

Agenda Item

DATE: APRIL 18, 2023 - 9:30 A.M.

TO: DOUGLAS COUNTY BOARD OF COUNTY COMMISSIONERS

THROUGH: DOUGLAS J. DEBORD, COUNTY MANAGER

FROM: TERENCE T. QUINN, AICP, DIRECTOR OF COMMUNITY DEVELOPMENT *TQ*

CC: DEAN ROBBINS, DISTRICT SUPERVISOR OF PARKS, TRAILS, & BUILDING GROUNDS
CURTIS MARSHALL, NOXIOUS WEED SUPERVISOR
DAN ROBERTS, ASSISTANT DIRECTOR OF PUBLIC WORKS OPERATIONS
STEVE SHOULTZ, CPRE, ASSISTANT DIRECTOR OF PARKS, TRAILS & BUILDING GROUNDS

SUBJECT: USE OF HERBICIDES IN DOUGLAS COUNTY

SUMMARY

In January 2023, a citizen group met with Commissioner Laydon and Douglas County staff to discuss their concerns and recommendations regarding the County's use of glyphosate, commonly known as Round Up and 2-4-dichloro-phenoxyacetic acid, also known as 2-4-D. The citizens cited the potential hazards to people, wildlife, and the surrounding natural resources as their primary concern and shared their ideas for alternative herbicide applications and weed control methods.

BACKGROUND

Public safety is Douglas County's number one priority when applying herbicides. Douglas County staff always follows laws and regulations pertaining to herbicide application safety requirements. Douglas County staff:

- Complies by using the correct personal protective equipment and application rates and limiting the impact of herbicide drift
- Licensed with the Colorado Department of Agriculture as public pesticide applicators in accordance with federal and state laws
- Uses databases to identify possible sensitive populations of people, animals, and resources and will adjust application practices accordingly
- Monitors weather conditions such as rain and wind to ensure lawful and safe application
- Uses an integrated weed management plan which includes herbicide applications using specialized equipment, mechanical methods such as mowing, and biological control methods

Douglas County engages the community in many ways to raise awareness and provide educational programs for the public. This outreach promotes safe weed management practices and ensures the public's safety. Douglas County staff engages by:

- Providing on-site visits for landowners and plant identification support for the public
- Training events with Douglas County Soil Conservation District
- Assisting the public with sprayer calibration needs
- Providing public outreach with a noxious weed education booth at the County Fair
- Working with the seven-member Noxious Weed Advisory Commission to assess the extent of noxious weeds and weed management within the County

The efficacy of the alternative products discussed has not been verified by County staff. With Board direction, staff is prepared to evaluate the effectiveness of the proposed herbicide products. Evaluations may include specific location tests, small test plots, comparisons, and pilot programs. Fluctuations in herbicide pricing will be monitored by staff.

DISCUSSION

Herbicides, including organic-based products, can be harmful to humans and the environment if mishandled or when used contrary to the product's application and safety labeling. Listed below are the currently used and suggested alternative products from the citizen group that is being discussed:

- Glyphosate-based herbicides - currently used
 - Non-restricted use chemicals available at most major landscape and home improvement outlets. Common names are Round-Up, Ranger, and Makaze
 - Contact, non-selective, broad-spectrum, foliar-applied herbicides
 - County usage for 2022 was 17.25 gallons of Glyphosate, costing \$926.36
- Avenger organic herbicide - citizen group suggestion
 - Contains d-limonene, which is citric oil from oranges
 - Contact, non-selective, broad-spectrum, foliar-applied herbicide
 - Additional cost of \$9,622.12
- Finalsan organic herbicide - citizen group suggestion
 - Ammoniated soap of fatty acids
 - Contact, non-selective, broad-spectrum, foliar-applied herbicides
 - Additional cost of \$3,723.04
- Natria organic herbicide - citizen group suggestion
 - Iron HEDTA –liquid iron
 - Contact, non-selective, limited spectrum, foliar-applied herbicide
 - Additional cost of \$1,951.84

- 2-4-D (2,4-dichloro-phenoxyacetic acid) - currently used
 - Selective, broad-leaf plant control, foliar-applied herbicide
 - Non-restricted, available at most retail outlets and ranch stores
 - County usage for 2022 was 8.5 gallons, costing \$174.08
 - There were no alternative products listed by the citizen group to use in place of 2-4-D. Both the citizen group and staff acknowledge that best turf management practices help reduce the need for 2-4-D

- Steam machine – citizen group suggestion
 - Requires specialized equipment with a purchase cost of \$15,000
 - Results may differ from chemical applications and may not kill all weeds with a single treatment
 - Labor intensive, the average time to treat a 2-mile long right away is two days -*Town of Monument Colorado*

NEXT STEPS

Staff is prepared to discuss with the Board of County Commissioners the current use of herbicides in Douglas County and the potential pilot program for determining efficacy of alternative products.