Weston County Natural Resource District Newsletter

JULY 2019

District Supervisors

Alicia Redding
Chairman

Emily Hartinger
Treasurer

David Tysdal
Vice Chairman

Gene Norman-
Supervisor

Tucker Hamilton
Supervisor

District Staff

Lacey Sloan
Coordinator

Austin Sommerville
NWTF Forester

District Hours

Monday-Friday
7am-3:30pm

USDA-NRCS Staff

Paul Eitel
District Conserva-
tionist

Joey Rhoades
Range Conserva-
tionist

Weston County Natural Resource District

Hazardous Waste Day: August 31st

Newcastle	COST
Shopko Parking lot	5 canned goods
10am to 1pm (No Early Birds)	$5 if you bring a little
	$10 if you bring a lot

Items that can be dropped off for recycle and disposal include:

- Automotive- (DO NOT MIX AUTO FLUIDS) antifreeze, oil, brake fluid, transmission fluid, car batteries
- Paints/Solvents- latex or oil based paints, paint stripper, paint thinner, wood preservatives
- Lawn & Garden-fertilizers, pesticides, rodent poisons, fungicides
- Home- bleach, disinfectants, drain cleaner, glues, nail polish remover, household batteries, florescent light tubes, aerosols, lighter fluid
- Electronics- computers, monitors, printers, fax machines, televisions

This is a partial list of possible items that can be brought on the collection day.

If you are unsure please contact the District Office.

**** Large amounts and Businesses CALL AHEAD Before AUGUST 12th to be APPROVED*****

Prescription drug disposal in NEWCASTLE

Thank you for participating!

This event is made possible by: Weston County Natural Resource District, Weston County Commissioners, Weston County Weed and Pest, Red Giant Oil, Wyoming Honor Conservation Camp, City of Newcastle, Shopko, Wyoming Refining Company, and our volunteers! THANK YOU!

Questions? Contact the District Office at (307) 746-3264

SOIL HEALTH DEFINED

Soil health is **the continued capacity of a soil to function as a vital, living ecosystem that sustains plants, animals, and humans.** Only living things can have "health," so viewing soil as a living, breathing ecosystem reflects a shift in the way we view and manage our nation's soils. Soil isn't an inert growing medium, but rather is the home of billions of bacteria, fungi, and other organisms that together create an intricate symbiotic ecosystem. This ecosystem can be managed to support plants and animals, by cycling nutrients, absorbing, draining and retaining rainwater and snowmelt for use during dry periods, filtering and buffering water to remove potential pollutants, and providing habitat for the soil biological population to flourish and diversify to keep the ecosystem functioning well.

KEY SOIL HEALTH MANAGEMENT PRINCIPLES

These principles are represented in the circular diagram to the left to emphasize their relationship as a continuum where each complements the others and also depends on the others.

1. Minimize disturbance
2. Maximize soil cover
3. Maximize biodiversity
4. Maximize presence of living roots

PROTECTING THE SOIL HABITAT

The first two principles, shown on the right side of the diagram above focus on protection of the soil habitat: minimize disturbance and maximize soil cover. Practices that use these principles maintain or increase stable soil aggregates and soil organic matter (SOM), and protect the surface of the soil that is most susceptible to the degrading forces of wind and water. Maximizing soil cover also buffers against temperature fluctuations that stress plants and soil organisms, reduces evaporation rates, and increases the amount of water entering the soil profile from precipitation and irrigation.

PRINCIPLES FOR HIGH FUNCTIONING SOILS 2

SOM is highest at the soil surface and is critical for stabilizing soil aggregates.

Maintaining SOM helps support additional soil functions including water infiltration, drainage and storage, nutrient-holding capacity and release, and habitat for soil biota.

FEEDING THE SOIL ORGANISMS INHABITING SOIL

The second two principles, shown on the left side of the circular diagram, focus on feeding soil organisms. Maximizing the diversity of food (energy and carbon inputs) and aboveground biodiversity increases the diversity of soil animals and microorganisms. Diversity not only refers to food sources, but also aboveground diversification of plants and animals, and microbial diversification underground. Diversification stimulates a host of additional benefits including breaking disease cycles, providing habitat for pollinators, and stimulating plant growth.

Maximizing the presence of living roots in the soil can be accomplished through eliminating fallow, diverse crop rotation, inclusion of cover crops, and/or through dedicated grasslands (native or pasture). Mixing up which plants are grown during the year or over the course of multiple years may help to break disease/pest cycles.

When these two principles are properly applied as part of a soil health management system, soils can maintain or even increase SOM content as well as enhance nutrient cycling.

Worm being born within the pore space of a well-aggregated soil.

HEALTHY, FUNCTIONING SOILS ARE ABLE TO:

- Cycle nutrients effectively
- Store carbon and nutrients in soil organic matter
- Provide good aeration to promote root growth
- Improve farm and ranch resiliency and profitability
- Improve yield stability
- Reduce runoff and erosion
- Improve water storage and plant available water while protecting water quality
- Be resilient to drought, heavy rainfall events, and temperature extremes
- Reduce disease and pest problems

Soil Health Management Systems Principles can be generally used in all production systems to achieve this. However, the specific practices chosen to implement the principles must be adapted to each production system, climate, ecosystem, and soil to effectively build and maintain healthy, functioning soil.

SOIL DISTURBANCES

Physical disturbances such as tillage or compaction from heavy machinery; Chemical disturbances such as fertilizer and pesticide applications, especially over application or misuse. Biological disturbances, such as over-grazing animals that can lead to compaction and reduction in perennial root systems, introduction of invasive species and/or use of monocultures can cause biological imbalances which all can affect soil functions.

SOIL COVER

consists of two main forms: 1) living plant canopy such as a growing crop, cover crop, or grassland; and 2) mulch, either as dead plant material (e.g. crop residues, prunings from trees and shrubs, thatch in grasslands) or as an amendment (e.g. compost, bark chips).

BIODIVERSITY

is the variation of life forms within a given ecosystem or field. The different life forms include all of the plants, animals and microorganisms, and their secretions. For soil health management systems, biodiversity can be increased through a variety of approaches including: plant diversity through the use of diversified crop rotations, cover crop mixes, diversity through the proper integration of grazing animals (e.g. livestock) into the system and includes animals living within the soils or microbial diversity, as well as direct additions with biological amendments. All four soil health management principles contribute to biodiversity.

www.nrcs.usda.gov

PUBLIC NOTICES

FY 2019-2020 Budget

The following budget has been reviewed:

Estimated Cash on Hand- 7/1/2019	$162,654.84
Estimated Emergency Reserve- 7/1/2019	$70,616.00
Projected Revenue:	
Anticipated Cash and Revenue *(State grants, Unanticipated Revenue, Sales Tax)*	$249,278.34
Mill Levy Requested	$120,000.00
Total Projected Revenue	**$369,278.34**
Projected Expenditures:	
Administrative Budget *(Coordinator, Office supplies, Postage, Memberships, Board travel, Training)*	$62,513.38
Operations Budget *(Education, Forestry, Wildlife, Water Quality programs)*	$274,864.96
Indirect Costs Budget *(Insurance, Payroll taxes, Worker's comp.)*	$31,500.00
To be added to Emergency Reserve	$10,000.00
Total Projected Expenditures	**$369,278.34**

Publish Date: July 2019

NOTICE TO STOP CUTTING DURING SUMMER MONTHS!

Pine engraver beetles (Ips pini) spend the winter in the duff layer on the forest floor or in logging slash. They infest fresh logging slash and fire wood while it is still green during the spring. As summer temperatures increase and conditions get drier, they attack live trees, usually smaller trees of 5-inches or less in diameter. To avoid beetle kills in the surrounding forest, it is advisable to cease thinning, pruning or firewood cutting during the hot summer months as freshly cut wood attracts Ips beetles. Avoid stacking or piling wood next to living trees.

WCNRD IS ACCEPTING APPLICATIONS!!

RURAL COST SHARE/RANGE IMPROVEMENT :This is a 50% cost share grant up to $5,000 and covers anything that can help improve rangeland health: electric fence, cross fence, solar wells, pumps, stock tanks, pipeline, dam repair, etc. Application Deadline is **3pm on August 1st , 2019.** We encourage our landowners to utilize their land to its fullest potential while maintaining the integrity of the land.

SEPTIC MAINTENANCE COST SHARE : This is an opportunity for landowners to Receive a $100 reimbursement for getting their septic tanks pumped. Applicants can only apply every 2 years. We formed this cost share opportunity so that septic tanks will be kept in prime shape and ensures that leaching into water ways and well systems is minimized to maintain water quality. Application Deadline is **3PM on August 1st, 2019**

Stop by the office or print an application from our website: *www.westoncountynrd.org*

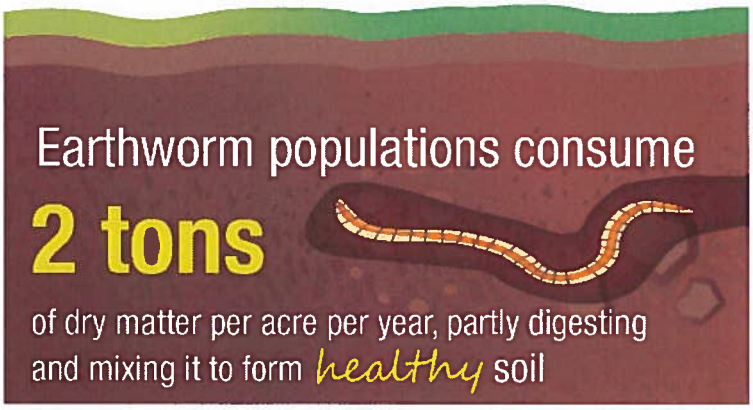
"The Range Wrangler"

By Joey Rhoades
NRCS Range Management Specialist

I grew up in Newcastle, WY. Throughout school I participated in cross country, soccer, 4-h, and the explorer post. Once I graduated in 2012 I began pursuing my college degree. I spent two years at Laramie county community college where I completed my general studies associates, and then transferred to the university of Wyoming where I began a bachelors in Molecular Biology. Several years into this program it became very clear I wanted to pursue a different avenue. This is when I began studying Rangeland Ecology and Watershed Management. Beginning in 2012 I was a member of a Wildland fire crew with the forest service. This gave me the opportunity to become more proficient with team skills, communication, and leadership roles. I worked with the forest service as a seasonal until the summer of 2018, when I took a position as an assistant Engine Captain with the Bureau of land Management in lander Wyoming. After working with the BLM I accepted my current position with the NRCS in Newcastle. After abstaining some work experience I plan to return to school and obtain my master's degree. Outside of work I am active in hunting, hiking, running, snowshoeing, and snow boarding.

Healthy Soils are Full of Life

By Sammy Simmons
WCNRD Intern



There are millions of species and billions of organisms that live in the soil such as, bacteria, algae, insects, earthworms etc that all live in the soil that we walk on and smell and plant flowers in the soil. The soil needs to always be covered by growing plats. This helps the soil to be healthier and for everything that lives in the soil to live longer. Raindrops don't always help the soil if there is a opening in the soil. When raindrops fall it hits the bare soil, it dislodges unprotected soil particles, and begins the process of soil erosion. That does not always helps your plants and the soil. There is a lot of work to out into keeping the soil healthy and better for the earth, and the food that people eat. The soil can take 20,000 pounds of organic inputs such as crop residue to increase the actual soil organic matter from 4 percent to 5 percent. Manure breaks down quickly to add nutrients for crops, but takes longer to improve the soil than compost. That is not good because the fast is manure then the soil can brake in then the plant and everything that I living can die and the soil is not health anymore. Everything that lives in the soil helps your crops and plants to grow heather. So, help keep the soil healthy.

RAIN BARRELS ARE BACK!

Features include:
- 50 gallon capacity
- Recycled pepper barrels
- Terra cotta color
- 35"tall and 23" diameter
- Jar top lid and screen for debris

Cost-Share Rate
$50.00 each

Contact us...

Weston County Natural Resource District
1225 Washington Blvd. Suite 3
Newcastle, WY 82701
Phone: 307-746-3264
E-mail: lacey.sloan@usda.gov

**Bulk Rate
U.S. Postage
Rate
Newcastle, WY
Permit No. 52**

The mission of the Weston County Natural Resource District is to provide leadership in conserving the natural resources in Weston County by providing information, education and technical assistance to meet the needs of our users.

Meetings are held the second Tuesday of every month at 3:00p.m. at the USDA Service Center. Members of the public are welcome to attend.

UPCOMING EVENTS

July

4th **OFFICE CLOSED (Independence Day)**

9th Board meeting: USDA Services Building, 3 PM

30th WCNRD at Family Fun Night @ Weston Co Fair

August

1st Rural Cost Share and Septic apps are due

13th Board meeting: USDA Services Building, 3 PM

31st Household Hazardous Waste Day—August 31st

Newcastle 10am-1pm

(Bring 5 canned goods or $5 for a little, $10 for a lot)

September

2nd **OFFICE CLOSED (LABOR DAY)**

10th Board meeting: USDA Services Building, 3 PM