

**Weeds Meeting Notes:**

Participants: DNRC, Beaverhead County, Wisdom-Wise River Forest Service, Dillon Forest Service, FWP Fishing Access Sites, Butte BLM, Dillon BLM, BoR

On February 21, 2017 the Beaverhead Conservation District hosted a public meeting to engage agency land managers and the public in an information sharing discussion regarding weed management on public land throughout Beaverhead County. Please find notes from individual presentations below. If you have further questions regarding weed management on public lands or would like to report weeds please use the contact list below. In addition find a list of Cooperative Spray Days for 2017 and Beaverhead County's Noxious Weed Priority List attached.

**Beaverhead Conservation District**

Jamie Cottom

406-683-3802

[beaverheadcd@gmail.com](mailto:beaverheadcd@gmail.com)

**DNRC**

Chuck Maddox or Tim Egan

406-683-6305

**Beaverhead County Weeds Department**

Jack Eddie or Amber Burch

406-683-3790

**Wisdom-Wise River District Beaverhead-Deerlodge National Forest**

Jessica Dhaemers-Phillips

406-689-3243

**Dillon District Beaverhead-Deerlodge National Forest**

Kyle Schmitt

406-683-3900

**FWP Fishing Access Sites**

Ray Heagney

406-994-4042

**Bureau of Reclamation**

Jon Hoerning

406-683-6472

**Butte Office BLM**

Lacey Decker

406-533-7600

## **Dillon Office BLM**

Mike Mooney

406-683-8000

### **DNRC- Chuck Maddox and Tim Egan**

- Area covered
  - Virginia City Hill west through all of Beaverhead County
  - 426,000 acres
  - 420,000 acres are agriculture & grazing, 77% of these acres are school trust lands
  - The Dillon Unit has sold 24 MMBF of timber over the last 10 years
  - Approximately 2,500 acres of timbered lands have been treated. Canada, and musk thistle often becomes an issue in these areas, as well as the occasional knapweed. It is managed through a combination of contract spraying and DNRC using their staff to spray.
- Who is responsible for managing weeds on State Lands?
  - On state lands the lessee is responsible for weed management
  - With increased recreational use the weeds problem is growing and therefore DNRC is taking on more of the weed management as the recreational use cannot be attributed to the lessee. Two track motorized use has increased weed control needs.
- Staffing
  - 6 permanent employees
  - 5 seasonal fire fighters
  - All employees spray weeds some of the time (under Chuck Maddox's license) when not performing other duties
  - There is not a dedicated weeds crew
- Funding
  - A portion of timber sale revenues, \$7.15 per MBF, goes to a fund Forest Improvement (FI) projects. The funds are used for regeneration work, weed spraying, and road management.
  - Recreational use of state lands generates approximately \$1 million/ year. This money is generated from Conservation Licenses that are sold when buying a hunting or fishing license. DNRC is given \$2.00 from every conservation license that is sold. A portion of that money is used to fund weed management throughout the state. In the Central Land Office we receive \$4,000 to be used by the 4 Unit offices in Conrad, Helena, Bozeman and Dillon, for purchasing signs and spraying weeds.
  - The CLO also receives \$11,000 from the AG & Grazing Bureau for spraying weeds at the 4 Unit offices.
  - We have a small weed budget because the lessee is responsible to control the weeds on their leased ground.

## **Beaverhead County- Jack Eddie**

- Area covered
  - 1500 miles of Beaverhead County roads
  - 500 miles of Department of Transportation Roads
  - Extensive partnerships with private landowners and public land management agencies throughout Beaverhead County.
- Planning & Priorities
  - Emphasized how large of a percent of public lands in beaverhead county. Crucial we work together on weed management
  - Required by state statute to use the Beaverhead County Management Plan. This plan must be updated every two years and is available to the public at the county weeds office.
  - If an area has a grant available for public lands and/or private landowners it is made a priority
  - Continental Divide Project- Contracted for a two year period. North half was completed last year (2016), south half will be completed this year (2017).
  - Four projects from trust fund for this year
    - Blacktail
    - Grasshopper
    - Argenta
    - Grasshopper/Beaverhead
  - Deal with non-compliance reports (50/year)
  - The incorporated cities of Dillon and Lima have agreements with the county. Most of the work done within the cities is education based as they have not yet had many issues with noxious weed infestations.
- Funding
  - Beaverhead County has a \$680,000 budget for weed management
  - Taxpayers provide \$83,000 of this funding each year for county roads
  - Department of Transportation contracts provide \$54,000
  - 95,000 dollars from state for trust fund projects
    - Will match with landowners. Hopes that this will be a good incentive
  - Remaining funds are provided through grants and contracting with other land management agencies???
    - BLM
    - FWP
    - Union Pacific
    - RAC- Forest Service Grants- Funding varies, but goes to support projects on Lemhi Pass, Argenta to Birch Creek, Birch Creek to Canyon Creek, Triangle Gulch to Quartz Hill, and the Wise River Scenic Byway
    - Rocky Mountain Elk Foundation- \$10,000 to go to Canyon Creek/Maiden Rock helispraying area with Forest Service
  - A portion of auto licensing provides funds to the noxious weed trust that is used for weeds management. HB 410 is looking at increasing this rate from 1.5% to 2%. This would generate about \$1,000,000 distribute to counties.

- HB 434- Current legislature is looking at a bill to create a trust out of Fish, Wildlife, and Parks funds to provide grant monies for weed management and wildlife habitat enhancement on public lands.
- Working with biological controls in a few areas. Most biocontrol insects are not adapted to our high altitude and climate, but they are working to create a higher elevation sustainable bug.
- Dyers Woad project- There are currently six sites throughout Montana, the largest is at Snowline. There are around 540 plants in the population, down from around 85,000 in the early 1980's. The hope is to completely eradicate from Montana. Dogs are used to help find individual plants.
- New weeds to watch for:
  - Absinthe wormwood has been found at Maiden Rock.



- Medusa Head- Has only been found in one place in Montana (not BVHD County)



- Rush Skeleton Weed- Found at the Mystic Lake Trailhead in the fall of 2015



- Handouts
  - Weed Priority List
  - Weed Days

### **Jessica Dhaemers-Phillips**

- Area Covered- Wisdom-Wise River Forest District- Roughly Carroll Hill to Browns Lake North
- Staffing
  - 2016- 4 seasonal employees treating weeds and 3 permanent employees working on weeds part of the time
  - 2017- Will hire two 2 person crews to manage weeds
- Funding
  - Annual weeds budget
  - RAC funds
    - 2017 Funding for Highway 43 south to Browns Lake for an aerial spraying on Forest, BLM, State, and Private for spotted knapweed. \$18,000 available.
  - Rocky Mountain Elk Foundation
    - Provided funding for aerial treatment of 171 acres of spotted knapweed near Wisdom
    - This year will provide funding for work around Wise River
- Priority Projects
  - Bear Lake Fire- This area is being treated using burn area weed treatment funds. Oxeye Daisy is the primary noxious weed in this area.
  - Rush Skeleton Weed-
    - Found at the Mystic Lake Trailhead in the fall of 2015.
    - Plant were pulled in the spring of 2016 (June)
    - One plant found in July
    - No plants were found in August
    - Area monitored every two weeks and rosettes were treated chemically
    - Reproduction rate is high - one seed can travel 20 miles in wind. Hard to control.

### **Dillon District Beaverhead-Deerlodge National Forest Service- Kyle Schmitt**

- Area Covered- Dillon District Forest Service Lands- Roughly Carroll Hill to Browns Lake South
  - Treatments average approximately 160 -200 acres (wetted) across 450,000 acres. Have ranged as high as 400 acres when aerial treatments incorporated
  - Focused on National Forest, but willing to help neighbors
- Priority Areas Include
  - System Roads
    - Birch Creek, Lemhi Pass, Bloody Dick Roads, Pioneer Byway
    - Lemhi Pass, Bannock Pass – High potential for new invaders
  - Two Track Routes – Tendoy, Medicine Lodge
  - Mining Disturbance
  - Campgrounds/Trailheads
  - Backcountry

- Lima Peaks – riparian areas for houndstongue
- East Pioneer Leafy Spurge Patches
- Funding
  - Annual Operating budget of \$50,000 to \$60,000.
  - Additional funding from partners such as RMEF, MDF, and SWMT RAC. Funding from partners can range from \$3,000 to \$30,000 depending on the year.
  - Formal Agreement between Beaverhead County and B-D NF for weed control efforts; District purchases chemicals through the county as well as contracts for site/road specific chemical application. Beaverhead County Routinely administers RAC contracts.
- Workload is primarily chemical spot treatments via ground application, although some aerial application and bio-control agents have been used.
- Operations focused on National Forest System Lands, as well as protecting them from weed threats from adjacent State/Federal Land and access routes
- Species Treated
  - Spotted Knapweed
  - Houndstongue
  - Musk thistle
  - Canada Thistle
  - Leafy Spurge
  - Other species that have been found and routinely treated are Oxeye daisy, whitetop, St. Johnswort, hoary allysum. No known toadflax species are established on Dillon District rangeland to date.
- Additional Projects
  - Aerial sprayed Middle Fork of Little Sheep (120 acres) and Yellowband Claim Area north of Argenta (40 acres) in October of 2015. Average Cost of \$45/acre contracted through Beaverhead County. Resulted in 95% Control. One skip confirmed on flight map and hand treated in 2016.
  - Releases of gall-fly and stem-mining weevils for Canada thistle in Shineberger and Sawmill watersheds in 2011 and 2012.
- Final thoughts
  - Prevention is best tool and is achieved through
    - Routine Equipment Inspections
    - Travel Restrictions
    - Certified Weed-Free Forage Requirements
    - Education
  - Challenges
    - Cheatgrass
    - New invaders
    - Annual swings in Funding
    - Time and funding
  - Annual acreage treated remaining steady. Cost of treatment increases as search and travel time increase.
  - Know large patches are being held in check.

- Problem areas continue to demand time and funding
- Gaining ground on small infestations and two-track systems; However roads continue to be largest vector.

### **Bureau of Reclamation- Jon Hoerning**

- Area covered
  - The Bureau of Reclamation's Dillon Field office manages roughly 4700 acres of land and 17 miles of shore line around the Clark Canyon Reservoir. We are also responsible for the lands around Barrett's Park Diversion Dam.
- Management
  - We have an integrated weed management approach where we use chemicals, mechanical and biological agents. Pulling and mowing is a big part of our efforts since a lot of our weeds are in sensitive areas. We participate with Beaverhead County and other agencies for a weed day at CCR once a summer.
  - We also pay the county for spraying on separate occasions. This summer we plan to do some mapping and also hire a private applicator to do some additional spraying.
- Equipment and Personnel
  - Our equipment includes a 100 gallon spray skid we put in the back of an OHV and a 25 gallon tank mounted on an ATV. In addition all work vehicles have 2 gallon hand pump sprayers in them during the weed active months.
  - There are two employees in the Dillon Field office and we do get some efforts from our camp hosts.
- Projects
  - This past summer we collected and distributed the cyphocleonus achates (knapweed root weevils) at some of our higher density knapweed sites.
- Priority species
  - The weeds we try to address are spotted knapweed, spurge, white top, hounds tongue, mullen, henbane and thistle.

### **Fish, Wildlife, and Parks Fishing Access Sites- Ray Heagney**

- Area Covered
  - FWP's administrative Region 3 is located in southwest Montana and includes the counties of Beaverhead, Broadwater, Gallatin, Jefferson, Lewis and Clark, Madison, Park, Silver Bow, and part of Deer Lodge. Region 3 encompasses 18,089 square miles, which is more than 12% of the total land area of Montana.
  - 96 fishing access sites within this area
- Personnel
  - One 2 person crew that is responsible for all sites within the region.
  - Each site is observed and 80% of sites are treated at least once
  - Ideally would be able to go to sites that require treatment at least twice a season
- Funding ???
- Projects

- Mapping program- Sprayers are fitted with a mapping program (Parks Pro Mapping) that tracks location, plant information, chemical use (type and amount), acreage treated, cost, equipment maintenance and calibration, applicator information.
  - Two year project
  - Help legislature understand weed management wants
- Poindexter
  - Currently have a two year \$8000 budget for contractors
  - Mid March walk around with contractors for bidding

### **Butte BLM- Lacey Decker**

- Area Covered
  - 300,000 acres across 8 counties from Wisdom to Augusta to Gardiner
  - Very small portion of area in Beaverhead County
- Priority Areas
  - Timber Cells
  - Mastication Units
  - Deano Creek by Wise River is priority area in Beaverhead County
  - Also working in Humbug Spires area, this is a likely place for invaders to move into Beaverhead County
  - Surrounding landowner involvement in weed management on their land is a large factor in determining priority areas. IE) If an adjacent landowner is working hard to control weeds, BLM makes this area a higher priority than one where surrounding landowners are doing little.
- Personnel- 2 person crew based in Helena
- Programs and Partnerships
  - Assistance agreements with county
  - Adopt a Trailhead Program- Program just beginning near Helena, may expand depending on results
    - Play Clean Go
  - Dalmatian Toadflax Aerial Project- Spokane Hills area of Lewis and Clark County \$100,000 contract- 15-20% kill rate.
    - Worried Dalmatian Toadflax may move south and aerial spray not working as well as expected.
  - Biocontrol Projects- Success is limited due to cold weather
  - Sheep Grazing- This has been effective
  - Monitoring for Mussels
  - Monitoring Cheatgrass and Japanese Brome
    - Could come south

### **Dillon BLM- Mike Mooney**

- Area Covered
  - All of Madison County and most of Beaverhead County
  - 990,000 acres



- 4400 acres treated on the ground in 2017
- Personnel
  - 6 person crew plus Mike Mooney in 2016
    - 2 stationed in Ennis
    - 4 stationed in Dillon
  - Waiting on budgets for 2017 but hoping for a 5 person crew
- Priority Areas
  - New infestation
  - Areas with low weed populations (ie- keeping areas in check before they become a problem)
  - High use areas- campsites, roads, trailheads, etc.
  - Surrounding landowner involvement in weed management on their land is a large factor in determining priority areas. IE) If an adjacent landowner is working hard to control weeds, BLM makes this area a higher priority than one where surrounding landowners are doing little.
- Projects
  - Working with other agencies to best manage time by doing lands switch. For example if one agency is working in an area adjacent to another BLM will spray both and switch the labor and chemical for the adjacent agency to repay in kind somewhere else.
  - If private landowners are treating weeds on BLM they can be reimbursed for chemical as long as they are spraying with a valid applicator's license and have record of what, where, and when they sprayed.
  - D7 Experiments- This is a naturally occurring soil bacteria that has been shown to be effective in helping control cheat grass.
    - 25 acre test plot in Madison County
    - Used as a bio-herbicide-- add to water and apply
      - Bio-herbicide made in Washington with wet soils
    - Having issues with cold, dry climate
    - Will take a few years to see any results
  - Creating an Adopt-a-Trailhead program to help engage the public with weed management on public lands- pilot areas are on trailheads near Helena

BEAVERHEAD COUNTY COOPERATIVE DAYS 2017

Name	Date	Location
Crew Training	May 30, 31, June 1 2017	
Glen	June 6, 2017	8:00 am Glen Bar Parking Lot
Maiden Rock	June 7, 2017	8:00 am Fishing Access
Burma	June 8, 2017	8:00 am stack yard
Wise River	June 10, 2017	8:00 am Fire Hall
Dyer Woad	June 13, 2017	Snowline
Big Sheep	June 14, 2017	8:00 am Sheep Pens
Melrose	June 15, 2017	8:00 am Melrose Bar
Argenta	June 17, 2017	8:00 am Bus Turn Around
Bell Canyon	June 19, 2017	8:00 am Red Rock exit
Lime Dam	June 20, 2017	8:00 am Schmidt Property
Lima	June 21, 2017	8:00 am Rest Area
BOR	June 22, 2017	8:00 am Marina
Dewey	June 23, 2017	8:00 am Quarts Hill Turn
Ruby Dam	June 24, 2017	8:00 am Dam
Wolverine	June 27, 2017	8:00 am Wolverine Gate
Wisdom	June 28, 2017	8:00 am County Road Shop
Snowline	June 29, 2017	8:00 am Snowline Exit
BVHD/ Ravalli	July 5, 2017	8:00 am Pass
Medicine Lodge	July 6, 2017	8:00 am Hansen Creek
BEAVERHEAD	July 8, 2017	8:00 am High School Parking Lot
Dyer Woad	July 11, 2017	Lima
Red Rock Pass	July 12, 2017	8:00 am Pass
Monida	July 13, 2017	8:00 am Monida Pass
Wise River Pull	July 15, 2017	8:00 am Stanchfields
Little Sheep	July 19, 2017	
East Fork, Price/Peet	July 20, 2017	8:00 am East Fork Turn
Grasshopper	July 22, 2017	8:00 am Grasshopper Inn
Dyce Creek	July 26, 2017	8:00 am Dyce Creek Turn
Argenta	July 29, 2017	8:00 am Bus Turn Around
Dyer Woad	August 8, 2017	Lima/Snowline
Lima Dam	August 9, 2017	8:00 am Below Dam
Wisdom	August 15, 2017	8:00 am County Road Shop
Wise River	September 16, 2017	8:00 am Fire Hall
Argenta	September 23, 2017	8:00 am Bus Turn Around

**Appendix N**  
**Beaverhead County Noxious Weed Priority List**

<b>General Purpose</b>	
Priority 1A	<p>These weeds are not present or have very limited presence in Montana. Management criteria will require eradication if detected; education; and prevention.</p> <ul style="list-style-type: none"> <li>- Yellow starthistle (<i>Centaurea solstitialis</i>)</li> <li>- Dyer's Woad (<i>Isatis tinctoria</i>)</li> <li>- Common Reed (<i>Phragmites australis</i> ssp. <i>Australis</i>)</li> </ul>
Priority 1B	<p>These weeds have limited presence in Montana. Management criteria will require eradication or containment and education.</p> <ul style="list-style-type: none"> <li>- Purple loosestrife (<i>Lythrum Salicaria</i>)</li> <li>- Rush skeletonweed (<i>Chondrilla juncea</i>)</li> <li>- knotweed complex (<i>Fallopia japonica</i>, <i>F. sachalinensis</i>, <i>F. x bohémica</i>, <i>Reynoutria japonica</i>, <i>R. sachalinensis</i>, <i>R. x bohémica</i> <i>Polygonum cuspidatum</i> <i>P. sachalinense</i>, and <i>P. x bohémicum</i>, )</li> <li>- Scotch broom (<i>Cytisus scoparius</i>)</li> </ul>
Priority 2A	<p>These weeds are common in isolated areas of Montana. Management criteria will require eradication or containment where less abundant. Management shall be prioritized by local weed districts.</p> <ul style="list-style-type: none"> <li>- Tansy ragwort (<i>Senecio jacobea</i>)</li> <li>- Meadow hawkweed complex (<i>Hieracium caespitosum</i>, <i>H. praealtum</i>, <i>H. floridundum</i>, and <i>Pilosella caespitosa</i>)</li> <li>- Orange hawkweed (<i>Pilosella aurantiaca</i>, <i>Hieracium caespitosum</i>)</li> <li>- Tall buttercup (<i>Ranunculus acris</i>)</li> <li>- Perennial pepperweed (<i>Lepidium latifolium</i>)</li> <li>- Blueweed (<i>Echium vulgare</i>)</li> <li>- Hoary alyssum (<i>Berteroa incana</i>)</li> </ul>
Priority 2B	<p>These weeds are abundant in Montana and widespread in many counties. Management criteria will require eradication or containment where less abundant. Management shall be prioritized by local weed districts.</p> <ul style="list-style-type: none"> <li>- Leafy spurge (<i>Euphorbia esula</i>)</li> <li>- Russian knapweed (<i>Acroptilon repens</i>, <i>Rhaponticum repens</i>)</li> <li>- Diffuse knapweed (<i>Centaurea diffusa</i>)</li> <li>- Russian knapweed (<i>Acroptilon repens</i>, <i>Rhaponticum repens</i>)</li> <li>- Spotted knapweed (<i>Centaurea maculosa</i>, <i>C. stoebe</i>)</li> <li>- Oxeye daisy (<i>Chrysanthemum leucanthemum</i>)</li> <li>- Dalmatian toadflax (<i>Linaria dalmatica</i>)</li> <li>- Oxeye daisy (<i>Leucanthemum vulgare</i>)</li> <li>- Houndstongue (<i>Cynoglossum officinale</i>)</li> <li>- St. John's wort (<i>Hypericum perforatum</i>)</li> <li>- Sulfur cinquefoil (<i>Potentilla recta</i>)</li> <li>- Yellow toadflax (<i>Linaria vulgaris</i>)</li> <li>- Saltcedar (<i>Tamarix spp.</i>)</li> <li>- Common tansy (<i>Tanacetum vulgare</i>)</li> <li>- Whitetop (<i>Cardiaria draba</i>)</li> <li>- Field bindweed (<i>Convolvulus arvensis</i>)</li> <li>- Yellowflag iris (<i>Iris pseudacorus</i>)</li> <li>- Canada thistle (<i>Cirsium arvense</i>)</li> <li>- Curlyleaf pondweed (<i>Potamogeton crispus</i>)</li> <li>- Eurasian watermilfoil (<i>Myriophyllum spicatum</i>)</li> <li>- Flowering rush (<i>Butomus umbellatus</i>)</li> </ul>
Priority 3	<p>Regulated Plants: (NOT MONTANA LISTED NOXIOUS WEEDS) These regulated plants have the potential to have significant negative impacts. The plant may not be intentionally spread or sold other than as a contaminant in agricultural products. The state recommends research, education and prevention to minimize the spread of the regulated plant.</p> <ul style="list-style-type: none"> <li>- Cheatgrass (<i>Bromus tectorum</i>)</li> <li>- Hydrilla (<i>Hydrilla verticillata</i>)</li> <li>- Russian olive (<i>Elaeagnus angustifolia</i>)</li> <li>- Brazilian waterweed (<i>Egeria densa</i>)</li> <li>- Parrot feather watermilfoil (<i>Myriophyllum aquaticum</i> or <i>M. brasiliense</i>)</li> </ul>
Priority 4	<p>County designated noxious weeds</p> <ul style="list-style-type: none"> <li>- Musk Thistle (<i>Carduus nutans</i>)</li> <li>- Common Teasel (<i>Dipsacus Fullonum</i>)</li> <li>- Field Scabious (<i>Knautia arvensis</i>)</li> <li>- Black Henbane (<i>Hyoscyamus niger</i>)</li> <li>- Common Mullein (<i>Verbascum thapsus</i>)</li> <li>- Scentless Chamomile (<i>Tripleurospermum Perforata</i>)</li> <li>- Swainsonpea (<i>Sphacrophysa salsula</i>)</li> <li>- Cypress Spurge (<i>Euphorbia cyparissias</i>)</li> <li>- Myrtle Spurge (<i>Euphorbia myrsinites</i>)</li> <li>- Halogeton (<i>Halogeton Glomeratus</i>)</li> </ul>