

Five factors must be considered in determination of threatened or endangered status for a species¹: (1) present or threatened destruction, modification, or curtailment of habitat or range; (2) over-utilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) inadequacy of existing regulatory mechanisms; and (5) other natural or human-caused factors affecting its continued existence.

(1) Present or threatened destruction, modification, or curtailment of habitat or range. Sage-grouse distribution and abundance have continued to decline over the past decade and several taxa may be in danger of extirpation. Their native shrub steppe habitats have been degraded through conversion for agriculture, urban and mineral resources developments, construction of utility and transportation corridors, overgrazing, brush control, altered fire frequencies, and exotic species invasions. In addition, chemical applications for pest control and weather cycles may have negatively impacted sage- grouse habitats and/or distribution.

(2) Over-utilization for commercial, recreational, scientific, or educational purposes. While recent scientific investigations in Washington have resulted in some mortality of western sage-grouse, the level of mortality incurred is not believed to be likely to significantly influence the viability of the Columbia Basin distinct population segment (DPS) which has not been since 1987. In addition, close management of recreation and sage-grouse viewing by the general public are not believed to negatively impact the southern subpopulation of the Columbia Basin DPS.

(3) Disease or predation. While episodes of disease or predation may increase the risk of extirpation of small and isolated populations, severe episodes of sage-grouse disease or predation have not been documented.

(4) Inadequacy of existing regulatory mechanisms. Measures for revegetation, such as rehabilitation practices for burned lands have not been tailored to the restoration of the habitat needs for sage-grouse. Hunting seasons for upland game birds may enable illegal or accidental shooting of western sage-grouse. Some military activities on public lands (i.e. certain training maneuvers and wildfires caused by live ordnance) may cause damage to vegetation communities important to sage-grouse.

(5) Other natural or human-caused factors. Fragmentation and isolation puts a population more at risk to direct impacts to individuals from inclement weather conditions, altered predator demographics or behavior, agricultural practices, vehicle collisions, pest control measures, scientific investigations, and military training. Small, isolated populations may also be at greater risk to the effects of inbreeding.

Attachment I

¹ Or if recognized, a distinct population segment.