Juniper Woodlands

Management Questions

- Where are baseline juniper woodlands, and what is the total area?
- Where does development pose the greatest threat to baseline juniper woodlands, and where are the relatively undeveloped areas? (Left map below)
- How has development fragmented baseline juniper woodlands, and where are the large, relatively undeveloped patches?
- Where are baseline juniper woodlands with high structural connectivity, and which woodlands function as stepping stones?
- Where are potential barriers and corridors that may affect animal movements among baseline juniper woodland patches?





Photo credit: Bureau of Land Management.

- Where are the juniper-sagebrush ecotones with potential for juniper expansion? (Top left map following page)
- Where have recent fires occurred in baseline juniper woodlands, and what is the total area burned per year?
- What is the potential distribution of juniper woodlands in 2030?
- What are the levels of development by land ownership or jurisdiction for baseline juniper woodlands?
- Where are the townships with the greatest landscapelevel ecological values? (Top right map following page)
- Where are the townships with the greatest landscapelevel risks? (Center right map following page)
- Where are the townships with the greatest conservation potential? (Bottom right map following page)





Juniper woodland-sagebrush shrubland ecotones in the Wyoming Basin. Ecotones are indicated by juniper woodlands cells with a higher percent of sagebrush shrublands within 30 meters (98.4 feet) (red).

Summary

Juniper woodlands occupy a limited area of the Wyoming Basin Rapid Ecoregional project area, but they provide important habitats for many species. Most juniper woodlands are small and widely dispersed. These numerous small patches can function as vital stepping stones connecting larger juniper woodland complexes. Many of the small patches have high levels of development, resulting in decreased structural connectivity among relatively undeveloped complexes, which could pose problems for species that rely on juniper woodlands for food and cover. Almost half of the woodlands are under Bureau of Land Management jurisdiction and have relatively low development scores.

The small size of juniper woodland patches in a matrix of sagebrush shrublands leads to a high proportion of woodland edge. Over decades and centuries, patch edges can expand and contract in response to climate variability and time since fire. The degree to which distribution of juniper woodland is a consequence of fire suppression and grazing or the result of longer term dynamics represents a critical information gap. Fire patterns over the past several decades appear consistent with the historical fire regime with a fire-return interval of several centuries. Fire suppression has not played a major role in juniper woodland expansion.



(*A*) Landscape-level ecological values, (*B*) ecological risks, and (*C*) conservation potential of juniper wood-lands summarized by township.