

# *Weston County Natural Resource District*



*2016-2021*

*Long Range Natural Resource  
Management Plan*

# Weston County Natural Resource District



## **Board of Supervisors**

Jerry Varner  
Alicia Vigil-Redding  
Emily Hartinger  
Gene Norman  
David Tysdal

## **District Staff**

Lacey Sloan, District Coordinator

## **District Meetings**

The District Board of Supervisors meets the second Tuesday of each month at 3:00 p.m. at the District Office.

## **District Mission Statement**

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

Weston County Natural Resource District  
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Newcastle, WY 82701  
Phone: 307-746-3264  
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**December ##, 2016**

**This Long Range Natural Resource Management plan will serve as a guide to establish programs each year and provide future direction to the District Board as program activities are planned over the next five years to meet the needs of the citizens of the Natural Resource District.**

**The Plan is intended to describe the Weston County Natural Resource District's mission, attributes, goals and objectives to enhance the natural resources through programs and involvement with local people.**

**A planning process for the Long Range Plan was started in **May 2016** at the local workgroup meeting with local conservation agencies. We discussed the local conservation concerns and how we could address them. WCNRD emailed out a survey and invited members of the public to provide comments in person on suggestions for the Long Range Plan and identify issues or concerns about natural resources in our county.**

**The district created a draft Long Range Plan and advertised the plan for public comment.**

**The draft plan was available for public comment from **October 31, 2016** through **December 16, 2016** with a public meeting held on **November 21, 2016** to gather comments and suggestions on the draft plan.**

**The Weston County Natural Resource District Board adopted the Long Range Management Plan on **December ##, 2016** to serve as a guide for the next five years.**

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**Jerry Varner, Chairman**

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**Alicia Vigil-Redding, Vice-chairman**

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**Emily Hartinger, Secretary/Treasurer**

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**Gene Norman, Supervisor**

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**David Tysdal, Supervisor**

## Introduction

Weston County Natural Resource District's Long Range and Natural Resource Management Plan was developed to assist the District in providing natural resource programs that are most important to the local people in our area. This plan identifies the natural resources, concerns and issues associated with each of the resources, and the goals and objectives that have been identified to address those concerns and issues.

The purpose of the Management Plan is to provide a guide for the planning and accomplishment of work by the district and its cooperating landowners/users and agencies. This plan will include the work and goals for the Weston County Natural Resource District for the **period January 2017 through December 2021**. The goals and objectives will be accomplished through sponsorship of district programs and through partnerships with government agencies, non-profit organizations and local citizens.

This plan may be modified during its time frame to reflect new or pressing natural resource issues or concerns brought before the District Board for consideration.

**This plan has undergone a 45 day public comment period to solicit comments and suggestions from our constituents.**

## Authority

The Weston County Natural Resource District, pursuant to W.S. 11-16-122 (xvi) of the Wyoming Conservation District Law is authorized to develop plans for the Weston County Natural Resource District and file said plans in the office of the Weston County Clerk.

## Governmental Subdivisions of the State

The Weston County Natural Resource District is a local government and a governmental subdivision of the state as defined and established by the Wyoming Statutes at Title 11, Chapter 16, et seq., entitled –“Wyoming Conservation Districts Law”. The Board of Supervisors of the WCNRD (5 members) are elected by the people of the WCNRD at District elections by popular vote. The elected members represent both the rural and urban populations within the WCNRD.

Board supervisors serve in a volunteer capacity, and are only compensated for expenses incurred in their delivery of district programs, meetings, planning activities, and specific district projects. The Board of Supervisors employs one full-time District Coordinator to implement the projects and programs of the WCNRD. The WCNRD program operation administration is supported by the 1 (one) mill voter approved county levy. The levy was first approved in 1990 and the latest approval in 2003.

The Weston County Natural Resource District is guided by the legislative declarations and policy of the Wyoming State Legislature with the following charge:

AS PRINTED FROM: W.S. 11-16-103 Legislative declarations and policy.

- (a) It is hereby declared that the farm and grazing lands of Wyoming are among the basic assets of the state; that improper land user practices cause and contribute to serious erosion of these lands by wind and water; that among the consequences, which would result from such conditions are the deterioration of

soil and its fertility and the silting and sedimentation of stream channels, reservoirs, dams, and ditches; that to conserve soil and water resources, and prevent and control soil erosion, it is necessary that land use practices contributing to soil erosion be discouraged and that appropriate soil conserving land use practices be adopted.

- (b) It is hereby declared to be the policy of the legislature to provide for the conservation of the soil, and soil and water resources of this state, and for the control and prevention of soil erosion and for flood prevention or the conservation, development, utilization, and disposal of water, and thereby to stabilize ranching and farming operations, to preserve reservoirs, preserve wildlife, protect public lands and protect and promote the health, safety, and general welfare of the people of this state.

## District Overview



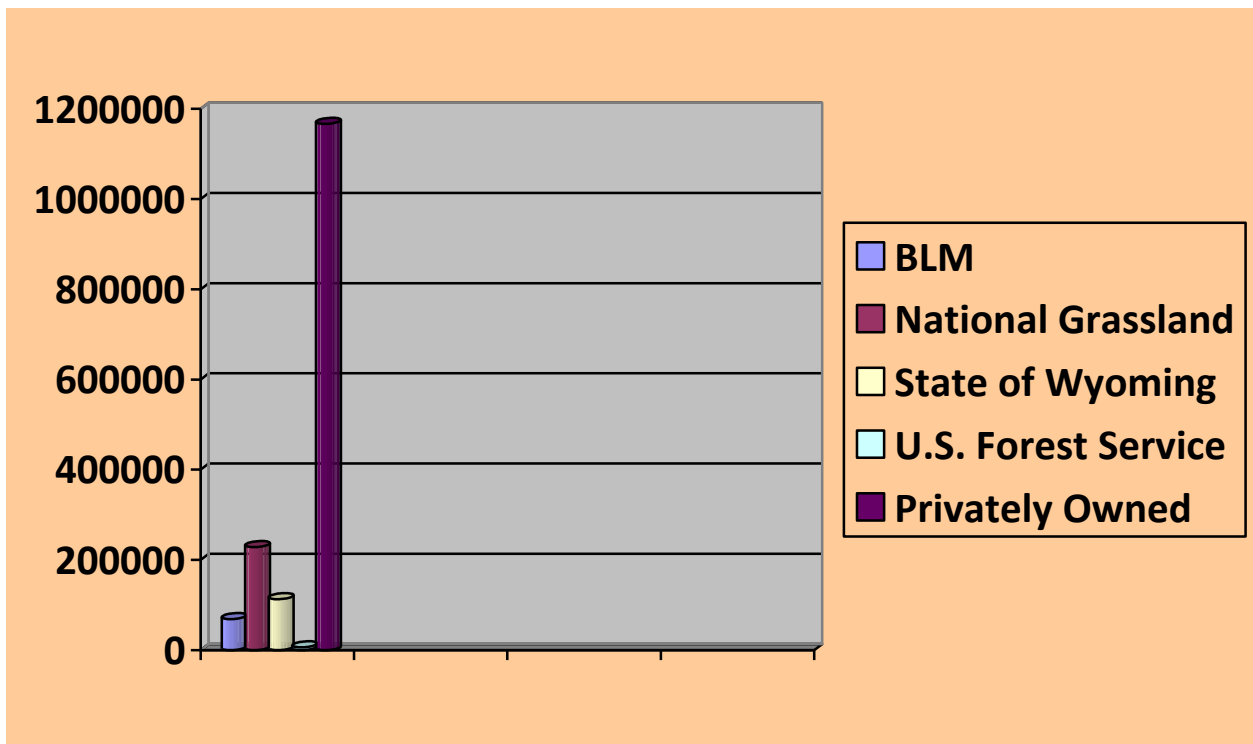
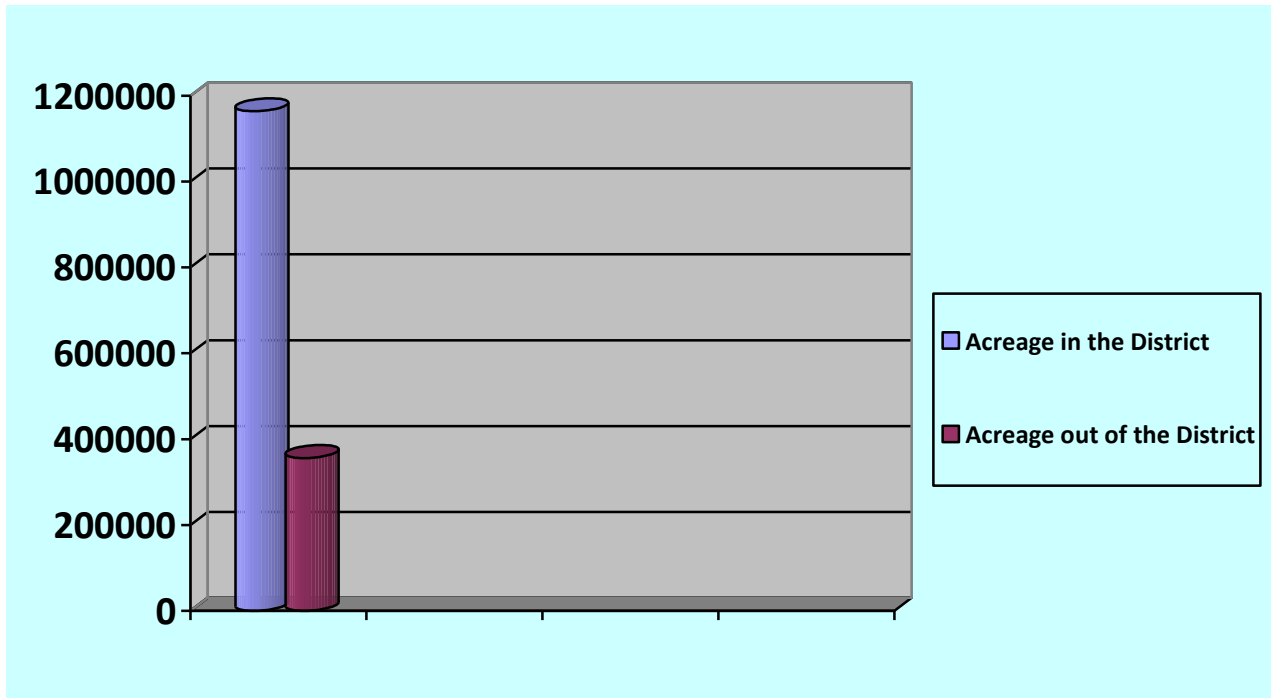
The Weston County Natural Resource District was organized in 1960 and received certification from the Secretary of State on January 16, 1961 under the name Beaver Skull Conservation District. A name change to Weston County Natural Resource District was designated on April 15, 1994 by the Secretary of State of Wyoming. The name change was a recommendation at a local long range public planning meeting.

The original District boundary was land in Weston County that lies east of Highway 85 and north of Highway 16. Landowners inside this area at the time of creation had the option to opt out of the district. Additionally, landowners outside this area were given the option to opt in. All land additions to the district since that time, have been done voluntarily by landowner request. Any land in Weston County lying outside District boundaries can be added voluntarily by landowners to the District at anytime. The District currently encompasses a majority of Weston County.

Because the duties assigned to the Conservation Districts are many and varied, it is necessary for the District to analyze resource needs and issues and develop a long range management program for the conservation and development of the natural resources within the District.

# Land Status

The Weston County Natural Resource District is in Weston County which lies in the northeastern part of Wyoming. According to the Weston County Assessor's Office, the total area of the District is 1,163,904 acres. The amount of acreage out of the District is 355,786.





# History, Custom, & Culture

In 1885, the land northwest of Nebraska in Wyoming Territory was wild and uninhabited except for a few scattered ranches. Large cattle companies brought cattle to the area to graze on the open range.

The Weston County area was opened for settlement with the search and subsequent confirmed coal seam finds at Cambria around 1887. Cambria was a thriving coal town located north of present day Newcastle. The coal was needed to feed the train engines coming into southern Wyoming. The railroad was brought into Weston County in 1889.

The county was named for J. B. Weston of Beatrice, Nebraska, who organized a small pack outfit in the year 1887 and visited the region of the reported coal out cropping. By September, 1887 prospecting and development of the Cambria mines was well under way.

Weston County was originally a part of Laramie County when the latter was established in 1875. On March 12, 1890, Governor Warren approved an act passed by the last Territorial Legislature of Wyoming creating the County of Weston.



Under the Homestead Law, the miners of Cambria Coal Mine settled the prairie country in the hills, farming there in the summer and working the mines during the winter. It is estimated that 90 percent of the Black Hills area of Weston County was settled by mine workers.

The current and traditional principal economic activities include ranching and dry land agriculture, oil and gas production, services and retail trade, as well as forest products. The economy of the county is dependent on the activities related to the abundant natural resources occurring within the county.

Agriculture has been an important component of Wyoming's economic identity and an essential part of Wyoming's culture and lifestyle.

There are numerous outdoor recreation opportunities that include camping, hiking, fishing, boating, rock climbing, and hunting. In the winter months, the Black Hills provide snowmobile and cross county skiing opportunities.

## Municipalities

The City of Newcastle is located in the east central part of the county. It is nestled next to the foothills of the Black Hills. It was first surveyed by J.H. Hemingway, the superintendent of Cambria Coal Company and he was given the honor of naming the town. He named it Newcastle, after his birth place, Newcastle upon Tyne, England.

The Town of Upton is located in the northwest part of the county and can trace its roots back to the early 1880's when a small community known as Irontown, sprang up along the banks of Iron Creek. Upton had its beginnings during the construction of the railroad.

The community of Osage lies halfway between Newcastle and Upton along US Highway 16.

## **Elevation**

Elevation ranges from 6,480 feet in the northeastern corner of the District to 3,620 feet in the southeastern corner. Most of the area is 3,800 to 4,800 feet in elevation.

## **Climate**

Weston County has four distinct seasons. In winter, the average temperature is 25 degrees F and the average daily minimum temperature is 14 degrees. The lowest temperature on record, which occurred at Newcastle, on February 1, 1951, is -32 degrees. In summer, the average temperature is 70 degrees and the average daily maximum temperature is 84 degrees. The highest recorded temperature, which occurred in Newcastle in July 1954, is 105 degrees. The average annual temperature is 47 degrees.

The total average annual precipitation is 14.1 inches. Of this, 11.1 inches, or 79 percent, usually falls in April through September. The growing season for most crops falls within this period. The heaviest 1-day rainfall during the period of record was 2.7 inches at Newcastle, in June 1964. Thunderstorms occur on about 25 days each year, and most occur in April through July.

The average seasonal snowfall is 37.1 inches. The greatest snow depth at any one time during the period of record was 12 inches. On an average of 31 days at least 1 inch of snow is on the ground. The number of such days varies greatly from year to year.

The sun shines 70 to 80 percent of the time in summer and 60 to 70 percent in winter. The prevailing wind is from the west or northwest. The average growing season is 136 days.

## **Soils**

The area encompassed by the District is comprised of gently sloping to rolling plains and terraces, foothills, and the Black Hills uplift.

In general, the foothills of the District include shales, sandstone and limestone formations with soils that are moderately deep to shallow and medium textured. In the area above the foothills, the red bed area is made up of broken soft red siltstones and limestones. The soils are deep to shallow. North and east of the red bed is an area of darker and moderately fine textured soils. South of the foothills are shallow, fine-textured soils on shales.

A soil survey of Weston County was completed in 2006 according to the National Cooperative Soil Survey Standards. A soil survey involves mapping or delineating differences in the material that makes up the outer portion of the earth's crust and also associated surface features such as slope, vegetative cover, streams and cultural features.



Information derived from the soil survey is used to assist landowners in preparing soil conserving ranch and farm management plans. Urban dwellers, industry and units of government make use of soil survey maps and interpretations to determine the suitability of soils for various users.

The completed Weston County Soil Survey book is available free of charge at the District Office to any interested resident. In addition, the NRCS has created the Web Soil Survey online and many landowners have been directed to make use of this website. The site provides detailed information and color maps on soils throughout the country. Users can search their local property and print detailed reports on soils, land uses, expected vegetation and many other factors. The site can be accessed at [www.websoilsurvey.nrcs.usda.gov](http://www.websoilsurvey.nrcs.usda.gov)

## Vegetation

About 75% of the county is rangeland. The vegetation most commonly found on rangeland is western wheatgrass, green needlegrass, needleandthread, blue grama, little bluestem, sideoats grama, threadleaf sedge, prairie junegrass, inland saltgrass, and alkali sacaton.

The predominate shrub species are big sagebrush, silver sage, and greasewood.

Woodland makes up about 25,000 acres of the area. Most of the woodland is in the northeastern quarter of the county near Newcastle, Four Corners, and Upton. There is a smaller area of about 1,500 acres in size in the southwestern corner of the survey area, near Rochelle. Ponderosa pine is the dominate tree species and has the greatest commercial value.

## Watersheds

Weston County has two major watersheds. The Cheyenne River watershed includes the majority of the county. The Belle Fourche River watershed includes a small area in the northwest part of the county and a small amount along the northern border.

The Cheyenne River enters the District in the south-west part and leaves in the south-central portion of the District. The main small streams that flow into the Cheyenne River include: Salt, Soldier, Stockade Beaver, and Whoop-Up Creeks on the eastern border; Beaver, Oil, Skull Creek, and Mush Creeks in the east-central part; Raven Creek in the northwestern part; and Lodgepole, Black Thunder, Little Thunder, and Hay Creeks in the south-central part.

Buffalo Creek and Cold Springs Creek drain into the Belle Fourche watershed to the north.

Currently, there is only one stream listed on Wyoming DEQ's 303(d) List of impaired streams. This is Poison Creek and it is listed for naturally occurring oil seeps. It is being remediated by Wyoming Oil & Gas Commission.

# Long Range Goals and Objectives

## **Air**

Air quality problems do exist in the county, but are usually site specific. In particular, air quality issues have been raised in the City of Newcastle regarding releases from the refinery and also in various parts of the county due to dust from county roads. The county continues to pursue and receive funding from the state to apply magnesium chloride on county roads and the treatments do provide temporary relief and benefit to landowners but funds are limited and application of magnesium chloride cannot be applied to all roads every year due to funding and limited county staff, therefore air quality on county roads will continue to be an issue.

.Additionally, the Wyoming Refining Company is in the process of upgrading facilities that will decrease the amount of pollutants released from the refinery. In general, air quality problems are related to unpaved roads, industry, mining, construction, diesel and auto exhaust, wood smoke, smoke from wildfires and prescribed burns.

**GOAL:** Encourage actions that benefit the air quality of our District.

### **OBJECTIVES:**

1. Provide assistance to business, industry, land management agencies, and private landowners to reduce or eliminate dust or other particles.

## **Crop/Pasture/Hayland**

The majority of the cropland/pasture/hay land in the District is dry land farming. However, there are areas in the county that do benefit from irrigation. Irrigation occurs along Stockade Beaver Creek in the eastern part of the county, the Cheyenne River in the southwest corner, Skull Creek in the center of the County, and Beaver Creek in the southeast.

Production on the dry land farming is variable because of precipitation fluctuations. Alfalfa, Alfalfa/grass mix, grass, oats, barley are the most commonly grown.



Not all of the irrigated croplands have a dependable water supply to assure optimum yields. Center pivots and flood irrigations are the two types of irrigation used. The most commonly grown crop under irrigation is alfalfa; however corn and wheat is also planted to a lesser extent.

Soil blowing is a concern on some soils in this county. The risk of soil blowing can be reduced by using a resource management system that includes such practices as wind strip cropping, stubble mulch tillage, and windbreaks.

Water erosion on fallowed fields is a concern during precipitation events. Practices such as terraces, grassed waterways, and stubble mulch tillage can help overcome this problem.

**GOAL:** Encourage and promote conservation practices that reduce water erosion, soil blowing, water efficiency, and boost production.

**OBJECTIVES:**

1. Provide assistance to landowners to reduce soil blowing and water erosion.
2. Support conservation practices that improve irrigation efficiency and water quality.
3. Encourage permanent cover plantings on marginal dryland planting sites.
4. Provide rental equipment for no-till practices.

## Forest Land and Urban Forest

Portions of the Black Hills National Forest and the Thunder Basin National Grasslands are included within the Weston County Natural Resource District. Timber management, timber thinning, and defensible space against wildfire are major concerns in wooded areas. The forest lands are primarily ponderosa pine, juniper, Black Hills spruce, and aspen.



There has been and continues to be commercial logging in Weston County, though the intensity of logging varies according to economic conditions that drive demand for wood products.

There are approximately 168,000 acres of woodland in the county capable of economically producing wood products. A significant portion of the woodland is privately owned. The rest is administered by the state and federal governments. Most of the woodland is in the northeastern quarter of the county (Black Hills National Forest, state, and private). There is also an area of woodland in the western part of Weston County (Thunder Basin National Grasslands,

state, and private).

Ponderosa Pine is the dominant tree species and has the greatest commercial value. Other tree species common to the area are bur oak, quaking aspen, plains cottonwood, willow, box elder, and Rocky Mountain Juniper.

Newcastle, Upton, and Osage are all included within the forest area. These urban areas, as well as numerous subdivisions in forested rural areas near Newcastle and Upton, require defensible space protection and face the same concerns with disease and insects as traditional forested land. The Wyoming State Forestry division has hired a part-time coordinator to educate landowners about defensible space and provide information on cost share opportunities to enact defensible space projects on their property. Technical assistance is also needed to help urban and rural property owners identify insect and disease problems with their trees.

**The dense overstocked forested lands in the district are in need of management. Education of sustainable forest management and the benefits of reducing stand densities are a priority.** Efforts to educate landowners about stand density are ongoing in cooperation with Wyoming State Forestry.

A large part of the District is naturally treeless and could benefit from implementation of windbreaks to conserve energy, protect livestock and enhance wildlife habitat. Through the advancement and availability of planting aids, the survival of seedling trees is very high.

Windbreak plantings and living snow fences play an important role in offering protection to home sites, farmsteads, and roadways in the county. Tree plantings for windbreaks or living snow fences provide energy savings, aesthetic value, and increased wildlife habitat.

**GOAL:** The WCNRD will encourage and promote tree plantings by providing technical assistance, a non-competitive tree seedling program and tree planting grants and encourage tree management to produce a healthier, sustainable forest.

**OBJECTIVES:**

1. Provide general tree planting and care information and assist with tree selection and design assistance for windbreaks.
2. Provide a variety of tree and shrub species to encourage affordable tree plantings for windbreaks.
3. Planting of living snow fences along roadways will be supported to help with drifting and blowing snow, provide some wildlife habitat benefits and provide aesthetic beauty to the landscape.
4. Encourage and support community tree planting and beautification projects through annual, competitive grants offered to local groups.
5. Forest management programs will be supported. There are many benefits such as improved understory vegetation, adequate water, sun and air for improved timber production, reduction in stand density, and thus resilient forest.
6. Provide tree planting equipment (tree planter & fabric machine) to assist with windbreak tree plantings.
7. Provide planting survival aids such as fabric mulch and tree protectors for purchase.
8. Continue to work cooperatively with the Wyoming State Forestry Wildfire Protection Coordinator to educate landowners about how to create defensible space to protect homes and property from wildfire.
9. Continue to work with the Newcastle and Upton Tree Boards to support urban tree plantings and maintain the healthy and vitality of urban trees.
10. Work cooperatively with Wyoming State Forestry and other agencies to educate landowners about forest management and steps that can be taken to properly manage forested lands to create a resilient landscape.

## Land Use Planning

Wyoming Conservation District Law provides for the conservation of the soil, and soil and water resources of this state, and for the control and prevention of soil erosion and for flood prevention or the conservation, development, utilization, and disposal of water, and thereby to stabilize ranching and farming operations, to preserve national resources, protect the tax base, control floods, prevent impairment of dams, reservoirs, preserve wildlife, protect public lands, and protect and promote the health, safety, and general welfare of the people of this state.

**GOAL:** Cooperate and coordinate with governmental agencies and private landowners to protect the natural resources of this District.



**OBJECTIVES:**

1. Advocate open spaces concepts and principles and the retention of agricultural lands in production.
2. Request cooperating agency status for Weston County on issues that affect the natural resources where the District has expertise.
3. Provide written documentation to the Weston County Planning Board on soil suitability, erosion control, sedimentation, and flooding problems for proposed subdivisions in the county.
4. Request Federal, State, and local agencies notify the Weston County NRD of any actions or regulations which may impact natural resources. (Federal Executive Order 13132, October 1999)
5. Support identification, early detection, and control of noxious weed infestations and encourage implementation of county weed control policies.
6. Protect and enhance the quality of water by promoting permitting and proper management of septic systems.
7. Provide the Weston County Planner detailed recommendations regarding subdivision reviews and other land use issues in the county.

## Minerals

Weston County has a variety of mineral resources that include coal, bentonite, oil, and gas. The mineral industry provides economic resources to the county. The Cambria Coal Mine operated until the Great Depression of the 1930's. Oil was discovered in 1880 but did not become important until the Osage Oil Field discovery of 1918. Gas and oil now are transported out of the area by truck and pipeline. An oil refinery is located in Newcastle. The presence of bentonite deposits near Upton and elsewhere in the county led to one of the first commercial bentonite operations in the United States. Bentonite used to be processed at a plant located west of Upton, but was closed in 2002.

In the past, Newcastle has experienced several economic booms and busts primarily related to mining, and oil and gas exploration.

Potential impacts to water quality from mineral extraction, in particularly coalbed methane water discharge are a major concern to downstream landowners.

**GOAL:** Encourage suitable exploration and extraction of available minerals while protecting the natural resources in the county.

**OBJECTIVES:**

1. Request that local, state, and federal agencies contact the District on plans that may affect the natural resources.
2. Pursue cooperating agency status for Weston County on issues that affect our natural resources.
3. Support mineral development that is in compliance with local, state, and federal regulations with consideration given to protecting the natural resources.
4. Advocate for landowners who are impacted by mineral resource exploration and extraction and provide information on how they minimize negative effects to their land during these activities.



# Rangeland

The general rangeland plant cover is composed of native grasses, forbs, and shrubs that are valuable as forage for livestock and wildlife. The grass species commonly found on rangeland include western wheat grass, green needlegrass, needleandthread, blue grama, little bluestem, sideoats grama, threadleaf sedge, prairie junegrass, inland saltgrass, and alkali sacaton. Big sagebrush, silver sage, and greasewood are predominate shrub species.



About 75 percent of the District is rangeland. More than 80 percent of the farm income is derived from livestock, principally cattle. Most ranches are cow-calf-yearling enterprises. The production of livestock is necessary to the livelihood of the ranching/farming businesses and related industries in Weston County.

In the areas that have similar climate and topography, differences in the kind and amount of vegetation produced on rangeland are closely related to the kind of soil. Effective management is based on the relationship between the soils and vegetation and water.

Water quantity and distribution, improving native vegetation, improving riparian areas, livestock management, soil erosion, and sustaining wildlife habitat are all major concerns for rangeland health.

**GOAL:** Encourage good range management to improve the watershed and sustainability of ranching and agriculture.

## OBJECTIVES:

1. Support monitoring efforts on rangeland conditions to assist with management decisions.
2. Promote and educate landowners on conservation practices that improve range condition, livestock management, and wildlife habitat.
3. Support efforts to identify noxious weed sites and initiate management efforts.
4. Encourage woody species plantings to benefit riparian areas.
5. Support efforts to reverse the encroachment of Ponderosa Pine into rangeland meadows and encourage meadow regeneration.
6. Encourage demonstration projects on sagebrush to enhance habitat for sage grouse and other wildlife.
7. Request local, state, and federal agencies work with local public in the development of management plans.
8. Promote public education by providing information on natural resources.
9. Support carbon sequestration demonstration projects and efforts.

# Riparian Areas

A riparian area is the ribbon green vegetation area along a stream or creek or around a lake or pond. A riparian area has visible vegetation or physical characteristics reflective of permanent water influence.



Riparian vegetation plays an important role in improving water quality by reducing erosion and sedimentation, protecting streambank stability, and providing shade and cover for fish and wildlife habitat.

**GOAL:** Encourage management of riparian areas to improve woody regeneration, streambank stability, and water quality.

**OBJECTIVES:**

1. Support woody vegetation along waterbodies as well as native grass to protect streambanks from erosion during normal flows and assist with streambank maintenance during periods of above flow conditions.
2. Support upland water development to assist with grazing management of riparian areas.
3. Support improved riparian areas for wildlife habitat.
4. Provide information and technical assistance on tree plantings in riparian areas.

## Waste Management

Solid waste management and disposal is an issue that affects everyone and has taken on significantly more local importance in recent years. Proper disposal of solid waste and maintenance of private and public landfills is an important natural resource issue and regulated under the Wyoming Department of Environmental Quality. Because new, future landfills will be heavily regulated and monitored due to the potential for soil and water contamination, the creation of more landfills will be very expensive. Therefore, it is in the best interest of Weston County to preserve the functionality of its current landfills and reduce the waste-stream to extend the life of the landfill. Recycling materials and preventing their entrance into landfill is the best way to extend the life of landfills.



The District has worked cooperatively with the City of Newcastle for several years to provide for recycling of cardboard and aluminum cans in Weston County, with drop-off locations in Newcastle. However, over the past few years, additional attempts have been made to increase and expand the recycling program. These discussions are ongoing and we expect expanded recycling in the near future.

As a service to the community, the District has sponsored a one day, annual Household Hazardous Waste Collection Day in the fall. Drop off locations are in Upton and Newcastle and several entities cooperate to provide financial and logistical support for the event including the City of Newcastle, Weston County Commissioners, Weston County Weed and Pest, Shopko, Wyoming Refining Company, Red Giant Oil, City of Upton and Newcastle Area Chamber of Commerce.

**GOAL:** Encourage and facilitate community awareness and participation in proper waste management and recycling.

**OBJECTIVES:**

1. Coordinate local programs and activities to encourage recycling and composting.
2. Educate the community on proper storage and disposal of hazardous waste materials and sponsor annual Household Hazardous Waste Collection Day.
3. Provide information on permitted septic system installation and alternatives.
4. Provide information and education programs on the benefits of recycling, composting and proper hazardous waste management.
5. Encourage reduction, reuse, and recycling of materials.
6. Continue to work towards expanding and improving the existing recycling program.



# Water

Water plays an important role in agriculture, community uses, industry, recreation, and wildlife uses. Because the majority of Weston County receives just 10 to 14 inches of precipitation per year, the availability and conservative use of water is very important to residents of the county.



Whether it is surface or ground water, the quality of water is also important to Wyoming residents. State and federal laws regulate water quality with respect to point sources or discharges and non-point sources of water pollution. Wyoming DEQ promulgates the rules and regulations for water quality for surface water and ground water.

**GOAL:** Encourage productive watersheds that are maintained for water quality and quantity for use as surface and ground water.

## OBJECTIVES:

1. Provide information on water quality programs, issues, conservation practices and new regulations to the public.
2. Participate in voluntary requested watershed planning efforts.
3. Support and provide a voluntary water quality monitoring program that meets the “Credible Data” legislation criteria for surface water monitoring in Weston County.
4. Support sediment control measures to reduce non-point source pollution.
5. Support water development projects to increase water quantity for livestock management and wildlife.
6. Pursue a Level 1 Watershed Study on the Beaver Creek Watershed to benefit the residents in the district and allow development and restoration opportunities.
7. Encourage water development projects to improve riparian habitat.
8. Support appropriate reservoir development to supplement recreation, wildlife, or irrigation activities.

# Wildlife

Wildlife is an important component of the natural resources in the county. A variety of game and non-game animals are found in the District. Major game animals are whitetail deer, mule deer, antelope (pronghorn) and elk. There is also a small band of bighorn sheep that resides on the Wyoming-South Dakota border east of Newcastle. Common predators are the fox, coyote, bobcat, and mountain lion. Upland game occurring in the District are rabbits, sharptail grouse, sage grouse, wild turkey and chuckar partridge.

Cold and warm water fisheries are available and are used extensively. However, there are limited fishing areas that are open to the public, so the ones that are available received significant use. Game fish such as rainbow, brook and brown trout and tiger muskie inhabit our cold waters. The warm water fish include bass, walleye, crappie, and perch.



Big game hunting, particularly for deer and antelope, is a vital part of our local economy and hunting and fishing in general is a traditional part of life in the county.

**GOAL:** Coordinate with landowners and agencies to provide technical assistance for wildlife habitat improvement projects, and provide information and comments on Endangered Species listings.

**OBJECTIVES:**

1. Cooperate with landowners and agencies in wildlife habitat improvement projects and management.
2. Support wildlife management plans that are directed toward maintaining healthy wildlife populations.
3. Provide education and information concerning endangered species nominations and designations.
4. Oppose the introduction or transplant of threatened and endangered species within the boundaries of the county, unless the District and the county consent and it is done pursuant to specific terms and conditions that avoid disrupting existing land uses.
5. Support conservation plan initiatives as an alternative to an endangered species listing.
6. Support opportunities for increased public hunting and fishing access, either through expansion of the Wyoming Game and Fish Department's Walk-In Program or through the maintenance/creation of fisheries on public land.
7. Support predator control efforts to protect wildlife and property.

## Education Program

The District works to provide educational opportunities for both adults and children in our county about natural resource issues. In order to provide information to adults, the District has sponsored several Small Acreage Workshops. The workshops have covered a variety of topics including tree pruning, grazing animals properly on a small acreage, septic systems installation and maintenance, xeriscape landscaping, raising chickens and other small animals, noxious weed identification and control and many more. The workshops have been well received and we have had good attendance at all of them.

Educational programs for children are done year round, including participation at the Weston County Ag Expo, the Black Hills Natural Resource Youth Camp at Mallo, presentations to classrooms, water quality monitoring on Stockade-Beaver Creek, presentations at the library's summer reading program and more.



The newest district educational effort is the creation of a community garden in Newcastle at the Weston County Senior Center. Initial funding and technical assistance for the garden was provided by the district, the City of Newcastle, Weston County and NRCS. The garden consists of 62 raised beds and a fruit orchard. The raised beds are available for seasonal rent by any member of the community. Renters are allowed to grow any variety of flowers, vegetables, herbs or fruit that they choose.

**GOAL:** Provide accurate and timely information to all Weston County residents about natural resource issues.

**OBJECTIVES:**

1. Promote public education by providing information on natural resources.
2. Continue to sponsor small acreage workshops at least once a year.
3. Continue partnership in the Black Hills Natural Resource Youth Camp at Mallo Camp.
4. Purchase and donate educational books to our local libraries on various natural resource topics for checkout and use by all Weston County residents.
5. Reach out to educators and offer materials and resources for teaching about natural resource issues in the

classroom.

6. Publish educational articles in the newsletter for residents which provide 'how to' information on implementing natural resource conservation activities.

## **Survey Results**

In #####, surveys were mailed to ### landowners in the District, soliciting comments on the District's current goals and priorities. ### responses were received and comments are summarized below.

**District Mission: Provide leadership in conserving the natural resources in Weston County Natural Resource District by providing information, education and technical assistance to meet the needs of the users.**

**Air Quality Goal: Encourage actions that benefit air quality in our District**

**Crop/Pasture/Hayland Goal: Encourage conservation practices that reduce water erosion, soil blowing, and water efficiency and boost production.**

**Forest Land and Urban Forest Goal: The WCNRD will encourage tree plantings by providing technical assistance and a non-competitive tree seedling program and encourage tree management to produce a healthier, sustainable forest.**

**Land Use Planning Goal: Cooperate and coordinate with agencies, private land owners to protect the natural resources of this District.**

**Minerals Goal: Encourage suitable exploration and extraction of available minerals while protecting the natural resources in the county.**

**Rangeland Goal: Encourage good range management to improve the watershed and sustain the stability of ranching and agriculture.**

**Riparian Areas Goal: Encourage management of riparian areas to improve woody regeneration, streambank stability and water quality.**

**Waste Management Goal: Encourage community awareness and participation in proper waste management.**

**Water Goal: Encourage productive watersheds that are maintained for water quality and quantity for use as surface and ground water.**

**Wildlife Goal: Coordinate with landowners and agencies to provide technical assistance for wildlife habitat improvement projects and provide information and comments on Endangered Species listings.**

**Custom and Cultural Resources Goal: Respect the custom and culture of the county in planning and development plans.**

**Other suggestions and comments received:**