COLORADO
Division of Reclamation, Mining and Safety
Department of Natural Resources

MINERALS PROGRAM INSPECTION REPORT
PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME: Pino Pit	**MINE/PROSPECTING ID#:** M-2000-118	**MINERAL:** Sand and gravel	**COUNTY:** Huerfano
INSPECTION TYPE: Surety-Related Inspection	**INSPECTOR(S):** Patrick Lennberg	**INSP. DATE:** October 12, 2021	**INSP. TIME:** 10:00
OPERATOR: APC Southern Construction Co., LLC	**OPERATOR REPRESENTATIVE:** None	**TYPE OF OPERATION:** 112c - Construction Regular Operation	

REASON FOR INSPECTION: Surety Related	**BOND CALCULATION TYPE:** Complete Bond	**BOND AMOUNT:** $167,800.00
DATE OF COMPLAINT: NA	**POST INSP. CONTACTS:** None	**JOINT INSP. AGENCY:** None
WEATHER: Clear	**INSPECTOR'S SIGNATURE:** Patrick LJ	**SIGNATURE DATE:** October 20, 2021

The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.

INSPECTION TOPIC: Hydrologic Balance

PROBLEM: The site is improperly impounding surface drainage/runoff.

CORRECTIVE ACTIONS: Submit documentation from the State Engineer's Office demonstrating that the impoundment of water in this pit is authorized by that office. Operator could also remove impediments to proper surface drainage or remove the areas of ponding water.
CORRECTIVE ACTION DUE DATE: 12/20/21

INSPECTION TOPIC: Gen. Compliance With Mine Plan

PROBLEM: Trash and refuse was noticed on the site. This is a problem at this time for failure to dispose of refuse in a manner that controls unsightliness or deleterious effects of such refuse pursuant to C.R.S. 34-32.5-116(4)(e).

CORRECTIVE ACTIONS: The operator shall submit a written notice to the Division with photo documentation, that the trash has been removed from the site, not buried, by the corrective action date.

CORRECTIVE ACTION DUE DATE: 12/20/21

INSPECTION TOPIC: Reclamation Success

PROBLEM: There are state-listed noxious weeds present on site, including Russian Olive Trees, Tamarisk trees, and Puncturevine. This is a problem for failure to employ weed control methods for state listed noxious weed species within the permitted area, and to reduce the spread of weeds to nearby areas as required by Section 3.1.10 (6) of the rule.

CORRECTIVE ACTIONS: Implement approved weed control plan and provide proof to the Division that this has been done. If a weed control plan is not already in place, the operator shall develop a weed control and management plan in accordance with Section 3.1.10 (6) of the Rule. This plan should be developed in consultation with the county extension agency, or weed control district office and should include specific control measures to be applied, a schedule for when control measures will be applied and a post-treatment monitoring plan. This weed control plan shall be submitted to the Division as a Technical Revision to the approved plan with the appropriate Technical Revision fee of $216.00 by the corrective action date.
CORRECTIVE ACTION DUE DATE: 12/20/21

OBSERVATIONS

The Pino Pit was inspected by Patrick Lennberg with the Division of Reclamation, Mining and Safety (Division/DRMS). The inspection was completed in response to a Succession of Operators application (Revision No. SO-2) that was received by the Division on May 26, 2021. The site was previously inspected by the Division on January 29, 2019 as part of the Division's routine monitoring inspection program. The weather was clear and windy.

The Pino Pit is located 12 miles northwest of Walsenburg, CO. The pit is a 112c permitted for 80 acres with an approved maximum allowed disturbance of 35 acres. The approved post-mining land use is rangeland. A mine sign was observed as required by Rule 3.1.12.

The site was active at the time of inspection. A dump truck was being loaded with recycled asphalt grindings. The site is being mined from east to west with the most recent mining activities occurring in the western portion. The eastern pit, approximately 2.3 acres in size, has not been active since the last inspection. The pit walls had been graded to approximately 2H:1V along the north, east and southern walls while the western wall has been graded to 3H:1V or shallower and some reclamation has taken place. There is a large rill that has developed along the northern wall that is gradually filling the bottom of the pit. The sediment being deposited may eventually choke off the Cottonwood trees established in the bottom of the pit.

The western pit area is approximately 3.7 acres in size. The slopes range from near vertical to approximately 2H:1V. The total depth of the pit is 30 to 40 feet. All slopes will need to be graded to a minimum of 3H:1V. At the bottom of the pit there is standing water that has accumulated as a result of precipitation. Impounding runoff has been cited as a problem within this report. The Operator must get documentation from the State Engineers Office stating detaining stormwater longer than 72 hours is allowed or get rid of the ponding area all together.

At the southeast corner of the western pit area trash and refuse, including used tires, a VCR, and u sed oil filter, have been dumped into the pit area. This is being cited as a problem for failure to dispose of refuse in a manner that controls unsightliness or deleterious effects of such refuse pursuant to C.R.S. 34-32.5-116(4)(e). The Operator must document removal of the trash and refuse from the pit area and properly dispose of the material in an approved off site location and not buried onsite.

Both pit areas have Saltcedar, or Tamarisk (Tamarix spp.), growing in them and a Russian-olive tree was noted to be growing along the pit walls of the eastern pit area. Saltcedar and Russian olive trees are List B Noxious Weeds in Colorado. Additionally, Puncturevine a List C Noxious Weed was determined to be growing in the haul road along the northern boundary of the permit area. Having state-listed noxious weeds growing at the site is being cited as a problem in this report. The Division recommends contacting Charles Bryant the Huerfano County Weed Manager at 719-989-1353 to develop a mitigation plan for the area.

During the inspection the Division was able to locate or view all the permit boundary markers. The mining activities appear to be within the 35 acre maximum disturbance allowed.

The Division evaluated the financial warranty and determined the current bond amount held by the Division is adequate at this time.

Photographs taken during the inspection are attached.

Please contact Patrick Lennberg (303)866-3567 ext. 8114 or email at patrick.lennberg@state.co.us if you have any questions regarding this report.

Inspection Contact Address
Jim MacDonald
APC Southern Construction Co., LLC
14802 W 44th Avenue
Golden, CO 80403

Attachments Saltcedar Fact Sheet
Russian-olive Tree Fact Sheet
Puncturevine Fact Sheet

cc: Jared Ebert, DRMS

ec: Jim MacDonald, APC Southern, jmacdonald@apcsouthern.com
Clint Allen, Oldcastle SW Group Inc., clint.allen@na.crh.com

PHOTOGRAPHS

Photo 1: Mine sign at mine entrance location

Photo 2: Punctureevine on road in permit boundary

Photo 3: Puncturevine close-up

Photo 4: Looking southwest from a product stockpile towards west pit area

Photo 5: Previous pit area that has been backfilled

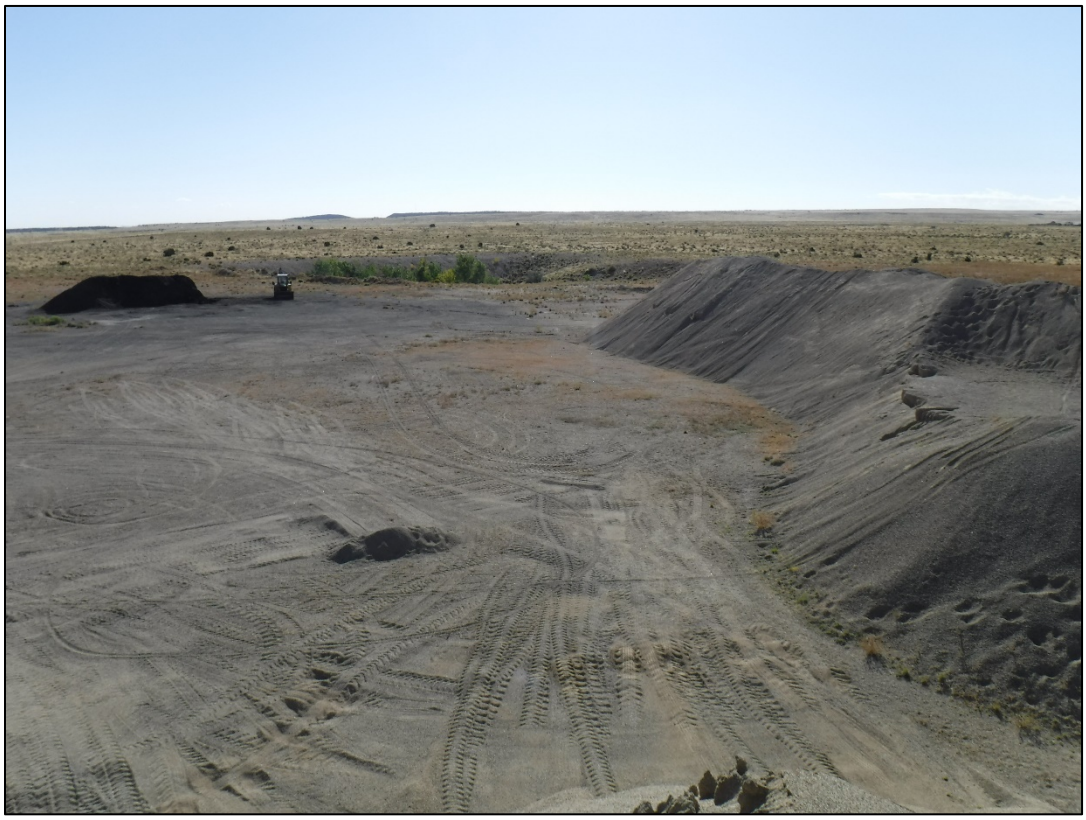


Photo 6: Looking southeast towards the eastern pit area

Photo 7: Bottom of western pit area with ponded water fringed by Saltcedar

Photo 8: Trash and refuse being dumped into western pit area

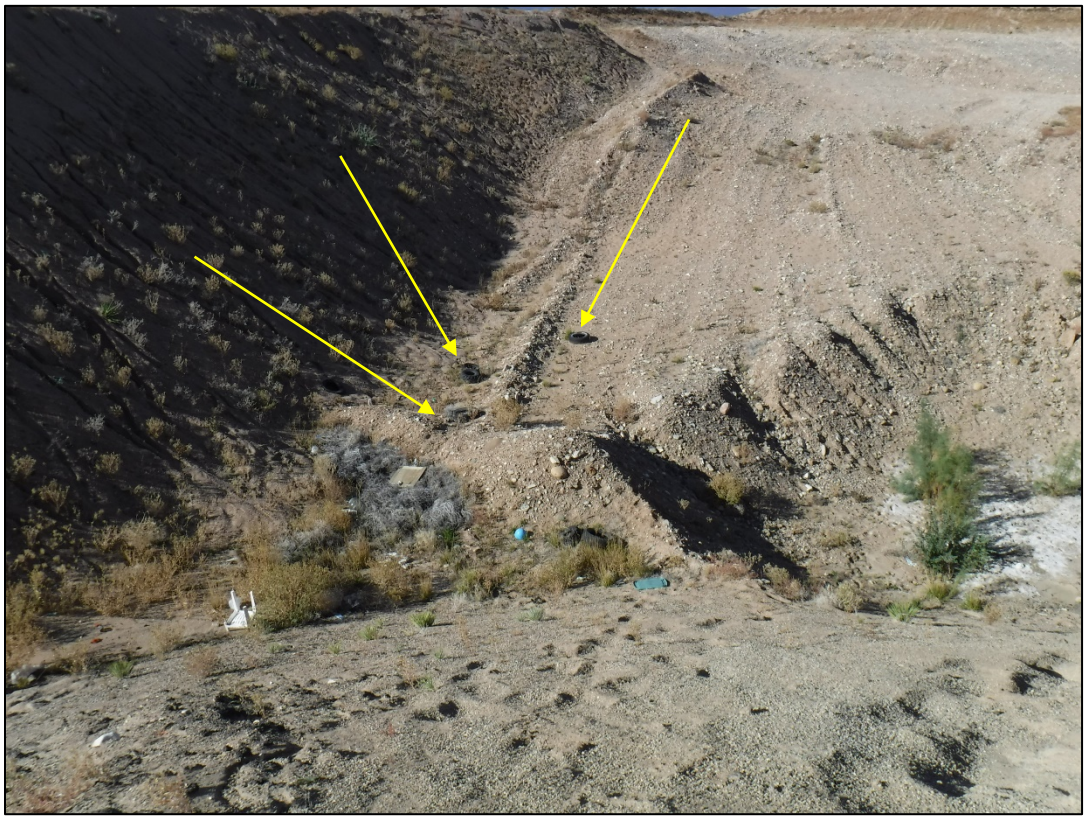


Photo 9: Used tires, yellow arrows, dumped into western pit area

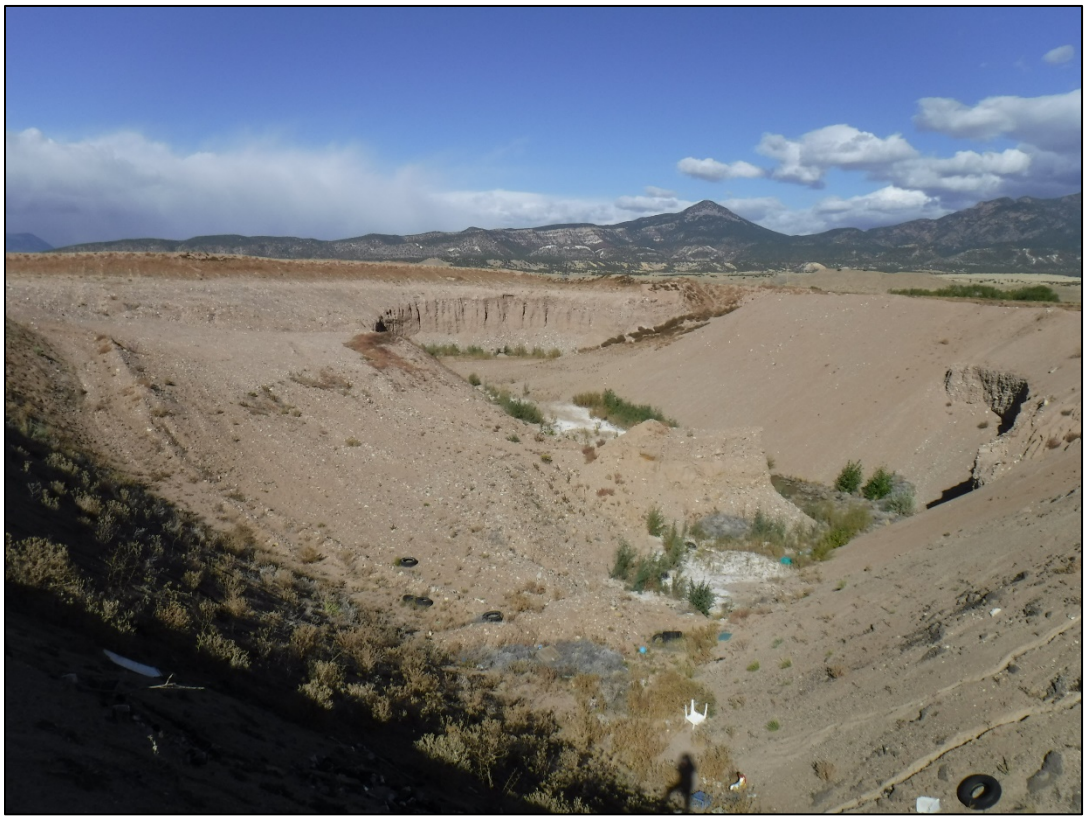


Photo 10: Trash and refuse being dumped into western pit area

Photo 11: Northwestern area of the western pit

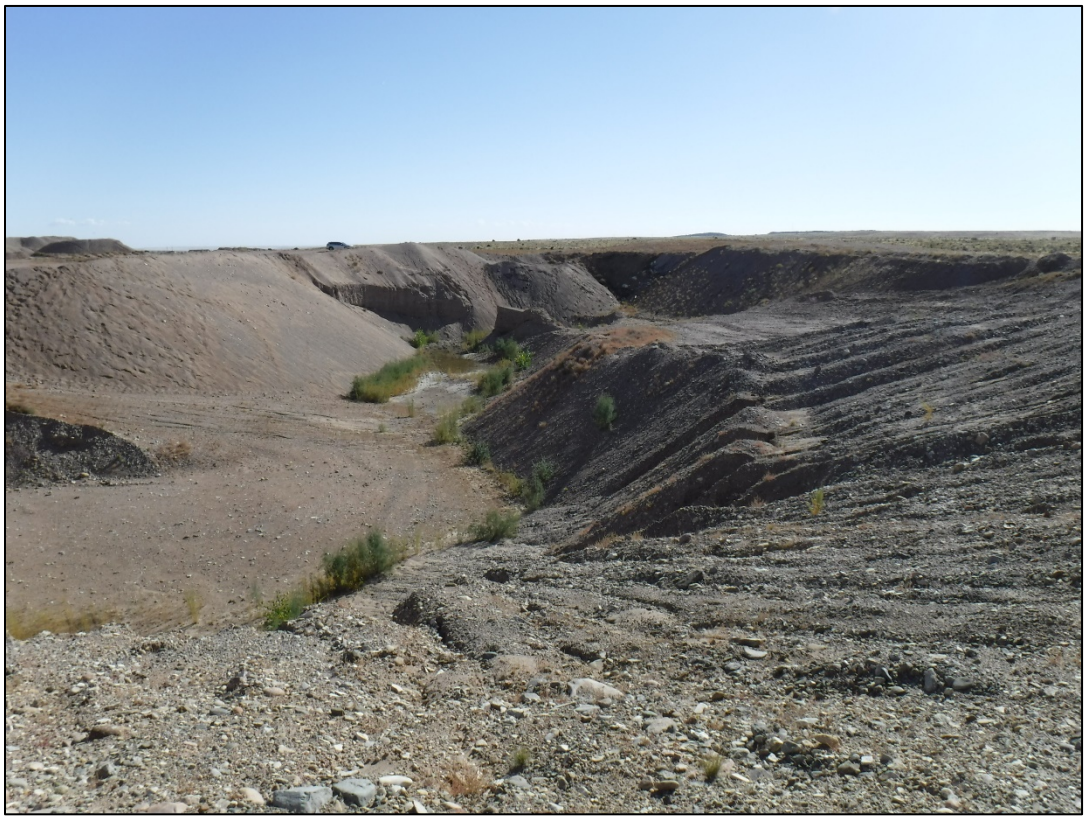


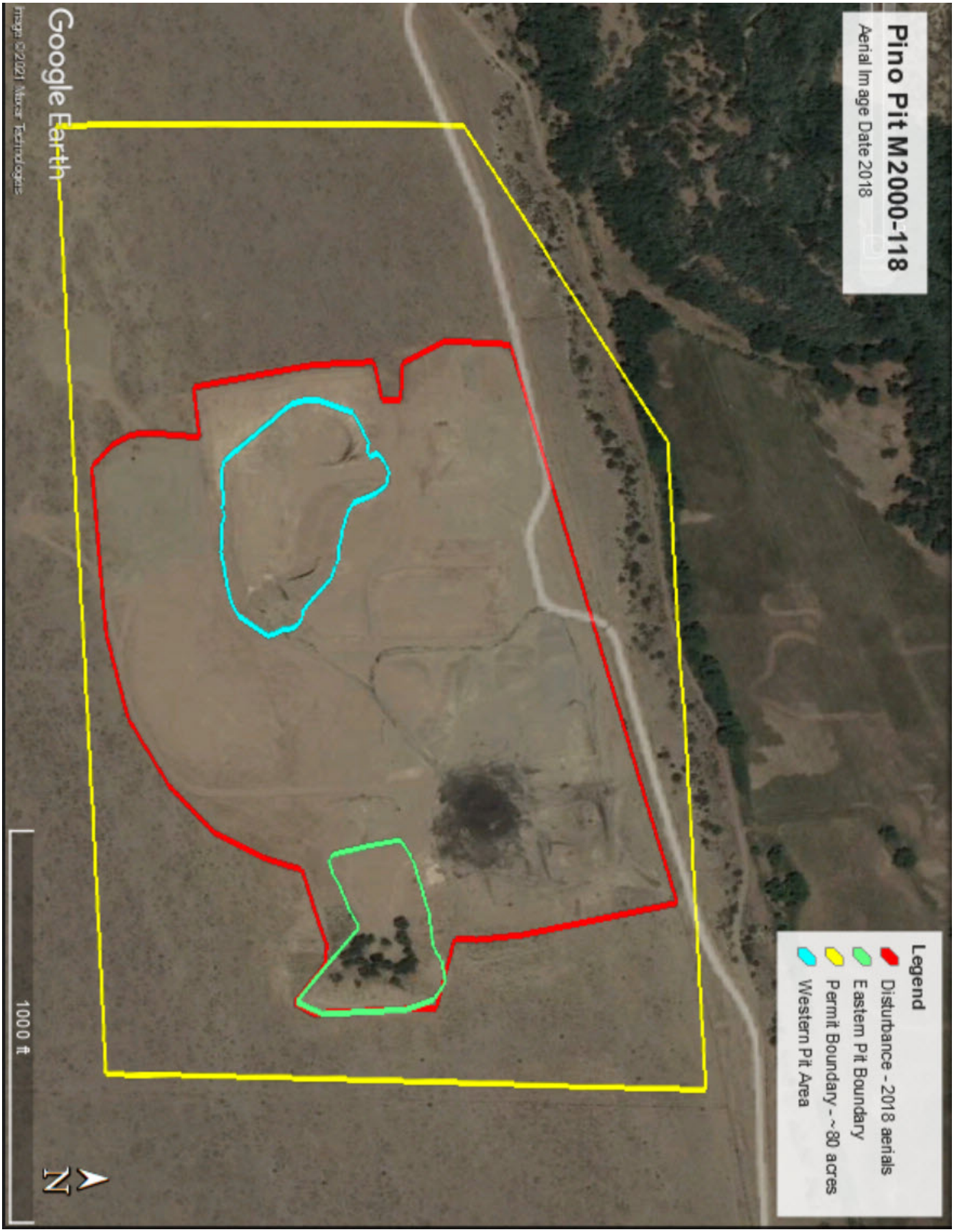
Photo 12: Looking east across the western pit area

Photo 13: Typical permit boundary marker

Photo 14: Eastern pit area, large erosion gully center left of picture and Russian-olive tree circled yellow

Photo 15: Saltcedar eastern pit area

Photo 16: Headcutting of erosion gully leading to eastern pit area


Pino Pit M2000-118
Aerial Image Date 2018
Legend
Disturbance - 2018 aerials
Eastern Pit Boundary
Permit Boundary - ~80 acres
Western Pit Area
Google Earth
Image ©2021 Maxar Technologies
1000 ft
N

Huerfano County

10/11/2021, 1:19:27 PM

1:4,514

0 0.03 0.06 0.12 mi

0 0.05 0.1 0.19 km

Roadways

PLSS Intersected

PLSS Township

Parcels

PLSS Section

GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS---------- N	(FN) FINANCIAL WARRANTY-------- Y	(RD) ROADS---------- Y
(HB) HYDROLOGIC BALANCE---------- PB	(BG) BACKFILL & GRADING---------- Y	(EX) EXPLOSIVES--------- N
(PW) PROCESSING WASTE/TAILING---- N	(SF) PROCESSING FACILITIES------- N	(TS) TOPSOIL---------- Y
(MP) GENL MINE PLAN COMPLIANCE- PB	(FW) FISH & WILDLIFE---------- N	(RV) REVEGETATION---- N
(SM) SIGNS AND MARKERS---------- Y	(SP) STORM WATER MGT PLAN---- N	(RS) RECL PLAN/COMP-- PB
(ES) OVERBURDEN/DEV. WASTE--------- N	(SC) EROSION/SEDIMENTATION--- Y	(ST) STIPULATIONS------- N
(AT) ACID OR TOXIC MATERIALS------- N	(OD) OFF-SITE DAMAGE----------N	

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

Attachments

Saltcedar

Tamarix spp.

Colorado Department of Agriculture

305 Interlocken Pkwy
Broomfield, CO 80021

(303) 869-9030
weeds@state.co.us

Saltcedar Identification and Management

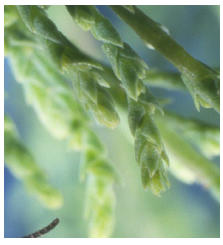
Identification and Impacts

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

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

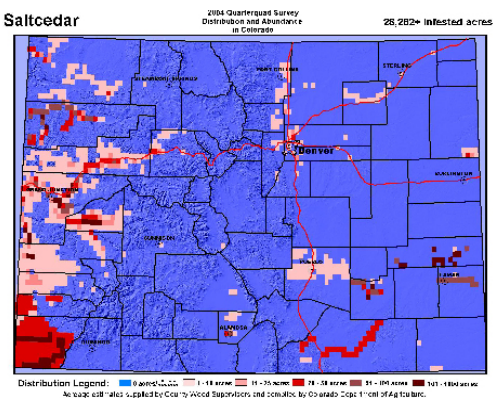
The most effective method of control for saltcedar is to prevent its establishment through proper land management. Monitor susceptible areas for new infestations. An integrated weed management approach has proven to be an effective control when dealing with saltcedar. Details on the back of this sheet can help to create a management plan compatible with your site ecology.

Saltcedar is designated as a "List B" species on the Colorado Noxious Weed Act. It is required to be either eradicated, contained, or suppressed depending on the local infestations. For more information, please visit www.colorado.gov/ag/csd and click on the Noxious Weed Program link. Or call the State Weed Coordinator of the Colorado Department of Agriculture, Conservation Services Division, 303-239-4100.



Key ID Points

1. Saltcedar is a tall shrub or small tree that has white to pink flowers in clusters called racimes.
2. Leaves are small and scaly.



Plant and flower photos © Kelly Uhing. Leaf photo © USDA Aphis PPQ. Infestation photo above, © Steve Dewey, Invasive.org. Tamarisk branch © Stevens County, WA Noxious Weed Control Board

Updated on:
07/2015

Management Recomendations

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

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

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

Integrated Weed Management:

Select the appropriate control method based on the size of the area and other environmental or cultural considerations. Re-seed controlled areas with desirable species to protect the soil resource and to prevent or slow saltcedar reinvasion. Follow up control efforts the same growing season and for several years afterwards.

Saltcedar

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

Herbicide	Rate	Application Timing
Triclopyr (Garlon 4, Remedy)	20-30% solution in basal bark oil. The herbicide Pathfinder comes pre-mixed in oil and does not require dilution.	Cut-Stump Treatment: Apply to the cambial layer of the tree immediately after the cut-stump treatment and to roots above soil surface. (Summer to fall) Basal Bark Treatment: Spray till wet but not dripping; the roots above soil surface, root collar, and lower trunk to a height of 12-15 inches above ground (Summer to fall)
Glyphosate* (Rodeo - approved aquatic label)	Undiluted (100% solution) or 50% solution in basil bark oil	Cut-Stump Treatment: Apply to the cambial layer of the tree immediately after the cut-stump treatment and to roots above soil surface. Diluted solutions requires regular agitation. (Summer to fall)
Triclopyr (Garlon 4, Remedy) + Aminopyralid (Milestone)	3 qts. Garlon 4/acre + 7 oz. Milestone/acre + 0.25% v/v non-ionic surfactant	Broadcast foliar treatment: Apply when plants are growing rapidly. (May to September)
Note: *These products are non-selective and will kill any vegetation contacted.		
Additional herbicide recommendations for other species can be found at: **goo.gl/TvWnv9**		

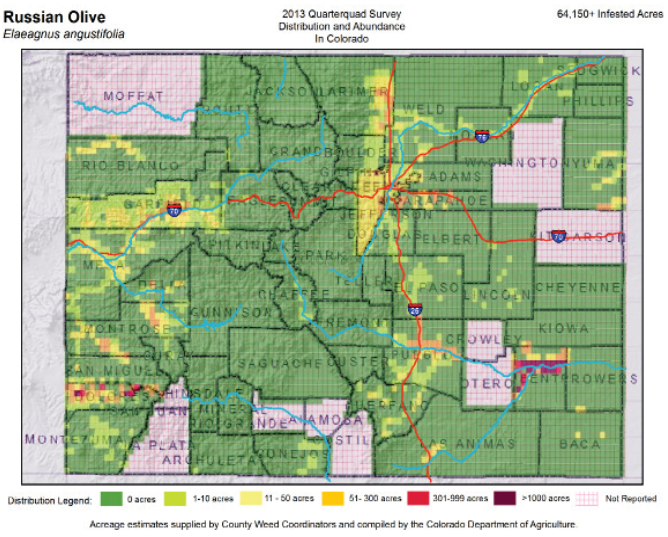
Russian Olive Identification and Management

List B

Russian olive (*Elaeagnus angustifoilia*) is a perennial tree or shrub that is native in Europe and Asia. The plant has olive-shaped fruits, silver color at first then becoming yellow-red when mature. Russian olive can reproduce by seed or root suckers. Seeds are readily spread by birds and can remain viable for up to 3 years. Spring moisture and slightly alkaline soil tend to favor seedling growth. The plant's extensive root system sprouts root suckers frequently. The tree can reach up to 30 feet in height with branches that have 1 to 2 inch thorns. Leaves are 2 to 3 inches long, alternate, narrow, and have simple blades with smooth edges. The leaf's lower surface is silvery white, while the upper surface is light green in color. Flowers are 4 small sepals in light yellow clusters, fragrant, and appear May through June. Fruits mature from September to November. Russian olive twigs are flexible, reddish, and have surfaces coated with gray and scaly pubescence, becoming smooth.

Once thought to be a beneficial windbreak tree, it since has been deemed detrimental to the environment. Russian olive can grow in a variety of soil and moisture conditions, but prefers open, moist, riparian zones. It is shade tolerant and can be found along streams, floodplains, fields and open areas up to approximately 8,000 feet in elevation. Russian-olive can outcompete native plants, interfere with natural plant succession and nutrient cycling, and tax water reserves. Because Russian olive is capable of fixing nitrogen in its roots, it can grow on bare, mineral substrates and dominate riparian vegetation. Although Russian olive provides a plentiful source of edible fruits for birds, ecologists have found that bird species richness is actually higher in riparian areas dominated by native vegetation.

The key to effective control of Russian olive is preventing establishment of the trees or shrubs. If plants are already present, control options include cut-stump treatments and mechanical mowing. These treatments depend on size and location of the plant. Details on the back of this sheet can help you create a management plan compatible with your site ecology.



Russian olive is designated as a "List B" species in the Colorado Noxious Weed Act. It is required to be either eradicated, contained, or suppressed depending on the local infestations. For more information visit www.colorado.gov/ag/weeds and click on the Noxious Weed Management Program. Or call the State Weed Coordinator at the Colorado Department of Agriculture, Conservation Services Division, 303-239-4100.

© Patrick Breen, OSU

© Patrick Breen, OSU

Key ID Points

1. Leaves are silvery white.
2. Branches have 1 to 2 inch thorns.
3. Yellow-red fruits on mature plants.
4. Mature trees have shedding, reddish-brown bark.

Russian olive

Elaeagnus angustifoilia

List B

Integrated Weed Management Recommendations

Integrated weed management offers the most effective combination of control efforts through the "cut stump" treatment. Trees are cut down with a hatchet or chainsaw, then immediately treated with an approved herbicide on the surface of the cut stump. The most effective timing is late summer/early fall for herbicide transfer into the roots.

Russian olive

Elaeagnus angustifolia

© John Randall, TNC

© James Miller, USFS

© Chris Ness, Adams County

© Scott Peterson, USDA

CULTURAL

Replace Russian olives with native trees. Prevent establishment of new trees by removing seedlings and saplings before they mature. Contact your local Natural Resources Conservation Service for recommendations of other possible trees or shrubs.

BIOLOGICAL

Tubercularia canker is an unapproved biocontrol. However, it overwinters on infected stems and spreads via rain-splash, animals, or pruning implements to open wounds in the bark. Infected tissue becomes discolored or sunken. Entire stems may be girdled and killed, and the disease can deform or kill stressed plants over time.

MECHANICAL

Saplings can be pulled with a weed-wrench or cut with brush-cutters. Trees can be girdled or cut with chainsaws. However, stump sprouting commonly occurs after cutting down the tree; and stump excavation without removing all parts of the roots can result in root sprouting. Treating cut-stumps with an herbicide can eliminate sprouting. Stump burning is practical when conditions support a long, hot fire and most effective in summer or early fall. Saplings are most sensitive to mechanical treatment.

CHEMICAL

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

Herbicide	Rate	Application Timing
Triclopyr (Garlon 4, Remedy)	20-30% solution in basal bark oil. The herbicide Pathfinder comes pre-mixed in oil and does not require dilution.	Cut-Stump Treatment: Apply to the cambial layer of the tree immediately after the cut-stump treatment and to roots above soil surface. (Summer to fall; fall treatments showed fewer re-growth) Basal Bark Treatment: Spray till wet but not dripping; the roots above soil surface, root collar, and lower trunk to a height of 12-15 inches above ground (Late summer to fall)
Glyphosate* (Rodeo - approved aquatic label)	Undiluted (100% solution) or 50% solution in basil bark oil	Cut-Stump Treatment: Apply to the cambial layer of the tree immediately after the cut-stump treatment and to roots above soil surface. Diluted solutions requires regular agitation. Treat summer to fall; fall treatments showed fewer re-growth.
Note: *These products are non-selective and will kill any vegetation contacted.		
Additional herbicide recommendations for this and other species can be found at: **goo.gl/TvWnv9**		

Colorado Department of Agriculture - Conservation Services
305 Interlocken Parkway
Broomfield, CO 80021
303-869-9030
www.colorado.gov/ag/weeds

Colorado State University

Updated:
07/2015

Puncturevine

Colorado Department of Agriculture

305 Interlocken Pkwy
Broomfield, CO 80021

(303) 869-9030
weeds@state.co.us

Key ID Points

Updated on:
08/09

Identification and Management

Identification and Impacts

Puncturevine (*Tribulus terrestris*) in a summer annual forb, and is native to Europe. The plant is prostrate or ascending, spreading into mat forming cover. The stems are trailing and can grow to 1 1/2 to 5 feet long. Leaves are formed into leaflets, with each leaflet containing 5 to 8 oval leaves. The leaves are hairy and opposite. The flowers appear in July through October. They have five petals and are yellow in color. Each flower node will produce a fruit, at maturity the fruit will break into 5 seed capsules. Each seed capsule will produce 2-4 seeds. Each capsule is hard and contains many spines, almost tack like. The shape of the seed capsule has been referred to as a "goathead." The seeds will propagate after the first moisture of the spring and then any wet period following. Seeds can stay viable for 4 to 5 years.

Habitats for Puncturevine include, but are not limited to roadsides, pastures, waste areas, cultivated fields, yards, and disturbed sites. The seed capsules can cause injury to humans, animals, and tires. Seeds can be found in hay, which may cause injury to animals. The capsules can also become entangled in wool, and decrease the quality. Due to the spiny nature of the plant, spreading seed over large areas is fairly easy.

The key to effective control of Puncturevine is preventing the plants to produce seed. Puncturevine can easily be dug up, making sure to get all the roots and to bag any flowering parts. Chemical and biological controls can also be effective as treatment options. Details on the back of this sheet can help to create a management plan compatible with your site ecology.

Puncturevine is designated as a "List C" species on the Colorado Noxious Weed Act. It is required to be either eradicated, contained, or suppressed depending on the local jurisdictions managing this species. For more information, visit www.colorado.gov/ag/weeds and click on the Noxious Weed Program link. Or call the State Weed Coordinator at the Colorado Department of Agriculture, Conservation Services Division, 303-239-4100.

Photos © From Bottom left; Steve Dewey, Utah State University, Bugwood.org; All other Kelly Uhing, Colorado Department of Agriculture

Tribulus terrestris

Management Recommendations

Puncturevine

CULTURAL
Cultural control for Puncturevine is a difficult task, since seed reserves can stay viable for 4 to 5 years. Preventing the plants from establishing, by eliminating bareground can assist in the process. For specific seed recommendations contact your local Natural Resources Conservation Services for seed mixes.

BIOLOGICAL
There are two biological controls available for control of Puncturevine; *Microlarinus lareynii*, a seed feeding weevil, and *Microlarinus lypriformis*, a stem boring weevil. Contact the Palisade Insectary of the Colorado Department of Agriculture at 970-464-7916 for more information.

MECHANICAL
Hand pull or dig when soil is moist, but make sure to wear gloves. Bag specimens carefully so as not to scatter seeds. This is helpful unless infestations are too large. The key to effective control is to prevent seed production and/or spread.

Integrated Weed Management:

Using a combination of control options can be effective in the control of Puncturevine. The plants are hard to eradicate, due to the seed viability of 4 to 5 years in the soil. Constant monitoring and management can be helpful.

HERBICIDES

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

HERBICIDE	RATE	APPLICATION TIMING
Glyphosate (Roundup) *Non-selectiveherbicide*	1.6% solution or 2 oz./gal water	Apply in early plant growth stages, emergance and rosettes.
2,4 D and Dicamba (Outlaw)	1-2 pints/Acre or 0.5-1.0 oz/gal water	Spring at emergence of seedlings continue through growing season. Add non-ionic surfactant 0.32 oz./gal water or 1 qt./100 gal water.
Chlorusulfuron (Telar)	1-3 oz./Acre	Apply pre-emergance or early post-emergance.
Pendimethalin (Pendulum)	2.1-4.2 qts/Acre	A pre-emegance spray.

Photos © Top to Bottom; (middle) Neal Spencer, USDA Agricultural Research Service European Labratory, Bugwood.org; (other 2)Kelly Uhing, Colorado Department of Agriculture