NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

RESTORATION AND MANAGEMENT OF RARE OR DECLINING HABITATS

(Ac.)

CODE 643

DEFINITION

Restoring, conserving, and managing unique or diminishing native terrestrial and aquatic ecosystems.

PURPOSE

To return aquatic or terrestrial ecosystems to their original or usable and functioning condition; to improve biodiversity by providing and maintaining habitat for fish and wildlife species associated with the ecosystem.

CONDITIONS WHERE PRACTICE APPLIES

Sites or areas that once supported or currently support a unique, dwindling, or imperiled native plant and animal community.

CRITERIA

I. Users of this standard shall comply with applicable federal, state, and local laws, rules, regulations. This standard does not provide the details of each required law.

- All necessary local, state, and federal permits shall be obtained by the landowner (or designee) prior to the restoration.

II. Methods used shall be designed to protect the soil resource from erosion and compaction.

III. Invasive plant and animal species shall be controlled.

- Control will be limited to that necessary, to control undesirable species, while still protecting habitat which benefits fish and wildlife species, and native pollinators.
- Refer to USDA Plants Database, NM invasive and noxious weeds. www://plants.usda.gov
- Refer to NRCS Fish and Wildlife Habitat Management Leaflet No. 24, Integrated Pest Management (IPM) and Wildlife.

IV. Undisturbed areas shall be conserved on a sufficient extent of the area to sustain disturbance-intolerant species.

V. If planting, site preparation, planting dates and methods, and plant material care and handling shall optimize vegetation survival and growth and will be prepared to achieve desired habitat conditions.

- Only high quality and ecologically adapted native plant materials will be used. When feasible, local ecotypes will be used.

VI. A baseline (pre-treatment) assessment will be evaluated and documented to assist in conservation plan development; and for comparison with post-treatment habitat conditions.

Goals or success criteria will be established using 1] a determination of the sites potential and 2] reference sites for guidance and comparison. Where no such reference site exists, use ecological site description or historic data to establish restoration goals.

VII. Use of fertilizers, pesticides and other chemicals shall not compromise the intended purpose of this practice.

CONSIDERATIONS

Conserving, restoring or managing rare or declining habitats may be accomplished by using supportive or facilitate conservation practices. Practices commonly include:

Access Control - Code 472

Brush Management - Code 314

Fence - Code 382

Forage Harvest Management - Code 511

Forest Stand Improvement - Code 666

Herbaceous Weed Control - Code 315

Prescribed Burning - Code 338

Prescribed Grazing - Code 528

Range Planting - Code 550

Riparian Forest Buffer - Code 391

Riparian Herbaceous Cover - Code 391

Tree and Shrub Establishment - Code 612

Wetland Restoration - Code 657 *or*

Wetland Enhancement - Code 659

Determining the practices and management to restore and maintain declining habitats will depend upon the site potential, and the habitat goals (desired future condition).

When restoring, conserving or managing rare and declining habitat to benefit targeted wildlife (species, group or guild), then a habitat appraisal or evaluation should be used to 1] identify if early successional plant stages will benefit the targeted wildlife and 2] to identify what type, extent and timing of succession is needed.

Wildlife Habitat Evaluation/Appraisal Guides are found online in the NRCS New Mexico FOTG Section II. If one is not provided for the desired target species or habitat, contact the NRCS NM State Biologist for assistance.

Generally, the size of the restored or managed area should be large enough to support and maintain populations of all species associated with the targeted habitat.

Consider how land use and habitat in the associated landscape may influence the ability to achieve restoration and management objectives.

Consider the effects on unique or rare flora. Refer to the New Mexico Rare Plants list, found at http://nmrareplants.unm.edu.

Consider the accessibility of the site for installation, management and maintenance.

Soil disturbance associated with the installation of this practice may increase the potential of invasion or spread of invasive plant species. Use mitigation techniques to prevent or reduce any negative effects.

When selecting plants and designing management for this practice, consider the needs of pollinators and incorporate to the maximum extent practicable.

The Ecological Site Description (ESD) state and transition models should be used when available. Found in NM FOTG Section II.

Consider how the short and long term effects of climate change may influence the ability to achieve restoration and management objectives.

Vegetation management activities should not be conducted during critical life stages of rare plants, or fish and wildlife except when necessary to achieve the desired habitat condition.

Consider the likelihood of being able to maintain important ecological disturbances such as burning, flooding or grazing long-term.

- Management activities should be rotated to mimic natural disturbance regimes.
- Refer to NRCS Fish and Wildlife Habitat Management Leaflet No. 37, Importance of Disturbance in Habitat Management.

PLANS AND SPECIFICATIONS

Site specific planning for this practice shall follow the Standard and Specifications, and be recorded using the appropriate, approved job sheet(s). Narrative statements in the conservation plan or other documentation may provide supplemental information.

In addition to conservation plan requirements, the plan shall identify and describe:

- the baseline (pre-treatment) condition,
- identify the ecosystem type,
- the targeted plants, wildlife species/group or guild (if applicable)
- structural and vegetative implementation actions necessary to achieve the goals and objectives,
- management actions necessary to achieve the goals and objectives. Including the method, timing and intensity of each action (i.e. a prescribed grazing plan etc.).

OPERATION AND MAINTENANCE

The following actions shall be carried out to ensure that this practice functions as intended. These actions include normal repetitive activities in the application and use of the practice (operation), and repair and upkeep of the practice (maintenance):

- Habitat conditions shall be evaluated and compared to desired conditions on a regular basis; to be able to quickly adjust the conservation plan and ensure the desired habitat conditions are met. Specify the appropriate timing in the Operation & Maintenance schedule.
- Annually inspect and repair structural or vegetative components of this practice.
- Any adjustments to treatments and/or management must be made in consultation with the local NRCS conservationist.

REFERENCES

Kuchler, A.W. 1964 Potential Natural Vegetation of the Conterminous United States. American Geography Society, Special Publication 36. Second edition (revised), 1975.

New Mexico Department of Game and Fish. 2006. Comprehensive Wildlife Conservation Strategy for New Mexico. New Mexico Department of Game and Fish. Santa Fe, New Mexico. 526 pp + appendices.

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Noss, R.F., E.T. LaRoe III, and J.M. Scott. 1995. Endangered ecosystems of the United States: a preliminary assessment of loss and degradation. Biological Report 28; National Biological Service, Washington, D.C.

USDA. Plants Database. New Mexico Invasive and Noxious Weeds. www://plants.usda.gov

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