

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

PRESCRIBED GRAZING

(Ac.)

CODE 528

DEFINITION

Managing the controlled harvest of vegetation with grazing animals.

PURPOSES

This practice may be applied as part of a conservation management system to accomplish one or more of the following purposes.

- Improve or maintain the health and vigor of plant communities.
- Improve or maintain quantity and quality of forage for livestock health and productivity.
- Improve or maintain water quality and quantity.
- Maintain or improve riparian and watershed function.
- Reduce accelerated soil erosion, and maintain or improve soil condition.
- Improve or maintain the quantity and quality of food and/or cover available for wildlife.
- Promote economic stability through grazing land sustainability.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to all lands where grazing animals are managed.

CRITERIA

General Criteria Applicable for all Purposes

The prescribed grazing plan is based on landowner objectives (desired future condition), resource condition and capability, and conservation needs.

Removal of herbage will be in accordance with site production limitations, rate of plant growth, and the physiological needs of forage plants.

Manage kind of animal, animal number, grazing distribution, length of grazing periods, and timing of use to provide sufficient deferment, rest periods, rotations, and to meet planned utilization levels.

Protect soil, water, air, plant, and animal resources when locating livestock feeding, handling, and watering facilities.

Manage grazing animals to maintain adequate vegetative cover on sensitive areas (i.e., riparian, wetland, habitats of concern). Concentration areas, such as those adjacent to developed water or shade, where specified use may be exceeded, will not be larger than ten (10) percent of the grazing unit. Concentration areas will not be allowed in riparian areas with the exception of identified water points.

Estimated initial stocking rates will be based on actual use records, forage inventories and management unit conditions.

Prescribed grazing will be based on the management of key species and when needed, key areas. Changes in management and plant communities may require the identification of new key species and areas.

Additional Criteria to Improve or Maintain the Health and Vigor of Plant Communities

Duration and intensity of grazing will be based on desired plant health and expected productivity of key forage species to meet management unit objectives.

Adjust grazing periods and/or stocking rates to meet the desired objectives for the plant communities and the associated resources, including the grazing animal.

Schedule livestock movements based on rate of plant growth, available forage and utilization, not calendar dates.

Periodic rest from grazing may be needed to maintain or restore the desired plant community following episodic events, such as wildfire or severe drought.

Additional Criteria to Improve or Maintain Quantity and Quality of Forage for Livestock Health and Productivity

Plan grazing to match forage quantity and quality with goals of the livestock producer and needs of the grazing animal.

Additional Criteria to Improve or Maintain Water Quality and Quantity

Maintain adequate ground cover and plant density to maintain or improve filtering capacity of the vegetation.

Minimize concentrated livestock areas to enhance nutrient distribution and improve or maintain ground cover.

Duration, intensity, frequency, and season of grazing in or near surface waters will be managed to maintain or improve water quality.

Dragging of pasture and hayland is not recommended where or when it may impact surface waters.

Additional Criteria for Soil Erosion and Maintain or Improve Soil Condition

Maintain adequate ground cover, litter, and canopy to maintain or improve infiltration and soil condition.

Minimize concentrated livestock areas, trailing, and trampling to reduce soil compaction, excess runoff and erosion.

Additional Criteria to Improve or Maintain Food and/or Cover for Wildlife Species of Concern

Manage for diverse plant communities. Manage plant height, structure and density for desired wildlife habitat.

Provide rest from grazing during critical nesting periods.

Additional Criteria to Promote Economic Stability through Grazing Land Sustainability

Evaluate the economics of the forage system and associated infrastructure.

Develop a grazing system that provides forage for as much of the year as possible to minimize supplemental feed cost.

Develop a contingency plan to ensure resource management and economic feasibility without resource degradation.

Reduce the loss of livestock from toxic and poisonous plants.

CONSIDERATIONS

The results of applying prescribed grazing for maintaining or improving vegetative condition, cover, soil condition, and water quality are typically long term (over many years). Time periods are based on inherent

site conditions, technology available, economics, and landowner objectives.

Utilization or stubble height target levels are tools that can be used in conjunction with monitoring to help ensure that resource conservation and producer objectives are met.

When needed, rest areas for a period of time to ensure the success of prescribed fire, brush management, seedings, plantings or other conservation practices.

Where practical, start the grazing sequence in a different management unit each growing season.

When weeds are a significant problem prescribed grazing should be implemented in conjunction with pest management to reestablish, protect, or enhance the desired plant communities.

Livestock feeding, handling, and watering facilities should be designed and installed in a manner to improve and/or maintain animal distribution. These facilities should also be designed and installed to minimize stress, the spread of disease, parasites, contact with harmful organisms and toxic plants.

Pest (weeds, disease, flies, parasites, insects, etc.) control (chemical, biological, or cultural) must be considered when the pests impair the quantity or quality of the forage species, or animal health to meet the management objectives. Pest control will be in accordance with Conservation Practice Standard, Pest Management Standard 595.

Supplemental feed and/or mineral requirements should be balanced with the forage consumption to meet the desired nutritional level for the kind and class of grazing livestock.

Prescribed grazing should consider the needs of other enterprises utilizing the same land, such as wildlife and recreational uses.

Consider improving carbon sequestration in biomass and soils through management of grazing to produce the desired results.

PLANS AND SPECIFICATIONS

The prescribed grazing plan shall conform to all applicable federal, state, and local laws. Seek measures to avoid adverse affects to endangered, threatened, and candidate species and their habitats.

Prepare a prescribed grazing plan (specification) for all management units where grazing will occur according to this standard. Specifications shall be recorded using approved specification sheets (Prescribed Grazing Specification 528, ID-CPA-031), job sheets, narrative statements in the conservation plan, or other acceptable documentation that is readily understood and useable by the client in their daily operations.

The manner of documentation will depend upon the size and complexity of the operating unit, the details required for a grazing prescription, and the client's needs.

Guidelines for developing a prescribed grazing plan include:

1. Goals and Objectives clearly stated.
2. Resource Inventory (i.e., resource condition, grazing animals-number and class, existing structures, facilities, and soil).
3. Forage Inventory (include client actual use records if available) of the expected forage quality, quantity and species of forage in each management unit(s) during the grazing period.
4. Forage-Animal Balance developed as a sustainable grazing plan for the management unit(s), which insure forage produced or available meets forage

demand of livestock and/or wildlife of concern.

5. Grazing Plan developed for livestock that identifies periods of grazing, rest, deferment and other treatment activities for each management unit.
6. Contingency plan developed (on client request) that details potential problems (i.e., severe drought, flooding) and serves as a guide for adjusting the grazing prescription to ensure resource management and economic feasibility without resource degradation.
7. Monitoring plan developed with appropriate records to assess whether the grazing strategy is meeting objectives. Identify the key areas and key plants that the manager should evaluate in making grazing management decisions.

Specifications for Rangeland Grazing

Inventory of native plant communities will be based on ecological sites. Forage inventory will be developed using trend, health, and utilization of production data and growth curves (See National Range Planning Handbook (NRPH), Chapter 4).

Inventory of seeded plant communities will be based on stand density, vigor, and production of the seeded species (NRPH, Chapter 4).

Identify range readiness criteria (when needed), the defined state of plant growth at which grazing may begin under a specific management plan without permanent damage to vegetation, soil, or animal health. Usually applied to seasonal range.

Utilization levels (when needed) will be based on a percent of current annual growth of key species, season of use, client and ecological objectives.

Specifications for Forestland Grazing

Same as specifications for rangeland grazing, plus the following:

The timing, duration, frequency, and intensity of grazing will be adjusted to meet forestry production and management objectives.

Specifications for Riparian Area Grazing

Same as specifications for rangeland grazing, plus the following:

The timing, duration, frequency, and intensity of grazing will be adjusted to meet in-stream, riparian, and floodplain objectives.

The management plan should be closely coordinated with other agencies whose activities or jurisdictions may impact riparian areas. Impacts may include wildhorse management, roads, mining, and wildlife.

Riparian Grazing Units

Grazing units containing stream segments not meeting identified beneficial uses or areas where improvement is needed to maintain or improve beneficial uses will be given special management consideration. Management of these areas will be with the specific intent of restoring beneficial uses as defined for the stream segment by the Idaho Department of Health and Welfare Division of Environmental Quality or maintaining or improving streambank condition.

The entire identifiable riparian area should be within the riparian grazing unit where feasible. Areas with similar hydrologic characteristics such as wet meadows and bogs, should also be included in the riparian grazing unit when possible.

Upland areas may be fenced within the riparian grazing unit in order to make the grazing unit large enough to be managed effectively. In areas of deep canyons or areas of limited riparian size, the areas of upland vegetation may be extensive or

include more than one drainage. In riparian grazing units with large acreages of uplands, management should be directed toward proper distribution of livestock throughout the entire grazing unit, using management practices such as water developments, salting, herding (low-stress handling), brush management, and prescribed burning.

Streambanks

Areas of severe degradation or areas of special importance can be permanently or temporarily fenced from livestock grazing if exclusion is the only means for restoring riparian vegetation and stabilizing streambanks.

Streambank condition will show improvement until streambanks are stable and well vegetated or otherwise protected. Unvegetated or unstable streambanks will not increase but will show improvement until a stable condition is reached. This should be reflected in yearly streambank assessments, which over time show a trend of improvement (or maintenance) through an evaluation schedule in the grazing plan.

To prevent soil compaction and the development of shear points, livestock trailing on streambanks should be discouraged by placement of obstructions or other methods.

Key Areas and Management Checks

At least one key grazing area for each riparian grazing unit shall be in the riparian zone (identified on the conservation plan map).

Make management checks from half to two-thirds of the way through the planned season of use to determine the degree of use and condition of streambanks to provide time to make needed adjustments in grazing management. Final utilization and streambank condition will be determined at the end of the growing season or grazing season, whichever is latest, in the riparian

unit. The degree of use will be determined for herbaceous hydrophytic vegetation on the green line. Browse species should be selected as key species if they occur in the riparian plant communities.

Herbaceous hydrophytic vegetation will not be grazed more than 50% by weight during the growing season, or 60% in the dormant season unless permitted by specialized grazing systems with concurrence of the District Conservationist.

Key browse species will not be grazed more than 50% (of annual growth of twigs and leaves within reach of animals) during the grazing season. Specialized grazing systems may permit exceeding this level but shall be allowed only by concurrence of the District Conservationist.

Where streambank stability is dependent upon herbaceous vegetation, herbaceous hydrophytic species will not have less than a four (4) inch stubble height on the greenline at the end of the grazing and growing season. Specialized systems may permit a stubble height of less than 4 inches but shall be allowed only by concurrence of the District Conservationist.

Where stability is controlled by substrate, browse species or streambank damage will be used to determine proper levels of utilization.

In streams that are deeply entrenched with vertical banks, or in situations where little or no herbaceous hydrophytic vegetation is present, the proper degree of use will be determined by the District Conservationist taking into consideration streambank damage and deterioration and standards for utilization of woody species.

Where abatement of nutrient loading during peak runoff periods is needed and can be reduced with increased vegetation, the grazing system and/or the season(s) of use

will be determined by the District Conservationist to allow for such vegetation increase.

If woody vegetation naturally occurs on the site, management practices that encourage development of woody vegetation should be used. This may require late season grazing be minimized or specialized grazing systems be used. Populations of woody species should reflect site potential and management objectives.

The prescribed grazing plan will consider wildlife and aquatic habitat and requirements of fish populations (Stream Visual Assessment Protocol – SVAP).

Specifications for Pastureland Grazing

Production, seasonal flexibility, soil moisture, and forage quality of improved pasture will be considered in the development of prescribed grazing plans.

Dragging a pasture may be required for pest (parasites and flies) control, nutrient management, and optimizing production.

Inventory of irrigated and non-irrigated pasture will be developed using species composition, stand density and vigor, or production data and growth curves (See NRPH, Chapter 4).

Prescribed grazing will be based on the management level and condition of the pasture. Management level influences the amount of production and determines the extent and type of improvements.

Irrigated Pasture

The prescribed grazing plan will be coordinated with irrigation scheduling, nutrient management, facilitating practices, and regrowth periods.

The prescribed grazing plan will address season of use, type of irrigation system, soil moisture level, plant species composition,

rotations, fertilization, and other cultural practices.

Non-irrigated Pasture

The prescribed grazing plan will be coordinated with nutrient management, facilitating practices, and regrowth periods.

The prescribed grazing plan will address season of use, plant species composition, crop rotations, fertilization, and other cultural practices.

Specifications for Aftermath Grazing

The prescribed grazing plan will be coordinated with crop rotations, tillage operations, nutrient management, irrigation scheduling and other cultural practices.

Inventory of aftermath will be based on pounds per acre or AUM's per acre of standing crop or forage planned for harvest by grazing animals.

Protection of the soil and/or plant resources will be addressed when grazing aftermath. In some cases it may not be appropriate to graze aftermath depending on soil moisture, residue requirements, crop needs, and/or plant toxicity.

Specifications for Wildlife Land Grazing

The prescribed grazing plan will address wetlands, riparian areas, critical wildlife food, cover, shelter, travel corridors, and special seasonal needs such as calving, fawning, nesting, breeding, and wintering.

Wildlife will have priority in allocating forage.

OPERATION AND MAINTENANCE

Operation. Prescribed Grazing will be applied on a continuing basis throughout the occupation period of all grazing units.

Adjustments will be made as needed to ensure that the goals and objectives of the prescribed grazing strategy are met.

Maintenance. All facilitating practices (i.e., Fence, Watering Facilities, Pest Management) that are needed to effect adequate grazing distribution as planned by this practice standard will be maintained in good working order.

REFERENCES

- National Range Planning Handbook (NRPH)
- Stream Visual Assessment Protocol (SVAP)