



**National Supplement to Water Quality Enhancement Activity – WQL28 –
Biological suppression and other non-chemical techniques to manage brush,
herbaceous weeds, and invasive species**

State: _____

Participant: _____

Sage-grouse (SGI)

Description

This enhancement may be applied to control or remove woody brush, herbaceous weeds and invasive plants to restore native or desired plant communities and habitat consistent with the ecological site.

Benefits

Improvements to sage-grouse habitat can be separated into three categories:

- 1) Herbaceous weeds-practice implementation removes or reduces invasive or other weed species that limit sage-grouse habitat improvement and productivity. This practice can beneficially influence the vigor and establishment if native or desirable vegetation required to provide sage-grouse habitat.
- 2) Conifer removal-practice can reduce vertical structure on the landscape, prevent loss of understory vegetation, and restore habitat suitability for sage-grouse. This practice may result in decreased risk of predation by raptors and ravens and increased amount/availability of suitable habitat. This practice may also improve groundwater recharge that enhances grass/forb production.
- 3) Non conifer removal-opening up sagebrush canopy to provide brood habitat in monotypic stands by creating a mosaic of small, irregular shaped openings. This increases diversity and creates early brood rearing habitat by increasing forbs and legumes while improving insect populations all needed by sage-grouse in early life stages. Removal of sagebrush, rabbit brush, Russian olive and other woody species in riparian areas can also improve available habitat for sage-grouse.

Additional SGI techniques to those already listed

Implementation of this enhancement requires the use of biological, physical, and/or other non-chemical weed suppression techniques instead of herbicides. These techniques, used individually or in combination, can include activities such as:

- 1) Conifer removal (individual tree removal) – Targeted conifers are removed by manual or mechanical means, such as chainsaws, feller bunchers, hydraulic shears, or masticators.
- 2) Conifer removal (chaining) – Conifer stands are removed by dragging an anchor chain across the site. Practice is typically done in stands in later successional stages of encroachment where sagebrush and other shrubs, grasses, and forbs are greatly reduced

or absent (e.g., in Phases II and III, where trees are co-dominant or dominant with shrubs and herbs, and either the trees or all three layers influence ecological processes of the site.).

Additional documentation required

1. A grazing plan must be developed in accordance with NRCS practice standard (528) Prescribed Grazing to ensure that stocking rate is in balance with forage supply, season of use is rotated to ensure plants have adequate reproduction opportunity, and rangeland is monitored to inform of adaptive management.

This enhancement will be implemented in accordance with the appropriate conservation measures as described in the Conference Report for the NRCS' Sage-Grouse Initiative.