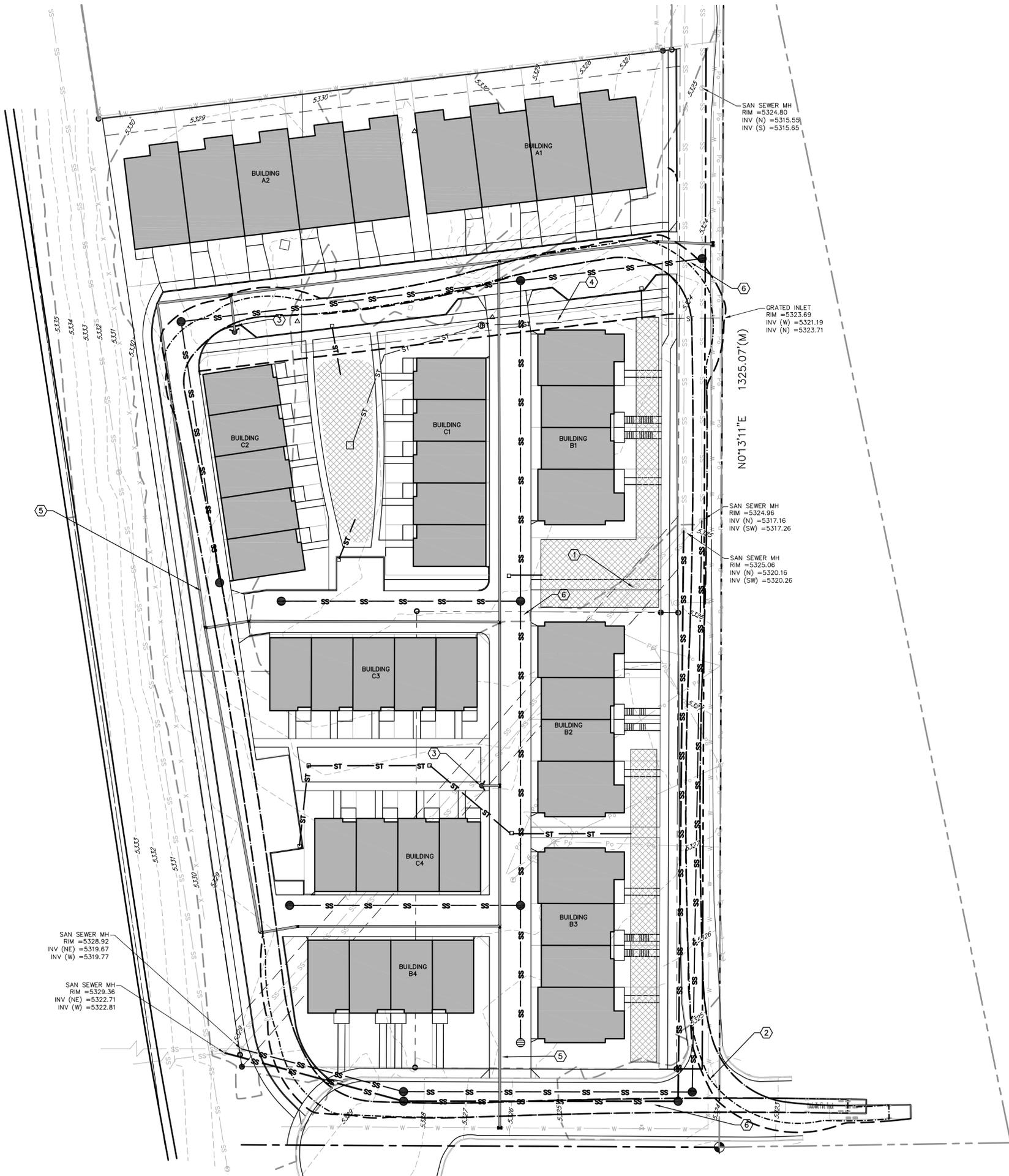
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PRELIMINARY
 GRADING,
 DRAINAGE, AND
 EROSION
 CONTROL PLAN

Sheet

C1.01

1 of 3 Sheets



LEGEND

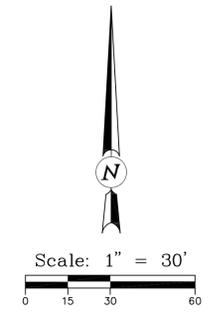
- ⊗ EXISTING WATER VALVE
- GM EXISTING GAS METER
- ☆ EXISTING LIGHT POLE
- ⊕ EXISTING FIRE HYDRANT
- EXISTING SPRINKLER VALVE BOX
- X — X — X — X — EXISTING FENCE
- SS — ○ — SS EXISTING SANITARY SEWER W/MANHOLE
- W — W — EXISTING WATER W/FIRE HYDRANT
- ST — ST — EXISTING STORM SEWER W/MANHOLE
- - - 5225 - - - EXISTING CONTOUR
- χ 25.8 EXISTING SPOT ELEVATION
- SS — ○ — SS PROPOSED SANITARY SEWER W/MANHOLE
- ST — ○ — ST PROPOSED STORM SEWER W/MANHOLE
- ⊕ PROPOSED WATER VALVE
- WM PROPOSED WATER METER

KEYED NOTES

1. EXISTING SANITARY SEWER MAIN TO BE RELOCATED.
2. EXISTING WATER MAIN TO REMAIN.
3. PROPOSED FIRE HYDRANT AND LATERAL.
4. PROPOSED STORM SEWER.
5. PROPOSED WATER MAIN.
6. PROPOSED SANITARY SEWER MAIN.

UTILITY NOTES

1. ALL CITY UTILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LOUISVILLE STANDARD SPECIFICATIONS.
2. WATER, FIRELINE, SEWER TAPS, AND SERVICE LINE SIZES SHALL BE DETERMINED AT THE TIME OF BUILDING PERMIT APPLICATION.
3. ALL NEW WATER AND SANITARY SEWER SERVICE TAPS TO EXISTING MAINS SHALL BE MADE BY CITY CREWS AT THE DEVELOPER'S EXPENSE.
4. ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE DONE IN A WAY SO AS TO MINIMIZE DISRUPTION IN SERVICE TO EXISTING USERS.
5. THE LOCATION OF THE ABOVE GROUND UTILITIES SHOWN HEREON ARE BASED ON THE FIELD SURVEY BY SCOTT, COX & ASSOCIATES, INC. ON OCTOBER 6, 2015. THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON SAID SURVEY AND INFORMATION PROVIDED BY OTHERS (WHICH MAY INCLUDE THE UTILITY OWNER OR UTILITY LOCATING SERVICES). SCOTT, COX & ASSOCIATES, INC. IS NOT RESPONSIBLE FOR UTILITY INFORMATION PROVIDED BY OTHERS. SCOTT, COX & ASSOCIATES, INC. RECOMMENDS THAT THE LOCATION OF THE UTILITIES BE FIELD VERIFIED PRIOR TO ANY DIGGING ON, OR ADJACENT TO THE SUBJECT PROPERTY.
6. BENCH MARK: CITY OF LOUISVILLE LP2: ELEV=5323.16' NAVD88. CONTOURS SHOWN ARE FROM A GROUND SURVEY.
7. ALL UNITS SHALL BE INDIVIDUALLY SERVICED FROM THE PROPOSED UTILITY MAINS.



SCOTT, COX & ASSOCIATES, INC.
 consulting engineers • SURVEYORS
 1530 85th Street • Boulder, Colorado 80303
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 JOB NO. 15537B DRAWING NO. 15537B-1
 9/2/16

**CLEMENTINE SUBDIVISION
 REDEVELOPMENT
 LOUISVILLE, CO 80027**

PRELIMINARY
 PUD

PROJECT # 15537B
DATE 1/1/16
DRAWN BY: MRF
CHECKED BY: DPA
REVISIONS:

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**PRELIMINARY
UTILITY PLAN**

Sheet
C1.02
 2 of 3 Sheets



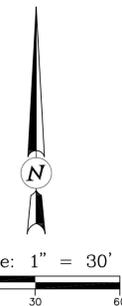
LEGEND



Louisville Fire Truck	
Overall Length	46.670ft
Overall Width	8.000ft
Overall Body Height	14.605ft
Min Body Ground Clearance	0.176ft
Track Width	8.000ft
Lock-to-lock time	5.00s
Max Steering Angle (Virtual)	45.00°

OUTLINE OF WHEEL TRACK

OUTLINE OF BODY TRACK



**CLEMENTINE SUBDIVISION
 REDEVELOPMENT
 LOUISVILLE, CO 80027**

PRELIMINARY
 PUD

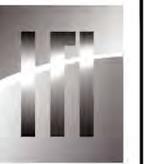
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PRELIMINARY
 TURNING
 ANALYSIS

Sheet
C1.03

3 of 3 Sheets



HARTRONFT ASSOCIATES
A Professional Corporation

Planning
Architecture
Interior Design

950 Spruce Street, #2A
Louisville, CO 80027
TEL: 303.673.9304
FAX: 303.673.9319

CLEMENTINE SUBDIVISION
REDEVELOPMENT
LOUISVILLE, CO 80027

PRELIMINARY
PUD

PROJECT # 1553
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CONTEXTUAL
PUD PLANS

Sheet
A1.0

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PROPOSED REDEVELOPMENT W/IMPROVEMENTS TO ADJACENT PROPERTY

CITY MAY INVESTIGATE
EXTENSION NORTH TO
PINE STREET

POTENTIAL MULTI-USE
TRAIL W/CONNECTION
TO EXIST'G WALK
@WEST SIDE OF EAST
STREET

DEVELOPER PROVIDED
ENHANCED LANDSCAPING
@PARCEL
• DROUGHT
TOLERANT, WATER
CONSERVATING
PLANT MATERIAL &
TREE GROUPINGS

CITY GATEWAY
OPPORTUNITY
• RETAINING WALL &
BERM FOR CITY'S
SIGNAGE OR FREE
STANDING SIGNS

TRAIL CONNECTION
• COAL CREEK TRAIL



PROPOSED REDEVELOPMENT SHOWN
W/FUTURE ROUNDABOUT

2013 42 GATEWAY
PLAN INDICATES
ATTACHED BIKE LANES
DETACHED MULTI-USE
TRAIL ON EAST SIDE
OF EAST ST. MAY BE
PREFERRED

ROUNDABOUT
PROPOSED PER 42
GATEWAY PLAN
ALONG WITH
"GATEWAY ELEMENTS"
SUCH AS LANDSCAPE
FEATURES, WAY-
FINDING, ETC.



PROPOSED REDEVELOPMENT SHOWN W/EXIST'G
CONDITIONS AT ADJACENT CITY PROPERTY



