

CONSERVATION NEWS

McCONE CONSERVATION DISTRICT

VOLUME 16, ISSUE 5: MAY 2016

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Shrub & Tree Orders

If you placed an order with us, they are in. Please stop by the office or call 485-2744 x100 to arrange for pickup.



MOTHER'S DAY IS MAY 8TH

Bush Cinquefoil plants
for sale
May 2nd—May 6th
at the
District Office.

\$1.50 each



New Supervisor



Officer Julianio swears in Greg Nagel as a Rural Supervisor.

2016 Montana Range Forum

May 4th & 5th
Big Horn Resort & Convention Center
Billings, MT

Approximately 70% of Montana is rangeland, what happens on Montana's rangelands affects everyone. This event will bring together private and public decision makers and provide an open forum to discuss rangelands in Montana.

Wednesday, May 4th

12:30 Registration
1:00 Welcome and Setting the Stage -
Les Gilman- Rangelands Resource Executive Committee Chair
Montana Sage Grouse Stewardship Program- TBD
Montana Rangelands Partnership (MRP)-Dr. Rachel Frost,
Missouri River Conservation Districts Council Coordinator
MRP Range Technicians introduction
Monitoring for Success Model-Dr. Jeff Mosley
Montana State University Extension Range Management Specialist

3:30 Break
3:45 Open discussion:
5:00 No host social hour At Big Horn Resort



Thursday, May 5th

7:30 Registration
8:30 Welcome address
9:00 Wyoming Range Health Assessment Program and Wyoming Coordinated Resource
Program -Justin Caudill-Wyoming Dept. Of Agriculture
9:45 Break
10:00 SDGC Program- Judge Jessop: Project Coordinator South Dakota Grasslands Coalition
10:45 Lessons on the Range-Gretchen Hyde: Idaho Rangelands Resource Commission Executive Director
11:30 Lunch provided
1:00 Afternoon roundtable discussion on Montana Rangelands directed by RREC.
Roundtable discussion to include brief overview of participants range programs, monitoring methods, and policy followed by open dialogue as to common ground and ideas for moving forward for the betterment of Montana rangelands.

\$25 Registration RSVP by April 27th
406-322-5359 ext. 101 or email tanya.lester@mt.nacdn.net



The 2016 Montana Envirothon was held in Lewistown April 25-26, 2016.

30 teams from across Montana competed & the results are in:

Winner of the 2016 Montana Envirothon
Helena High School

First Place: Oral Presentation
Big Sky High School

First Place: Best Test Scores
Hamilton High School

First Place FFA Team
Missoula FFA

Congratulations!

Good Luck!

Helena High School will represent Montana at the North American Envirothon in Toronto Canada July 24-29.



WE ALL NEED TREES • NACD POSTER CONTEST • DUE MAY 2ND



United States Department of Agriculture

Cover Crop Tips

Natural Resources
Conservation Service
Montana

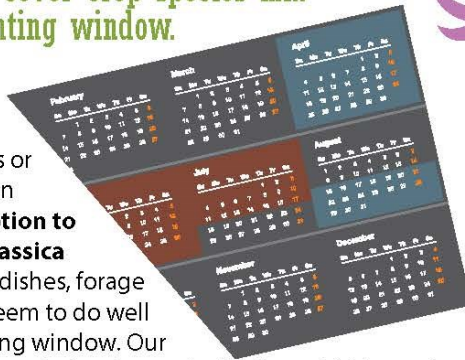


1 Let your goals and resource concerns guide your cover crop design.

For example, a cover crop designed for grazing should be different than a cover crop designed for maximum nitrogen fixation. Plan accordingly.


2 Tailor the cover crop species mix to the planting window.

Mixes are most successful when they are mostly cool-season species or mostly warm-season species. **One exception to this may be the brassica species.** Turnips, radishes, forage kale, and collards seem to do well regardless of planting window. Our cool-season planting window is usually April to mid-May and mid-August to early September. Our warm-season window is mid-May to mid-June (shallow soil temps 70 degrees F or warmer and adequate soil moisture). Planting cool and warm season species in mixes together is generally not recommended unless a mid-season planting date is used when chance of frost is over. Some areas may not have a warm season due to high elevation and/or short growing season.




3 If you want cover over an entire growing season, you may need to plant two cover crops:

a cool-season mix



planted in the fall or early spring and terminated at the end of May followed by

a warm-season mix



planted in early June and terminated with fall frost followed by grazing.

4 The overall crop rotation is more important than a single cover crop for adding diversity.

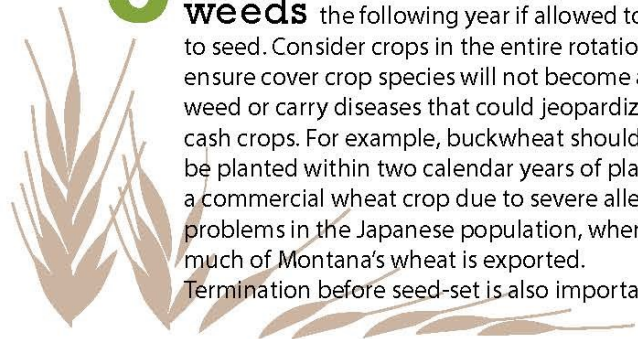
Use the cover crop to fill gaps in the rotation. A cover crop mix does not need to have all four plant functional groups (cool-season broadleaf, cool-season grass, warm-season broadleaf, warm-season grass) to be successful.



5 Plan for adequate weed control,

especially prior to seeding a mixed cover crop. Allow time for a flush of weeds and adequate weed kill prior to seeding. Once the cover crop is planted, few weed control strategies are available if something gets out of control.

6 Likewise, certain cover crop species can become weeds the following year if allowed to go to seed. Consider crops in the entire rotation and ensure cover crop species will not become a weed or carry diseases that could jeopardize cash crops. For example, buckwheat should not be planted within two calendar years of planting a commercial wheat crop due to severe allergy problems in the Japanese population, where much of Montana's wheat is exported. Termination before seed-set is also important.



7 More cover crop species are not always better than fewer

species for biomass production. There seems to be a biomass threshold for each site, and the addition of more species may only dilute the effects of the strongest competitors.



there's more →

Cover Crop Tips

Natural Resources Conservation Service Montana

8  Even in small amounts, certain cover crop species can provide flowers that are beneficial to pollinators and beneficial insects.

A small amount of additional fertilizer may be beneficial to encourage nutrient cycling.

A soil test can provide information that can be used to determine species and nutrient applications.



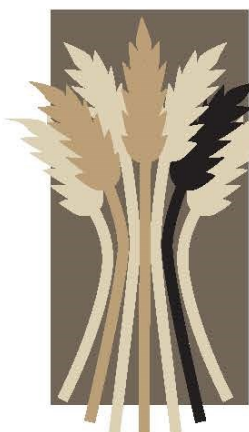
Soil moisture conservation is critical for dryland cover crops.

Be mindful that our peak precipitation window is April through early June, with a very dry period from June 15th onward. In dryland situations where soil moisture is critical, plan a cool-season cover crop to be planted in late fall or early spring and terminated by June 15th. Be particularly mindful of this in annual precipitation zones of 13 inches or less.

11 Using cover crops in dryland prior to winter wheat seeding may be one of our

most challenging cover crop scenarios, as there is no time for soil moisture recharge prior to wheat seeding. In addition, the threats of diseases such as rhizoctonia or wheat streak mosaic virus

needs to be addressed by breaking the "green bridge." Breaking the "green bridge" means having a period of several weeks prior to seeding with no growing plants. For a partial fallow replacement in a winter-wheat rotation, plant a spring-seeded, cool-season cover crop and terminate based on soil moisture, weeds and cover crop maturity. When considering a warm-season cover crop for fallow replacement, it may be best to follow the cover crop with a spring-seeded cash crop.




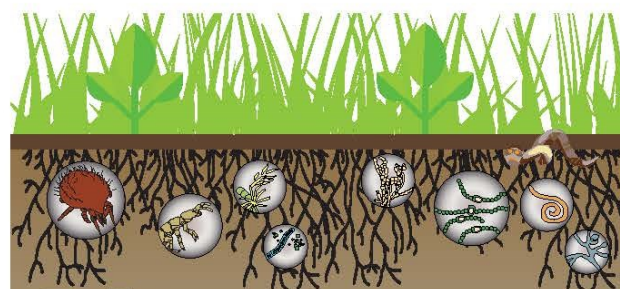
12 Be aware that the Risk Management Agency (RMA) requires 35 days of no crop growth between cover crop termination and winter wheat seeding for crop insurance purposes. If a crop, or a cover crop, is planted on summerfallow acreage in a fallow year, the following planted crop will not meet the RMA Summerfallow Practice definition until the acres lie fallow for a full crop year. However, the acreage may be insured under the "Continuous Cropping Practice". Check with your crop insurance agent or RMA before planting cover crops to understand the implications on crop insurance.

13 When cover crops follow small grains especially barley, under irrigated or high moisture conditions spray after small grain harvest to decrease volunteer competition.



14 Annual cover crops are only one tool to build soil health. Perennial crops and diverse rotations also provide positive soil health benefits.

15  Grazing can be an excellent way to re-coup the money in a cover crop investment. Fall is often the best time for grazing, as it provides supplemental forage at a necessary time of the year, and the combination of frost and grazing makes it easy to terminate the crop. Ensure species planted are not poisonous to livestock and send forage samples to a certified lab for nitrate and other toxicity tests as needed, and a forage quality analysis prior to grazing.



16 Improving soil health is a long-term commitment.

It can take 10 to 15 years to noticeably build soil organic matter in dryland crop systems. Be patient.

17  Cover crops require good management.

Growers new to the technique are advised to **start small** (5 – 10 acres) and build on lessons learned.

2016 Spring Acreage Reporting

When spring seeding is complete, producers are encouraged to mark their maps with the appropriate planting and intended use data and drop the maps off at the FSA office. Office staff will generate the FSA-578, Report of Acreage. The completed FSA-578 may be used for reporting planting information for crop insurance purposes. Acreage reports need to be signed at your local FSA office **AND** with crop insurance agents for producers with multi-peril crop insurance.

Filing for NAP Losses

The CCC-576, Notice of Loss, documents a producer's loss or damage to a crop or commodity due to an eligible cause of loss, as well as failed acreage and prevented planting. A CCC-576, Notice of Loss must be provided for prevented planting claims, within 15 calendar days after the final planting date established for the crop, and for low yield claims, the earlier:

- 15 calendar days after the disaster occurrence or date of loss or damage to the crop first becomes apparent
- 15 calendar days after the normal harvest date established for the crop.

Timely filing a Notice of Loss is required for all crops including grasses. For losses on crops covered by the Non-Insured Crop Disaster Assistance Program (NAP) and crop insurance, you must file a CCC-576, Notice of Loss, in the FSA County Office by the dates previously mentioned.

Change in Farming Operation

If you have bought or sold land, or if you have picked up or dropped rented land from your operation, make sure you report the changes to your county FSA office as soon as possible. When making ownership changes please provide a copy of the land deed or recorded land contract for purchased property. A reminder that the failure to maintain accurate farm records with FSA on all land you have an interest in can cause potential loss of program eligibility.

Farm Loan Program Availability

FSA has a number of loan programs available to assist applicants to begin or continue in agricultural production. As a farmer or rancher, whether you are just starting out or have many years of experience, loans are available for farm operating purposes and/or to purchase or improve a farm or ranch. All qualified producers are eligible to apply for these loan programs. As the "Lender of First Opportunity" FSA targets some of the direct and guaranteed loan funds for beginning and/or underserved farmers or ranchers. For purposes of this program, a beginning farmer/rancher is defined as someone who started in farming or ranching less than 10 years ago; underserved individuals are women, African Americans, American Indians, Alaskan Natives, Hispanics, Asian Americans and Pacific Islanders. FSA loans are only available to applicants who meet all the eligibility requirements and are unable to obtain the needed credit elsewhere. For more information, contact your local FSA office who can schedule an appointment with the Farm Loan Program (FLP) staff serving your area and/or visit the National FLP Web site at: <http://www.fsa.usda.gov/programs-and-services/farm-loan-programs/index>.



United States Department of Agriculture
Farm Service Agency

FSA News

Upcoming FSA Deadlines in Montana

- **May 14:** 2016 CRP Spring Managed and Routine Grazing Period Ends
- **May 31: Final Availability Date for Loans and LDPs for Corn, Dry Peas, Grain Sorghum, Lentils, Mustard Seed, Rice, Safflower Seed, Chickpeas, Soybeans and Sunflower Seed**
- **July 15:** 2016 Acreage Reporting Deadline for Spring Seeded Alfalfa Seed, Forage Seeding, Conservation Reserve Program (CRP), Fruit (except cherries), Vegetables, Christmas Trees, and all Spring-Seeded Crops and any other crops not required to be reported by previously announced deadlines.
- **July 15:** The nomination period begins for County Committee Elections across Montana
- **July 16:** CRP 2016 Summer/Fall Managed Haying and Grazing Begins (with prior County Committee Written Approval of Request)
- **August 1:** Deadline for 2016 ARC and PLC Enrollment
- **August 1:** Last day to file nomination forms at the USDA Service Center for County Committee Elections



USDA is an equal opportunity provider, employer and lender. To file a complaint of discrimination, write: USDA, Office of the Assistant Secretary for Civil Rights, Office of Adjudication, 1400 Independence Ave., SW, Washington, DC 20250-9410 or call (866) 632-9992 (Toll-free Customer Service), (800) 877-8339 (Local or Federal relay), (866) 377-8642 (Relay voice users).

Featured Noxious Weed: Field Bindweed

Field bindweed, the morning glory-type weed is a perennial that can be a very persistent problem in gardens, flower beds, and other parts of the yard. The plant can grow prostrate, with stems up to ten feet long, or it can climb like a vine. Blossoms are white or pink and shaped like a funnel. This weed reproduces both by seed and by creeping roots. The root system is deep, growing as deep as 27 feet, so pulling or hoeing the weed is ineffective. According to one study, it required 13 years to eliminate bindweed using this method; any shoots that are missed will continue to nourish the vast root system.

To control field bindweed in areas where it is well-established, the use of an herbicide can be more practical and usually much more effective. Herbicides that will move downward into the root system are required to kill the vegetative growth nodes on the roots of field bindweed. Fall herbicide applications for field bindweed are most effective, applied shortly before frost. Avoid using herbicides when the field bindweed needs water because when plants are drought-stressed they slow down all internal activity, thus slowing transport of the systemic herbicides to the roots. Contact your County Extension agent for assistance in selection and application of herbicides.

Mulching can sometimes be effective, but must be done with materials which bindweed can not penetrate, such as fabric weed barriers. The entire area infested must be covered for a minimum of one entire growing season or longer. When fabric weed mats are used, the entire area should be mulched to eliminate shoots that emerge around the edges of between strips of mat, allowing the plants to survive. Horizontal roots can extend for many feet. Plastic mulches do not work because the weed can penetrate them.

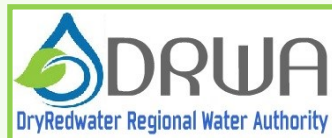
Relatively new herbicides that are almost non-toxic are the soap-based herbicides. However, they will kill only the portion of the plant with which they come in contact, so in the case of deep-rooted perennials such as field bindweed, which reproduce from rootstalk as well as seed, the herbicidal soaps are ineffective as they will not move down into the root system.



Article source: Weed Pest Topics-Field Bindweed, Montana State University
Photo source: http://oregonstate.edu/dept/nursery-weeds/feature_articles/bindweed/

Springtime Tips and Tricks Water Conservation is Simple

- **Spring Leaks:** Check for leaks in all pipes, hoses, connections, and faucets. Even a tiny leak can translate into wasting thousands of gallons of water over a surprisingly short period of time. Repair all leaks immediately.
- **Picky Planting:** You don't have to give up having an attractive yard when you conserve. There are many beautiful groundcovers that require less watering – Daylilies, Zinnias, Hostas, and Salvia are great examples. Also, don't plant a lawn that needs a lot of water. Select a grass seed that is well suited to the climate and thrives in the amount of sunlight and rain the lawn receives.
- **Don't Take the Rake:** Who even likes raking anyway? When you are finished mowing, leave the grass clippings on the lawn. This will boost water retention and help grass grow thicker. Also, keeping the length of your lawn at approximately 2 ½ inches will reduce evaporation and require less water.
- **Shut-off Nozzles:** Shut water off when not in use. Nozzles also help to more effectively direct water than when using your finger to create a stream.
- **Runoff = Wasteful:** Most people overwater lawns. Try to avoid watering driveways or sidewalks, and always shut sprinklers off when water begins to run down the street. Cycle watering in areas where runoff occurs, especially on sloped or compacted dry soils.
- **Just Keep Weeding:** Weeds are notorious for stealing water from other plants. If you keep the weed population in check, you won't have to water as much, or as often.
- **Recycled Rain:** Place rain barrels or buckets beneath downspouts. It all adds up in short order—a 1,000 square foot roof will collect 420 gallons of water with every inch of rainfall. Rainwater is great for watering gardens, plants, grass, and even washing the car!
- **Nix Mid-Day Sprinkling:** Did you know there were more efficient times of the day to water? Water generally evaporates most rapidly between 10am and 4pm.



Restrict sprinkler use to before or after these times and use less.



How can agroforestry help landowners adapt to increased rain intensity?

Rain events have become heavier and more frequent. These events can often cause flooding that damages crops and leads to erosion.

As the climate changes, many regions of the United States are experiencing rain events of increasing intensity, with peak rainfall occurrences becoming more frequent and surpassing previous peak rainfall amounts. Additionally, a greater percentage of total precipitation is occurring during peak precipitation events.

All of this is causing greater soil erosion and more frequent flooding, especially in the Northeast and Midwest. Future climate projections suggest that the increase in heavy precipitation events will continue, even in regions where total precipitation is projected to decrease, such as the Southwest.

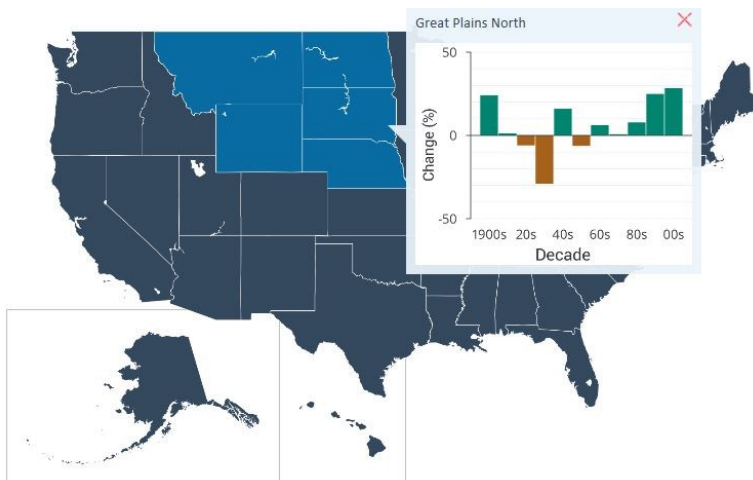
These heavy precipitation events affect agricultural and forested landscapes by increasing the amount of water flowing through streams and rivers, making field and bank erosion, as well as flooding, worse. Both erosion and flooding can damage crops, overload infrastructure, and increase siltation in drinking water reservoirs.

Future climate projections suggest this increase in heavy precipitation events will continue.

Agroforestry systems can help landowners adapt to this change and lessen negative impacts. Forest and tree cover can intercept rainfall, increase the amount of that rain that filters into the ground, and reduce the quantity, speed, and peak flows of runoff. Tree plantings can have positive effects at a watershed scale, even if trees are established in narrow strips along uplands or riparian areas.

Decision support tools can help to identify riparian areas where bank erosion is likely to occur and where riparian forest buffers would be effective at reducing erosion and enhancing water quality. Riparian buffers work best as part of a system of conservation practices. Proper management can reduce the potential negative effects of streamside trees, such as clogged agricultural drainages from tree debris.

The addition of trees and other permanent vegetation to the landscape through agroforestry can allow landowners to reduce impacts of extreme rainfall events while enhancing agricultural production. Riparian forest buffers have been discussed above. Windbreaks and alley cropping systems can help to reduce soil erosion and flooding throughout the watershed, while maintaining, or in some cases increasing, crop production. Silvopasture and forest farming also allow the positive effects associated with tree cover while diversifying and increasing economic productivity. By adopting agroforestry practices, landowners can help adapt their lands and the watersheds in which they live to the increased rain intensity associated with a changing climate.



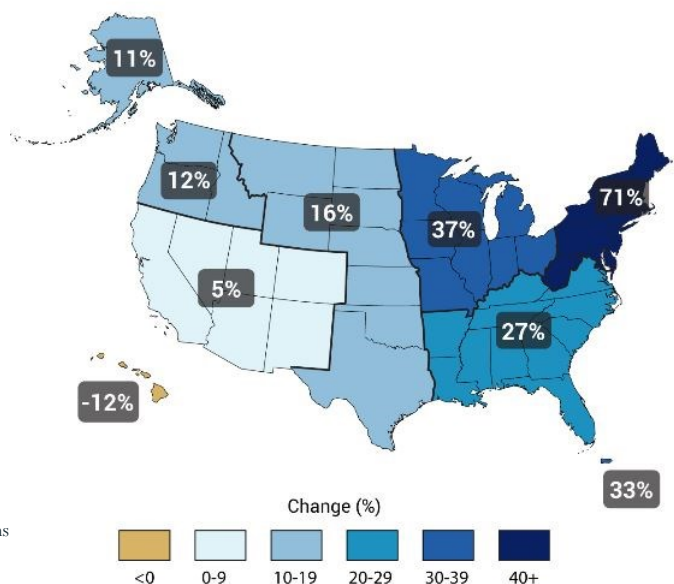
Percent changes in the annual amount of precipitation falling in very heavy events, defined as the heaviest 1% of all daily events from 1901 to 2012 for each region. The far right bar is for 2001-2012. In recent decades there have been increases nationally, with the largest increases in the Northeast, Great Plains, Midwest, and Southeast. Changes are compared to the 1901-1960 average for all regions except Alaska and Hawaii, which are relative to the 1951-1980 average. (Figure source: NOAA NCDC / CICS-NC).

To learn more, please explore:

- 2014 National Climate Assessment—Heavy Downpours Increasing <http://1.usa.gov/20J0adv>
- USDA NAC AgBufferBuilder: <http://nac.unl.edu/tools/AgBufferBuilder.htm>
- USDA Climate Hubs: <http://climatehubs.oce.usda.gov>
- USGS Climate DATA Portal: <http://cida.usgs.gov/gdp/>
- USFS Center for Forest Disturbance: <http://www.srs.fs.usda.gov/forestdisturbance/>

Article source: "Working Trees Info" USDA National Agroforestry Center
Data map source: National Climate Assessment 2014 <http://1.usa.gov/20J0adv>
Cloudburst photo source: <http://img.tfd.com/w/16/6A563-downpour.png>

Observed Change in Very Heavy Precipitation



This map shows percent increases in the amount of precipitation falling in very heavy events (defined as the heaviest 1% of all daily events) from 1958 to 2012 for each region of the continental United States. These trends are larger than natural variations for the Northeast, Midwest, Puerto Rico, Southeast, Great Plains, and Alaska.

The trends are not larger than natural variations for the Southwest, Hawaii, and the Northwest. The changes shown in this figure are calculated from the beginning and end points of the trends for 1958 to 2012. (Figure source: updated from Karl et al. 2009).



Photo source: spectacularink.com

Our battle-fields, safe in the keeping
Of Nature's kind, fostering care,
Are blooming, - our heroes are sleeping, -
And peace broods perennial there.
~John H. Jewett

McCONE CONSERVATION DISTRICT

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Mandi Nay, Coordinator, DRWA
Sue Wittkopp, CED, FSA

Upcoming Events

May 2016

- 4 Board Meeting, Circle
- 4-5 MT Range Forum, Billings
- 8 Mother's Day
- 22 Circle High School Graduation—Class of 2016!!
- 30 Memorial Day: Office closed

June 2016

- 1 Board Meeting, Circle
- 9 River Rendezvous, near Ft. Benton
- 19 Father's Day
- 23 CMR Community Working Group Meeting, Circle

July 2016

- 4 Independence Day: Office closed
- 6 Board Meeting, Circle

McCONE CONSERVATION DISTRICT MISSION STATEMENT CONSERVATION DISTRICT AUTHORITY

Mission Statement—By performing a leadership role in conservation for McCone County, the District will develop a more sustainable and economic resource management plan for the community.

Conservation District Authority— MCA 76-15-102 Declaration of policy. It is hereby declared to be the policy of the legislature to provide for the conservation of soil and soil resources of this state, for the control and prevention of soil erosion, for the prevention of floodwater and sediment damages, and for furthering the conservation, development, utilization, and disposal of water and therefore to preserve natural resources, control floods, prevent impairment of dams and reservoirs, preserve wildlife, protect the tax base, protect public lands, and protect and promote the health, safety, and general welfare of the people of this state.

County Landownership Maps for Sale

Wall Map	\$30.00
Book Map	\$35.00
Color Book Map	\$45.00

Equipment Rental

Tree Planter	\$0.20 per tree
Fabric Layer	\$0.05 a foot
Post Pounder	\$95.00 day/ \$550.00 week

Tree Supplies

Fabric Squares 3' x 3'	\$0.75 each
Fabric Squares 4' x 4'	\$1.00 each
Fabric Staples	\$0.10 each
4' Plastic Tree Protector	\$2.00 each
Plantskydd 1 Quart	\$22.00
Plantskydd 1 Gallon	\$59.00