Final Report



Tamarisk and Russian
Olive Tree Eradication
on the St. Vrain River in
Weld County
2014

Project Report Through April 2015

Summary of Accomplishments

Eight months of tamarisk and Russian olive removal was accomplished.

The project covered approximately 18 river miles.

It is estimated that approximately 120 acres were cleared of tamarisk and Russian olive.

Worked with 30 different landowners.

1 newsletter article in Longmont and Boulder Valley Conservation District Newsletter and website sent to 690 landowners.

19 posts from April 15 through Sept 12. People that saw the posts ranged from 1567 – 22,512; avg. 6035/post

32 letters mailed to landowners within the project area.

Flyers and posters were distributed to 39 locations in the project area.

Multiple piles of chipped material were shot out on the ground for landowners to use as mulch or to decompose.

175 seedlings of chokecherry, plum, dogwood and apricot were planted at property at CR 1. The landowner also planted over 100 willows to help stabilize the shoreline. 530 shrubs and trees were planted by the landowner at CR 19.

233 pounds of grass seed was planted along the St. Vrain River is areas with no vegetative cover.

25 gallons of Rodeo mixed at 50% with water and surfactant or a total of 50 gallons of product was used to treat the cut Russian olive and tamarisk trees.

118.75 hours of volunteer time on the project area for Russian olive and tamarisk removal and native planting.

Scope of Work Tasks in Grant Project

TASK 1: Russian Olive and Tamarisk Tree Removal

<u>Description:</u> Using the Weld County Youth Conservation Corps Russian olive and tamarisk trees will be cut down, the stumps treated with a chemical, and the cut material chipped. The Weld County Weed Division will supply the chemical for the project. The chipped material will be left on-site for the landowner's use or removed as requested by the landowner.

<u>Method/Procedure</u>: The trees will be cut down with chainsaws. All material will be chipped onsite. The chips will be left in a pile for the landowner to utilize, distributed in a thin layer to decompose on site or removed based on the landowners' needs. The chemical used in the cut stump treatments will be labeled for aquatic sites, and will be Habitat, Garlon 3A or Rodeo. The proper timing and rates will be utilized.

Deliverable: All of this work will take place from June 1, 2014 through December 15, 2014.

<u>Task Met</u>: The Weld County Youth Conservation Corp worked all summer to cut down and chip the Russian olive and tamarisk trees. In the fall three Weld County Weed Division staff members also cut down and treated Russian olive and tamarisk trees for two months. As a result, all properties within the grant project had work done on them for the removal of trees. One property had the least amount of work done as it was the last property to be addressed. Continued work will take place on this property with each year during the maintenance phase. This property borders CR 17 and is on the north side of Hwy 66 and was heavily infested.

Rodeo was the product that was used to treat the cut stumps. It was used at a rate of 50%. 25 gallons of product was used and mixed into 50 gallons of product for use on the trees.

TASK 2: Mapping the St. Vrain River

<u>Description:</u> The Dawson School Canoe and Kayak Team, along with the Weld County Weed Division and Boulder County NRCS, will float the St. Vrain River to map the invasive species that are within the flood plain of the river. The mapping will focus on Russian olive and tamarisk trees, as well as any other List A and Watch List species that are migrating into Weld County.

Task Met: For one day in July and one day in August, Boulder County NRCS staff, Sylvia Hickenlooper, and Longmont Conservation District technician, Joni, along with Weld County staff, Rob Roma and Tina Booton and chase vehicle driver Kent Lynch, floated the St. Vrain River mapping Russian olive and tamarisk trees as well as the new river channel. Other noxious weeds were watched for. All that was identified was Canada, musk and bull thistle along with some diffuse and Russian knapweed and hoary cress. No list A or B eradication species were identified.

TASK 3: Establish Native Vegetation

<u>Description:</u> The Friends of St. Vrain State Park, the Longmont Conservation District, and the Boulder County NRCS will help in determining which sites need assistance with re-vegetation of

native plant materials to limit erosion and offer competition against other noxious weeds. The materials to be used include tree seedlings of cottonwood, willow, service berry and other native shrubs, along with a native grass mix for the area.

<u>Task Met</u>: This task has begun. A dry winter and very wet spring with new flooding has set this test back slightly. More of this piece will be accomplished throughout the next five years with the maintenance plan. However, to date, 230 pounds of grass seed have been purchased and seeded. Over 700 seedlings have been planted to help stabilize the shoreline from the 2013 flood. These seedlings consisted of cottonwood, willow, apricot, dogwood, plum and chokecherry. Also, 30 gallon size conifers were planted as a request from a landowner.

The removed Russian olive and tamarisk trees were spread out enough that they had not formed a monoculture. So their removal did not create bare ground that needed any special attention. The sites are being monitored, however the grasses around these trees are doing well.

TASK 4: Create Educational Posters and Brochures

<u>Description</u>: Confluent Design, along with the Weld County seasonal employee will design the content and layout of these items. The Longmont Conservation District and Weld County Weed Division will share the cost of printing. Volunteers will help distribute the posters and brochures.

<u>Task Met</u>: The brochure and poster for promoting the project was also designed, printed and distributed during June and July. These items were distributed to 39 local businesses in Longmont, Frederick and Firestone. Most locations received one poster. The grocery stores received three posters; one for each entrance and one for the employee lounge. Front Range Community College received ten posters for distribution at their six locations. IBMC, the libraries and social centers each received three posters while the coffee shops received one poster.

TASK 5: Speaking at Various Groups

<u>Description:</u> The Weld County Weed Division Supervisor will seek out at least five speaking opportunities to promote the project and raise awareness of the impact of invasive species, especially the Russian olive and tamarisk trees.

<u>Task Met</u>: On May 17, at the grass tour sponsored by Longmont & Boulder Valley Conservation Districts and NRCS a booth was set-up to answer questions and provide information. There were approximately 30 people in attendance. The Weeds 101 workshop was held on May 20 at Southwest Weld Service Center. Along with all of the other information provided at this workshop, this project was talked about and the trees that would be removed in the near future were identified. There were approximately 55 people in attendance. Two workshops are scheduled with the Town of Frederick for November 5 and November 12.

Face Book posts and news articles were also used to promote the project and general information about noxious weeds. A letter was sent to each of the landowners in the project detailing what the project was about. A sample of this letter is included in the correspondence section.

TASK 6: Booth at Local Farmers' Markets

<u>Description:</u> An educational booth manned by the Weld County Master Gardeners will be at local farmers' markets at least three times during the length of the project. Booth volunteers will promote the project, distribute brochures, answer questions, and pass on information they receive about the location of other noxious weeds to the Weld County Weed Division.

<u>Task Met</u>: The Weld County Master Gardeners were present at thirteen farmer's markets in Frederick on Thursdays from June to September. The booth provided information about noxious weeds, promoting the project, distributing brochures, and answering questions.

Monthly Progress Time Line of Events

Time Line of Tasks for the Tamarisk and Russian Olive Eradication on the St. Vrain River in Weld County.

<u>May 2014:</u> Hired staff to work on the project. Held an initial planning meeting with grant partners. Started developing the posters and flyers. Mailed out introduction letters to landowners. Started setting meetings with landowners and mapping.

<u>June 2014:</u> Mapping done by Weld County staff. Tree removal completed by Weld County Youth Conservation Corp. Flyers and posters distributed.

<u>July 2014:</u> Continued contacting landowners in the project area and making appointments. Tracked down phone numbers and switched to calling instead of mailing letters or postcards. Continued mapping and tree removal by the respective parties.

August 2014: Continued mapping and tree removal by the respective parties.

<u>September 2014:</u> Continued mapping and removal by the respective parties. Volunteers started removing trees on open space lands in the project.

October 2014: Continued tree removal with Weld County Youth Conservation Corp and Weld County Staff. Six month report created and submitted. Volunteers continued removing trees on open space lands in the project.

November 2014: Continued tree removal with Weld County Youth Conservation Corp and Weld County Staff.

<u>December 2014:</u> Continued tree removal with Weld County Youth Conservation Corp and Weld County Staff. Volunteers continued removing trees on open space lands in the project.

<u>January 2015</u>: Volunteers continued removing trees on open space lands in the project.

February 2015: Volunteers continued removing trees on open space lands in the project.

March 2015 Volunteers continued removing trees on open space lands in the project.

<u>April 2015:</u> Revegetation with tree and shrub seedlings by landowners and volunteers. Last sites needing chipped completed. Volunteers continued removing trees on open space lands in the project.

May 2015: Monitoring and watching the flood waters.

<u>June 2015</u>: A final report was given on the TRO removal project. Continued monitoring for needed fall treatments.

Monitoring and and Maintenance Plan

Maintenance and Monitoring Plan

Monitoring

The Weld County Weed Division Supervisor will drive and walk through the project area two times each year from 2015 to 2020. Re-growth from cut stumps, new seedlings and any possible trees missed along with the quality and quantity of the native vegetation will be monitored during these inspections.

A spring inspection will be made in mid June and a fall inspection made in early October. Each inspection will be scheduled for 1 day. The cost of this will be:

Salary: \$50 per hour at 16 hours = \$800.00

Equipment: \$13.68 per hour at 16 hours = \$218.88

Total: \$1018.88 per year at 5 years = \$5094.40

Maintenance

If any re-growth from the cut trees is found during these inspections, the plants will be treated by the Weld County Youth Conservation Corp before the plants produce viable seed. The Weld County Weed Division (WCWD) will meet with the Weld County Youth Conservation Corp (WCYCC) leader on site to discuss the treatment of the plant. The tree will also be flagged with white survey tape to aid in the identification of the tree along with continued monitoring of the area.

The cost of this will be:

Time: 10 hours maximum: (\$50 WCWD per hour and \$35 WCYCC per hour): \$850.00

Equipment: 10 hours maximum: (Truck, saw, sprayer): \$16 per hour: \$160.00

Herbicide: 3 gallon maximum Rodeo: \$100.00

Total possible expense: \$1110.00

If the native plants are not filling in and keeping the area stabilized, and restoration is needed, it will be conducted by the Longmont Conservation District staff through reseeding and tree plantings as appropriate. This will be done at a cost of:

Reseeding: \$75 per hour at a maximum of 5 hours = \$375.00

Trees: willow cuttings will be taken from on site and transplanted. Otherwise a bundle of 50 seedling trees will be bought for \$44 the spring after their need is identified. The Weld County Youth Conservation Corp will do the planting as a community service project with one of their TIGHT crews.

Total cost: \$419.00

The expenses for the monitoring and maintenance work are included in the base grant as in-kind contribution from each of the partners.

A monitoring and maintenance report will be filed annually through 2020. Tina Booton, Weld County Weed Division Supervisor will file this report every December.

Correspondence

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PUBLIC WORKS DEPARTMENT
1111 H STREET
PO BOX 758

GREELEY, CO 80632 PHONE (970)304-6496, Ext. 3771

FAX: (970)304-6497 WEBSITE: www.weld.gov

May, 9th 2014

DONALD FETTERS SR 10690 COUNTY ROAD 1 LONGMONT CO 80504

Dear Donald Fetters,

The Weld County Weed Division is pleased to announce that we have been awarded a \$54,000 grant designated to enhance 13 miles along the St. Vrain River. This grant has been designated for the eradication and removing of all tamarisk and the Russian olive trees that have been classified as noxious weeds.

This great news means that all Weld County land owners whose property borders the St.Vrain River will be given the opportunity to have all these noxious trees removed at no cost to the landowner! Along with the cutting down and removal of these trees some properties will be entitled to be reseeded and have replacement trees planted to help reinforce the shore line. This past flood has caused many challenges and yet provided many opportunities to strengthen our communities. This grant has provided us with a great opportunity and will continue to require a concerted effort.

That being said, we will require access to your property to map the tamarisk or Russian olive trees. A map will be provided to the landowner about the trees with their locations. The contractor that will be used to remove and chip the trees on site is the Weld County Youth Conservation Corps.

Together we can enhance and help restore native trees and vegetation along the St.Vrain River. I look forward to working with each of you this summer. Please call me at 970-304-6496 ext. 3771 or email me at: rroma@co.weld.co.us to schedule an appointment to discuss the program.

I look forward to hearing from you soon.

Sincerely,

Rob Roma Weed Control Landowner Specialist



September 10, 2014

Mr. Rob Roma Weed Control Landowner Specialist 1111 H Street P.O. Box 758 Greeley, Co. 80632-0758

Rob,

This past summer we had the opportunity to see the Weld County Youth Conservation core at work. We were very impressed to watch these young men and women at work. Cutting down Salt Cedar and Russian Olives is a strenuous job as we all know and can be very dangerous. The teamwork they displayed was outstanding. A group of young people helping and watching out for one another to make sure the job gets done in a safe manner.

The working conditions were very hot, dirty and dangerous and never once did we hear anyone complain. The work area was left very clean at the completion of the job. We commend Weld County for putting together this program to help our young people develop themselves and to show them they can make a difference and are appreciated. They are helping to protect one of our most valuable resources, WATER!

We cannot say enough about this group of young people. They are very hard workers, kind, polite and take pride in their work and should be very proud of themselves.

Thank you all for making our community a better place in which to live. It's great to see our tax dollars at work which benefit the entire County.

Sincerely,

Marilyn Rupple

Marihan Rupple

4879 WCR 24 3/4

Diane Aites

4919 WCR 24 3/4

Jan England

4879 WCR 24 3/4

Newsletter Articles

Russian Olive and Tamarisk Tree Removal Project

The Weld County Weed Division along with Weld County Youth Conservation Corps, Longmont Conservation District, City of Longmont, City of Firestone, Boulder County NRCS, Friends of St. Vrain State Park, Confluent Design, and Dawson School recently partnered on a grant application to remove tamarisk and Russian olive trees from the St. Vrain River in Weld County. This grant was funded by the Colorado Water Conservation Board Invasive Phreatophyte Control Program. This multi-part endeavor of eradicating the tamarisk and Russian olive trees will include removal, revegetation, and education.

Tamarisk and Russian olive trees are non-native to the area, but grow profusely while displacing and eliminating native plants. They consume more water and increase the salinity of the soil, hindering growth of native trees, shrubs and forbs. With the occurrence of the flood in 2013, the seeds of the tamarisk and Russian olive have been provided a chance to spread, thus expediting the need for the project.

The Weld County Weed Division will work to notify and educate landowners of noxious tree infestations on their property. The grant provides funding to map the properties in order to identify, count, and remove the trees at no cost to the landowners. The Weld County Youth Conservation Corps will assist in cutting down and chipping the trees. Along with removal, certain parcels will be re-vegetated with desirable native plants to encourage competition against other noxious weeds and reinforce areas along the St. Vrain River banks.

As a continuing effort, Weld County Weed Division plans to reach out to the community to inform and bring awareness to the presence of the noxious trees.

Representatives from the division will be offering presentations and brochures to continue to educate. The Russian Olive and Tamarisk Tree Removal Project is expected to run from June 2014 to February 2015.

Announcing:

RUSSIAN OLIVE AND TAMARISK TREE REMOVAL PROJECT

WHO: Weld County Weed Division, Longmont Conservation District, Weld County Youth Conservation Corps, City of Longmont, St. Vrain State Park, Friends of St. Vrain State Park, Boulder County NRCS, Dawson School, Weld County Master Gardeners, 303 Tree Inc., City of Firestone, and residence owners along the St. Vrain River.

 All above will be working together in collaboration under a grant funded by The Colorado Water Conservation Board Invasive Phreatophyte Control Program

WHAT: A grant-funded project targeted at the mapping and eradication of the Tamarisk and Russian olive trees that border the St. Vrain River within Weld County's thirteen-mile stretch.

WHY: Tamarisk and Russian olive trees are foreign, invasive plants. They simplify the habitat by displacing and eliminating the native plants. In addition, they consume more water than native trees, increase soil salinity and pose a fire risk. Overall, Tamarisk and Russian olive trees cause problems for the local ecology as well farmers and ranchers and other land managers because of their invasion on irrigation ditches and pasture fields.

HOW: As part of a collaborative effort, the Weld County Weed Division has undertaken the task of scouting and mapping, while the Weld County Youth Conservation Corp will remove Tamarisk and Russian olive trees along the St. Vrain River. The trees will be cut down with chainsaws and chipped on site. Additionally, an environmentally safe chemical will be applied to the cut stumps to prevent regrowth. After removal, assessments will be made to determine which sites would benefit from revegetation with native plants. The revegetation would include planting grasses, forbs, shrubs and trees that are historically native to the site.

WHEN: The project will take place from June, 2014 to February, 2015.

Call: Rob Roma @ 970-304-6496 ext 3771 for more details and to make an appointment



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BOULDER VALLEY AND LONGMONT CONSERVATION DISTRICTS' NEWSLETTER 9595 Nelson Road, Box D, Longmont, CO 80501 - Phone: (303) 776-4034 - Fax: (303) 684-9893 Office Hours are 7:30 a.m. to 4:30 p.m., Monday - Friday.

2014 CONSERVATIONISTS OF THE YEAR



Arlene Penner, Boulder Valley CD, Heather Riffel

The Boulder Valley Conservation District has selected Heather Riffel as their Conservationist of the Year for 2014. Heather's passion for agriculture

as a teacher in the urban agriculture program at the Boulder Valley School District CTEC program at Arapahoe Campus and as advisor for the Boulder FFA Chapter. She is also the steward of the property in and around the school.

Heather grew up in Kansas where her passion for agriculture started early in gardening. At age 14 the only job she could qualify for was

working for a Day Lilly farm pulling weeds. She loved being outdoors and being involved in gardening. It led her into a college career path of landscaping studies. It was not un-

shines through her position til she became involved with a museum that her desire for being an educator began. During this time she really found her calling as being a teacher. She started working at CU grounds and horticulture departments three days a week and then she traveled to CSU two days a week to finish her graduate school studies, always making it difficult to choose which team to cheer on at football and basketball games.

> What Heather likes best about working in agriculture is how easy it is to connect with people. Talking about the land and the passion for growing food opens doors to communication. She firmly be-

> > (Continued on page 2)

The Longmont Conservation District Supervisors have chosen Anderson Farms as their Conservationist of the Year for 2014. Jim Anderson along with his wife, Brenda, and their daughter and son-in-law, Rachelle & Mike Wegele, farm 300 acres in southwest Weld County. Jim is a third generation farmer whose family moved to the area in 1905 from Sweden. Jim's father, Edwin Anderson, was a long-time Supervisor on the Longmont Soil Conservation District Board.

Jim Anderson used reduced tillage/high residue as a management practice before it was the standard. He had to build his own equipment because there was not

the specialty equipment that is available now. His rotation barley, corn, grass hay, and alfalfa. Jim and his Dad began the irrigation improvements on his farm with 3930 feet of gated pipe in 2009



Mike Litzenberger, Longmont CD, Jim Anderson, Brenda Anderson, Rachelle and Mike Wegele.

underground pipe in 2011 and has installed over 4,000 feet of under-

2010. He then installed 2511 feet of ground pipe over the years. Cur-(Continued on page 2)

2014 CONSERVATIONIST OF THE YEAR — LONGMONT

(Continued from page 1)

rently all acres on the main farm are under gated pipe. Jim built his own bubble screen to clean weed seed and debris from the water to keep his gated pipe from getting plugged. Jim has considered changing to a more efficient sprinkler system but rejected the idea because of the ruts that are created with the sprinkler systems that would not work well with his entire operation of corn mazes, pumpkin patch and field tours.

In the mid 1990's, Jim had a cattle feeding operation on a family farm near Mead. During that time he worked with the Longmont Soil Conservation District and NRCS on a composting project. The project

was a 319 funded project. The Colorado Department of Health, CSU Extension and the EPA also partnered on the project.

Anderson Farms began in 1997 with havrides to a small pumpkin patch. There is now 35 acres of pumpkins and Anderson Farms is the largest Agritainment facility in Colorado. Last year they saw over 14,000 urban students who came to the pumpkin patch and received education on farming. The fall festival, which is open from late September to November 1, draws thousands of participants to the farm for entertainment. The corn maze and the Terror in the Corn are two of the attractions. Jim builds most of the equipment and props for the attractions. Jim built the new 7,000 pound pumpkin that is on the top of the silo. It is a landmark that can be seen from The project I25 as well as Highway 52. There are

also cows, alpacas, a buffalo and goats on the farm for entertainment and education.

Jim has been the recipient of many awards. He received the Farm Journal Environmentalist of the Year, the National Cattlemens' National Environmental Award and the Coors Barley Conservationist of the Year award. He is currently on the Boulder and Weld Ditch Board and the Lower Boulder Ditch. He is past president of the Colorado Cattlefeeders Association and is on the Executive Committee of the National Cattlemens.

For the conservation that Jim and his family have done over the years, the Supervisors of the Longmont Conservation District are proud to name the Anderson Farms family their 2014 Conservationists of the Year.

2014 CONSERVATIONIST OF THE YEAR — BOULDER VALLEY

(Continued from page 1)

lieves how integral the career tech fields are and her first year of teaching began as a small engine repair instructor. It was needed though in order to get the greenhouse built at the Arapahoe Campus. From there, things have literally blossomed, not just for her but for the students she advises and guides. Without her instruction these students might not otherwise find their true passion also lies in agriculture.

In Heather's class there is not a "sit and listen" approach. It is all about hands-on, interactive learning. It is evident as the kids talk about their projects they are learning by leaps and bounds, but this isn't traditional agriculture. They are thinking outside the box reaching new corners of agriculture that do not fit in the normal curriculum, but increasingly necessary to improve food security and supply as our populations expand. The tools they acquire in Heather's class give them a project to go forth into college and the work place.

Heather has planted fruit trees, has a coop of chickens, and does composting of waste products from the chickens and the greenhouse. She discusses soil health and minimum tillage as well as cover crops with her students.

Heather and her class has been an integral component of making From Our Lands to Your Hands a successful event in Boulder. Plans are in place for a third year of the event. Her students work not only as group leaders, but are responsible for their own presentation for the visiting fourth grade students.

During the classes annual plant sale, where Heather was awarded as the Conservationist of the Year, it is evident she is helping foster the development of leaders in the agriculture sector as past students come to visit her and share their current experiences.

Today as more and more people are removed from agriculture, it becomes increasingly important that their exposure to farming and ranching is favorable and Heather ignites the spark necessary to start her student's paths into a promising field of agriculture, horticulture, and other agriculture related fields. For all of Heather's work locally and internationally, the Boulder Valley Conservation District is proud to work with and present Heather Riffel as their 2014 Conservationist of the Year.

Don't forget to visit our booth in the Exhibit Building at the Boulder County Fair.

2014 COLLEGE SCHOLARSHIP RECIPIENTS

tion District and Longmont Conservation District Supervisors are proud to award their 2014 college scholarships to area high schools graduates. These students are planning to continue their education in a field that will benefit agriculture and conservation. The Supervisors congratulate these students on their high school graduation and wish them continued success in their college experience.

The Boulder Valley Conservation District awarded their scholarship to **Hope Weinstein**. She



daughter of Mike Wein-Sheryl Genco of Boulder. Норе graduat-

ed from Fairview High School and plans to attend Yale University. Hope has been very active in research in water filtration and remediation. She has won many awards in the scientific field. She plans to gain a chemical engineering degree to work in a field of water remediation and conservation.

The Longmont Conservation District awarded five scholarships.

The Boulder Valley Conserva- Marissa Atkins is the daughter of



Steven and Dawn Atkins of Frederick. Marissa graduated from Erie High School and will be attending Brigham Young University-Idaho in the fall. Marissa has been very ac-

tive in school activities in leadership roles. She is a member of the National Honor Society and respected by her peers. Liza Hein is the

daughter of the Dennis Hein Mary and Kirker of Longmont. stein and Liza graduated from Faith Baptist School in Longmont and plans to



attend Colorado Christian University this fall. Liza was active in her school and also in 4H where she



won manv awards for her rabbits. Liza plans to teach others how to work with and care for animals. **Tyson** Peppler is the son of Kent & Colleen Peppler of Platteville. Tyson graduated from Longmont High School and plans to attend Colorado State University this fall. Tyson is active with the Rocky Mountain Farmers Union and serves as a youth advisor. He also participated in sports activities at Longmont High School. He plans to major in agriculture business and return to the family farm and have an off the farm business. Lauren Thompson is the daughter of Justin and Heather Thompson of Frederick. Lauren

graduated from Niwot High School and plans to attend Colo-State rado University this fall. Lauren has been active as



volunteer at the Colorado Therapeutic Riding Center. She was a volunteer at the Longmont From Our Lands to Your Hands youth event that teachers fourth graders why agriculture is important in their lives. Lauren plans to work in the equine industry after college.

Congratulations once again to each of these outstanding students. We wish you the best in your goals for the future.

CAMP ROCKY JULY 6-12, 2014

dential camp for 14 through 19 year olds who enjoy the outdoors and are interested in natural resources. The camp is located just outside Divide, Colorado. Camp Rocky's professional staff helps participants learn about their environment through hands-on experiences. The students work in teams, making new friends from across Colorado. Each year, new and returning students choose one resource field for their area of focus. Those resource fields are: rec-

Camp Rocky is a week long, resi- reation management, forest management, rangeland science, soil is and water conservation, and fish and wildlife management.

> During the second half of the week, students from the different resource teams will develop and present natural resource action plans and use their group plan to complete a management project.

> Cost for the camp is \$300 which includes housing and food for the week. Space is limited to the first 65 students who apply.

Registration information available www.coloradoacd.org/camprocky or you can contact the Boulder Valley and Longmont Conservation Districts office at (303) 776-4034 ext. 101.

The Conservation Districts offer scholarships to youth who would like to attend Camp Rocky. Please write a letter of request to the Conservation District Supervisors explaining your need for the scholarship.

MAXIMIZING IRRIGATED PASTURE WORKSHOP

Sylvia Hickenlooper, Soil Conservationist

If you have grass and you have livestock then the information presented at the Maximizing Irrigated Pasture Workshop was a game changer in how you as a land manager can have your pastures start working for you. This time of year, the grass is green and growing and it starts all the eager anticipation of turning livestock on the pastures to get their fill of high protein diet and most likely your livestock is bellowing at you to let them loose. However, most likely they are already on pasture now and doing a cow happy dance, but as a land manager this isn't the time to take a break because now it is even more important to watch your grass closely. This isn't like watching paint dry, this is where you can start

Steve Fransen & Glenn Shewmaker measuring grass

putting money in your grazing bank and stretch your forage longer. It all comes down to monitoring those pastures and how they are being grazed.

The big take home message from this workshop was there is 3 inches of each of your forage plants that does not belong to you and it does not belong to your livestock; it belongs to the plant. Now, it is impossible to train livestock to leave just 3 inches of each plant when they graze, but as a land manager you can be the one who moves them as soon as the pasture has been grazed down to an average 3 inch height. It might take an investment in a yard stick, but it might be the best investment you have made. It takes walking, driving, riding, whatever it takes to get out in your pastures and really know how

> they are doing. What looks like 3 inches in a car driving 60 miles per hour is drastically different when you have your boots on the ground. So what does this buy you in the long run? Roots! Yes 3 inches of stubble height and resting your plants buy your roots and with more roots you have more forage and more forage you are again back to happy

cow dancing.

T h e workshop took place May 17^{th,} andwas a collaborative effort with Boulder Valley and Longmont Conservation Districts. Longmont NRCS,



Brummer looking at roots.

West Greeley Conservation District, CSU Extension in Boulder, Larimer and Adams counties and Agfinity. Steve Fransen, Extension Forage Crops Specialist from Washington State University, Glenn Shewmaker, Extension Forage Specialist from University of Idaho Twin Falls Research and Extension Center, and Joe Brummer Associate Professor Forage Science at Colorado State University were the all-star line-up of presenters. Sam and Deb Herston hosted the field demonstration portion of their workshop at their farm in Loveland and had the workshop catered by Noodles and Company.

CHILDREN'S WATER FESTIVAL MAY 14, 2014

Tessa Zee, High School Senior and NRCS Longmont Field Office Job Shadow May 7th-20th

The Boulder Valley Conservation District and the NRCS employee's presentation on soil erosion at the Children's Water Festival at the University of Colorado was received wonderfully this year. At least 100 students from six area public schools watched our demonstration about how to protect our soils from erosion. When presenting to these spunky 5th graders, we told jokes, made a muddy mess with soil boxes and water, but most importantly, taught the kids about the problem that is soil erosion by allow-

ing them to ask questions and draw their own conclusions.

September's flood was an appropriate example of erosion that the students could personally relate to and understand. It was so wonderful to observe the true depth of their knowledge on the subject as well as the eagerness these children showed to participate in our activity. It is clear that they really grasped the concept of soil erosion and the importance of covering deteriorated land with mulch or vegetation when we used soil types of increasing nutrient content and a rain-maker in a

simulation. Overall, the 5th grade students were very enthusiastic learn to were and definitely



well-behaved. We could not have asked for a better day of outreach and education than we did at this year's Water Festival and wish we could have talked with all 1.300 students that attended!

TAMARISK AND RUSSIAN OLIVE TREE REMOVAL PROJECT

Rob Roma, Weld County Weed Division Technician



The Weld County Weed Division along with Weld County Youth Conservation Corps, Longmont Conservation District, City of Longmont. City of Firestone, Boulder County NRCS, Friends of St. Vrain State Park, Confluent Design, and Dawson School recently partnered on a grant application to remove tamarisk and Russian olive trees from along the St. Vrain River in Weld County. This grant was funded by the Colorado Water Conservation Board Invasive Phreatophyte Control Program. This multi-part endeavor of eradicating the tamarisk and Russian olive trees will include removal, revegetation, and education.

Tamarisk and Russian olive trees are non-native to the area, but grow profusely while displacing and eliminating native plants. They consume more water and increase the salinity of the soil, hindering growth of native trees, shrubs and forbs. With the occurrence of the flood in 2013, the seeds of the tamarisk and Russian olive have been provided a chance to spread, thus expediting the need for the project.

The Weld County Weed Division will work to notify and educate landowners of noxious tree infestations on their property. The grant provides funding to map the properties in order to identify, count, and remove the trees at no cost to the landowners. The Weld County Youth Conservation Corps will assist in cutting down and chipping the trees. Along with removal, certain parcels will be revegetated with desirable native plants to encourage competition against other noxious weeds and reinforce areas along the St. Vrain River banks.

As a continuing effort, Weld County Weed Division plans to reach out to the community to inform and bring awareness to the presence of the noxious trees. Representatives from the division will be offering presentations and brochures to continue to educate. The Russian Olive and Tamarisk Tree Removal Project is expected to run from June 2014 to February



COST-SHARE FOR NOXIOUS WEEDS AND POLYACRYLAMIDES

The Longmont Conservation Discome, first-served basis according minimize breeding places for mostrict provides financial incentives to landowners in their District who use herbicide on weeds in their fence rows and along irrigation ditches to reduce noxious weeds and to help prevent the spread of seeds.

Reimbursement will be 50% of the actual cost of the chemicals not to exceed \$100 per farm per year with a limit of \$500 per individual or entity. The funds are authorized for the purchase of chemicals, biological control or organic control only. The

to the date of the claim.

The District provides cost-share of up to 50% of the cost of polyacryalmides used in furrow irrigation or irrigation ditches to reduce leakage. For those landowners using pivot irrigation, there is also polyacrylamides that are used to minimize wheel track ruts. It will also help to cut pivot maintenance costs by reducing hard clods that form around wheel tracks. By reducing the amount of water refunds will be distributed on a first- maining in the tracks. it will also

auitoes.

The District also has belt feeders available that feed polyacrylamides continuously into irrigation water for 12 hours. The box itself is 15 inches wide, 22 inches long and 6 inches high and has a holding capacity of 15 pounds. Those are available for \$299 each.

Please call the Conservation District Office at (303) 776-4034 x101 for further information on these cost-share opportunities.

WEEK ID AND CONTROL WORKSHOP

shops are a partnership between erties, not backyards. The goal of CSU Extension and Boulder County the workshops is to provide the Parks and Open Space Weed Divi- landowner with the tools needed sion. The focus of the workshops to develop a weed management will be to address weed problems plan using sound integrated weed

The Weed Management Work- that currently exist on small prop-

control strategies. The workshop will be held on June 24 and August 26. The cost is \$10 per person per workshop. Register online at http://csu-extension-bocoweeds.eventbrite.com

2013 FLOOD EWP UPDATE

Boyd Byelich, NRCS District Conservationist Longmont Field Office

Funding for the NRCS Emergency Watershed Protection Program (EWP) was awarded in early December. Engineers and local staff have been engaged in mitigation work and designs since that time. The race was on to complete protection measures on more than 90 individual sites in Boulder County prior to the spring 2014 run-off. To date, this work has been completed on more than 95% of those sites. The anticipated peak run-off normally occurs June 10-15, so hats off to all those who helped get the work done in time! The remaining projects either have limited access or involve landslide issues, so these will continue to be addressed with a July completion timeline.

Much of the work involved improving channel capacity through excavation and widening, streambank stabilization using rock rip rap, and removal of woody and

sediment debris. Essential to the completion of this work was the constant communication and coordination by our staff with landowners whose property was affected. Each staff person was responsible for specific project areas in the county, e.g. Raymond/Riverside, Longmont Dam Road, and Streamcrest. Other areas, like Jamestown and Apple Valley, were subcontracted to consulting firms to insure all work was completed in a timely manner to beat the spring run-off period.

EWP requires a local sponsor to provide 25% match of the funds received. Boulder County was initially awarded almost \$6 million in funding, so the match is substantial. The State Office of Emergency Management stepped up as the overall sponsor, and Boulder County jumped in as the local sponsor. The level of coordination between NRCS and Boulder County over the last 6 months has been integral to the completion

of these projects on time. This has been accomplished through weekly coordination meetings, daily field visits, and ad-hoc meetings as needed. Many sites required field-fitting due to local or unusual conditions, and all parties were readily available to go to the sites and make the necessary decisions to keep the work moving forward.

This work could not have been accomplished without the support of the engineers and field inspectors that NRCS brought in from 10 different states. Mitigation work was on-going at many sites simultaneously, requiring regular oversight. These folks doggedly hit the field every day to insure that designs were completed and practices installed, so that the iron (heavy equipment) would not have any delays in getting the work done. Kudos to all for making this happen! Our goal was to be ready for spring run-off and we are there!



United States Department of Agriculture Farm Service Agency

LIVESTOCK DISASTER ASSISTANCE SIGN-UP UNDERWAY

Livestock disaster program enrollment opened on April 15, 2014. These disaster programs are authorized by the 2014 Farm Bill as permanent programs and provide retroactive authority to cover losses that occurred on or after Oct. 1, 2011.

To expedite applications, all producers who experienced losses are encouraged to bring records documenting those losses to their local FSA Office.

Eligible producers can sign-up for the following livestock disaster assistance programs:

<u>Livestock Forage Disaster</u> <u>Program (LFP):</u> provides compensation to eligible livestock producers that have suffered grazing losses due to drought on privately owned or cash leased land or fire on federally managed land.

<u>Livestock Indemnity Program</u> (<u>LIP</u>): provides compensation to eligible livestock producers that have suffered livestock death losses in excess of normal mortality due to adverse weather and attacks by animals reintroduced into the wild by the federal government or protected by federal law.

Emergency Assistance for Livestock, Honeybees and Farm-Raised Fish Program (ELAP): provides emergency assistance to eligible producers of livestock, honeybees and farm-raised fish that have losses due to disease, adverse weather, or other conditions, such as blizzards and wildfires. ELAP assis-

tance is provided for losses not covered by LFP and LIP. Producers who suffered eligible livestock, honeybee or farm-raised fish losses during 2012 and 2013 program years must submit a notice of loss and application for payment to their local FSA office by August 1, 2014. For 2014 program year losses, the notice of loss and an application for payment must be submitted by November 1, 2014.

For more information, producers can review the LFP, LIP and ELAP Fact Sheets on the Farm Bill webpage. Producers are encouraged to make an appointment with their local FSA office to apply for these programs.

Producers are reminded to report your 2014 crops (corn, barley, sugar beets, etc.) by July 15, 2014.

Please call 303-776-1242 x 100 for an appointment.

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Boyd Byelich District Conservationist Don Graffis & Sylvia Hickenlooper Soil Conservationists

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Nancy McIntyre, District Business Mgr. Joni Burr.

District Conservation Tech

The Boulder Valley and Longmont Conservation Districts' Front Page, 9595 Nelson Road - Box D, Longmont, CO 80501, is published quarterly to provide information to the land user.

DRIFTWATCH.COM. WHAT IS IT?

The DriftWatch Specialty Crop Site Registry is a voluntary online tool that is intended to help pesticide applicators and specialty crop growers in Colorado and other member states communicate more effectively and to promote awareness and stewardship activities and help prevent and/or manage drift appropriately. DriftWatch was originally designed by staff from the Purdue University Agricultural and Biological Engineering and Agricultural Communications departments with input and support from Purdue University Cooperative Extension Specialists. It is now a national registry platform operated by FieldWatch, Inc, a non-profit company created by Purdue in collaboration with interested agricultural stakeholder groups.

The data set is overseen by stateappointed stewards who verify each area submitted to the registry. The boundaries on the map are not property lines, but user-submitted sensitive area designations. Furthermore, DriftWatch is not intended to be a registry for homeowners or for sites less than half an acre in size.

Producers of high-value specialty crops, such as tomatoes, fruit trees, grapes and vegetables, map their sites online with an easy-to-use mapping tool and provide contact information about their operation. Likewise, commercial beekeepers register and map their hives the same way. Pesticide applicators access the website to help determine the scope and location of specialty crops and beehives in their trade

areas. DriftWatch provides the platform to facilitate better awareness, communication and interaction between all parties as one part of ongoing stewardship activities.

The site features a <u>map interface</u> that clearly shows applicators the locations of registered sensitive areas so they can use the information in their ongoing stewardship activities before they spray.

In addition to user-submitted sensitive crops, the map interface provides other data layers that give further insight into sensitive and protected areas, as well as help identify 'county, township and section jurisdictions.

For more information, visit www.fieldwatch.com.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, martial and family status.

ADDRESS SERVICE REQUESTED

DOULDER VALLEY AND LONGMONT CONSERVATION DISTRICTS 9595 Nelson Road - Box D Longmont, CO 80501

Educational Materials Distributed

Tamarisk and Russian Olive Trees: *The Diabolical Duo*

Tamarisk and Russian olive trees are foreign, invasive plants. They simplify the habitat by displacing and eliminating native plants. They waste more water than native trees, increase soil salinity, and pose a fire risk. These trees cause problems for the local ecology as well as farmers, ranchers and other land managers because of their invasion on irrigation ditches and pastures.

Pulling Together

As part of a collaborative effort, the Weld County Weed Division has undertaken the task of scouting and mapping, while the Weld County Youth Conservation Corps will remove Tamarisk and Russian olive trees along St. Vrain Creek. The trees will be cut down with chainsaws and chipped on site. Additionally, an environmentally safe chemical will be applied to the cut stumps to prevent regrowth. After removal, assessments will be made to determine which sites will benefit from revegetation with native plants. Revegetation will include planting grasses, forbs, shrubs and trees that are historically native to the site.

Project Schedule

The project will take place from June 2014 through February 2015, with monitoring continuing through 2020.

How You Can Help

If you are interested in improving the health of the St. Vrain Creek watershed, contact Rob or Tina at the address on the back of this brochure.

This project is a partnership of:

Weld County
City of Firestone
City of Longmont
Colorado Parks & Wildlife
Natural Resources Conservation Service
Dawson School
Friends of St. Vrain State Park
Confluent Design

With generous financial support by: Colorado Water Conservancy Board Invasive Phreatophyte Control Program

Project Contact:

Robert Roma, Weld County
Weed Landowner Specialist
970-304-6496 ext 3771
rroma@co.weld.co.us

Tina Booton, Weld County Weed Division Supervisor 970-304-6496 ext. 3770 tbooton@so.weld.co.us

www.weldweeds.org

Restoring the Lower St. Vrain Creek



St. Vrain State Park

Tamarisk (Saltcedar) and Russian Olive
Tree Eradication in Weld County,
Colorado

St. Vrain Creek is getting a little help to improve health and wildlife habitat.

WHAT A team of local, state, and federal agencies as well as private partners will be working together with private landowners to map and eradicate the Tamarisk and Russian olive trees that border St. Vrain Creek within Weld County, a thirteen-mile stretch of the creek. This work is being funded with a grant from the Colorado Water Conservation Board Invasive Phreatophyte Control Program.

WHY Tamarisk and Russian olive trees are foreign, invasive plants. They simplify the habitat by displacing and eliminating the native plants. They also consume more water than native trees, increase soil salinity, and pose a fire risk. Overall, Tamarisk and Russian olive trees cause problems for the local ecology as well as for farmers, ranchers, and other land managers because of their invasion of irrigation ditches and pastures.

HOW As part of a team effort, the Weld County Weed Division has undertaken the task of scouting and mapping, while the Weld County Youth Conservation Corps will remove Tamarisk and Russian olive trees along St. Vrain River Creek. The trees will be cut down with chainsaws and chipped on site. An environmentally safe chemical will be applied to the cut stumps to prevent regrowth. After removal, assessments will be made to determine which sites will benefit from revegetation with native plants. Revegetation will include grasses, forbs, shrubs, and trees that are historically native to the site.

WHEN The project will take place from June 2014 to February 2015.

Have questions or wish to get involved? Call Rob Roma @ 970-304-6496 extension 3771 for more details and to make an appointment.

This project is a partnership of:

Weld County

City of Firestone

City of Longmont

Colorado Parks & Wildlife

Natural Resources

Conservation Service

Dawson School

Friends of St. Vrain State Park

Confluent Design

With generous financial support by:

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Robert Roma, Weld County Weed Landowner Specialist 970-304-6496 ext 3771 rroma@co.weld.co.us

Tina Booton, Weld County Weed Division Supervisor 970-304-6496 ext. 3770 tbooton@co.weld.co.us www.weldweeds.org



St. Vrain Project poster & flyer distribution list:

- 1. Longmont Library 409 4th Ave, Longmont, CO 80501
- 2. Longmont Civic Center 350 Kimbark St, Longmont, CO 80501
- 3. Visitors Center 512 4th Ave # 103, Longmont, CO 80501
- 4. Longmont Museum and Cultural Center 400 Quail Road Longmont, Colorado 80501
- 5. Our Center Hospitality Center 303 Atwood St, Longmont, CO 80501
- 6. Sandstone Ranch 3001 State Highway 119, Longmont, CO 80504
- 7. King Soopers 1611 Pace Street, Longmont, CO 80504
- 8. King Soopers 2255 Main Street, Longmont, CO 80501
- 9. King Soopers 995 Hover Street, Longmont, CO 80501
- 10. Safeway 1632 Hover Street, Longmont, CO 80501
- 11. Safeway 1050 Ken Pratt Blvd, Longmont, CO 80501
- 12. Natural Grocers 1745 Main St, Longmont, CO 80501
- Walmart 2285 E Ken Pratt Blvd, Longmont, CO 80501
- 14. Walmart 2514 Main St, Longmont, CO 80501
- 15. Starbucks 1749 Main St, Longmont CO 80501
- 16. Starbucks 1100 Ken Pratt Blvd, Longmont, CO 80501
- 17. Starbucks 1050 Ken Pratt Blvd, Longmont, CO 80501
- 18. Gluten Free Bakery 331 Main St, Longmont, CO 80501
- 19. Life Bridge Christian Church 10345 Ute Hwy, Longmont, CO 80504
- 20. Ziggi's Coffee 400 Main St, Longmont, CO 80501
- 21. Sun Rose Café 379 Main St, Longmont, CO 80501
- 22. Instant Imprints 372 Main St, Longmont, CO 80501
- 23. IBMC College 2315 Main St, Longmont, CO 80501
- 24. Front Range Community College 2190 Miller Dr, Longmont, CO 80501

- 25. Longmont Theatre Company 513 Main St, Longmont, CO 80501
- 26. Jesters Dinner Theatre 224 Main St, Longmont, CO 80501
- 27. Red Frog Coffee 15 Ken Pratt Blvd Ste 200, Longmont, CO 80501
- 28. Michaels 205 Ken Pratt Blvd Ste 200, Longmont, CO 80501
- 29. Ross 205 Ken Pratt Blvd Ste 190, Longmont, CO 80501
- 30. Bed Bath and Beyond 205 Ken Pratt Blvd, Longmont, CO 80501
- 31. Chik-fil-A 215 Ken Pratt Blvd, Longmont, CO 80501
- 32. Marshalls 205 Ken Pratt Blvd, Longmont, CO 80501
- 33. Carbon Valley Library 7 Park Avenue, Firestone, CO 80504
- 34. Carbon Valley Recreation Center 701 5th St, Frederick, CO 80530
- 35. King Soopers 6110 Firestone Blvd, Firestone, CO 80504
- 36. Starbucks 11169 Frontage Rd, Firestone, CO 80504
- 37. Starbucks 8134 County Road 13, Firestone, CO 80504
- 38. Safeway 2206 County Road 13, Firestone, CO 80504
- 39. Safeway 8134 Colorado Blvd, Firestone, CO 80504

Rangeland-Pasture Recommendations Russian Olive/Elaeagnus angustifolia Identification and Management

Russian olive is a non-native deciduous shrub or small tree that can reach 10-25 feet tall. The foliage has an overall silvery appearance. The leaves are arranged alternately, 2-3 inches long and narrow with smooth margins. The upper surface is graygreen while the lower surface and leaf stalks are silvery-gray. The bark is dark reddishbrown in color and usually has 1-2 inch thorns. The twigs also have a silver-gray appearance. The flowers appear between May and June, they are yellow, bell shaped and arranged in clusters. The tree starts to produce fruit at 3 year of age. The fruit is shaped like a small olive and contain a single seed. The seeds are viable for up to 3 years. The Russian olive spreads mostly through seeds but can re-grow from injury. The Russian olive is very adaptable. The seedlings are tolerant of shade and drought conditions. It can thrive in a variety of soil types, including bare mineral substrates. They can grow between sea level and 8,000 feet.

The Russian olive originated in southern Europe, central Asia and eastern Asia. They were introduced to the United States in the late nineteenth century as an ornamental shrub or small tree. It has been used extensively in wind breaks and stream bank stabilization. Russian olive will out-compete native vegetation, changes soil characteristics and taxes water reserves. It rapidly takes over lowland fields and often dries up irrigation ditches. Although the fruit is often eaten by birds, studies show there is a greater number of birds in an area dominated by native Cottonwoods. The long thorns the plant produces can make a stand of Russian olive impassable to cows and wildlife. This results in fewer native plants and less animal diversity.



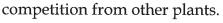


The most effective method of control for Russian olive is to prevent its establishment through proper land management. Monitor susceptible areas for new infestations.

On the backside of this sheet are Russian olive management recommendations. If you have any questions or would like more information, please contact the Weld County Public Works Dept., Weed Division at (970) 304-6496 ext. 3770. Please visit our website www.weldweeds.org.

Riparian Noxious Weeds Saltcedar/tamarisk Identification and Management

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







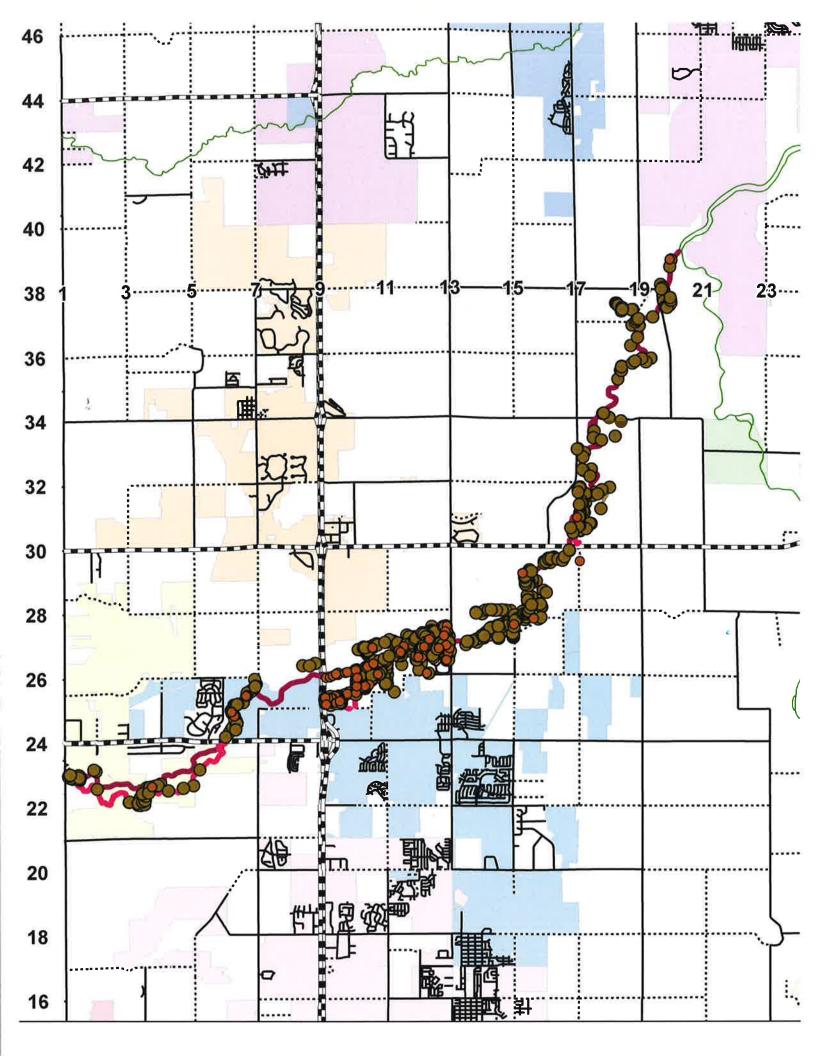
Saltcedar was introduced from Eurasia and is now widespread in the United States. It was introduced as an

ornamental and as a streambank stabilizer. Saltcedar crowds out native stands of riparian and wetland vegetation. It increases salinity of surface soil, rendering the soil inhospitable to native plant species. It uses more water than native plant communities, one large saltcedar plant can consume up to 200 gallons of water per day. Saltcedar can be found along floodplains, riverbanks, streambanks, marshes, and irrigation ditches.

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

On the backside of this sheet are saltcedar management recommendations. If you have any questions or would like more information, please contact the Weld County Public Works Dept., Weed Division at (970) 304-6496 ext. 3770. Please visit our website www.weldweeds.org.

Maps



Pictures

Aurora Organic Dairy

Before After





Acord





Adam





Colder Weather





Xcel





Nelson

Before







St. Vrain Sanitation District





Aites





Peters

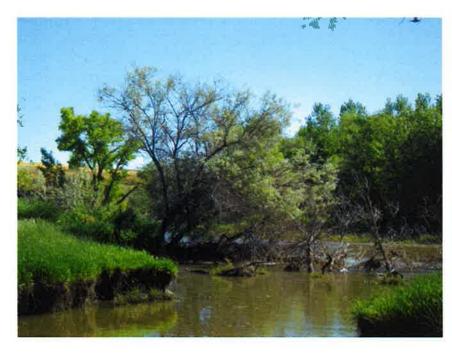
Before







JCK GRavel





Hill

Before



After



Fetters





Pelican Shores

Before

After





Nix

Before

After





Houston





St. Vrain Sanitation District





Varra





Vogel

Before

After





Wentzel





Weld County





CR 34 looking South





Hwy 66 looking North





Hwy 66 looking South

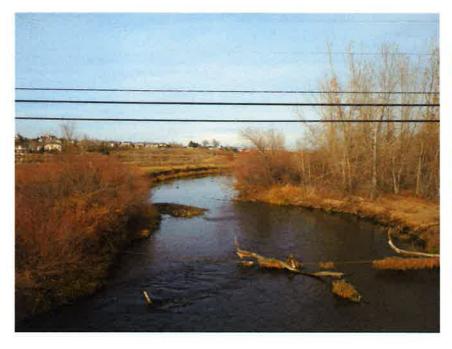




Hwy 119 looking North

Before

After





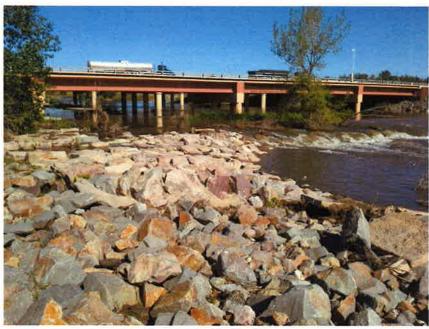
CR 19 looking West





125 Crossing Looking West





Some of the larger trees





















Work being done





















Slash Piles and Cut Trees











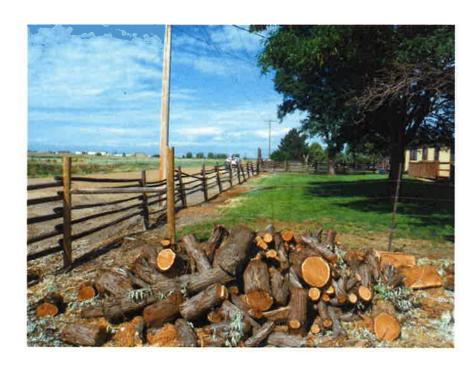


















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