



**NAWPA COMMITTEE
 CLIMATE CHANGE WORKING GROUP**

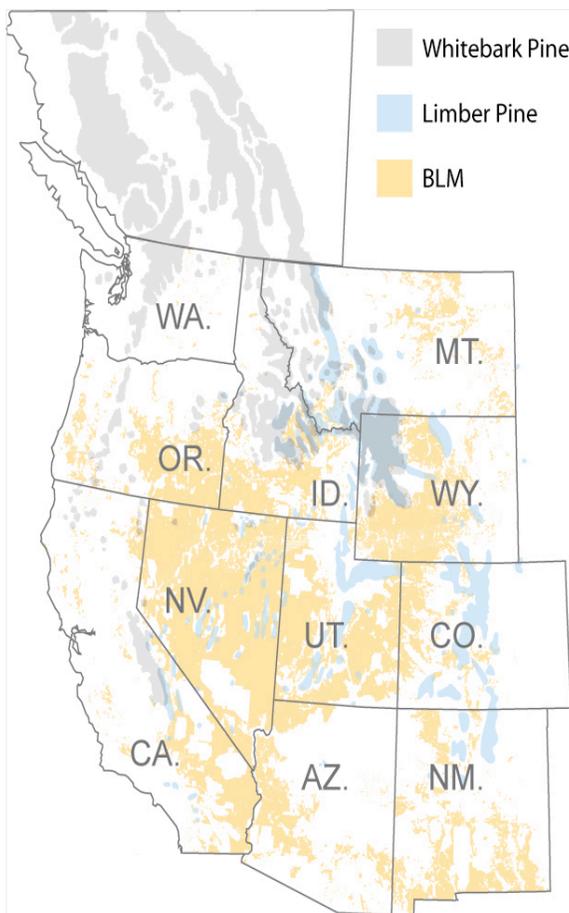
CASE STUDY OF CLIMATE CHANGE IMPACTS AND SOLUTIONS

U.S. BUREAU OF LAND MANAGEMENT:

PROTECTING OUR NATION’S FORESTS FROM INCREASING INSECT EPIDEMICS, INVASIVE SPECIES, AND CHANGING CLIMATE ACROSS THE LANDSCAPE

KEY MESSAGE

Changing climate exacerbates drought, mountain pine beetle infestations, and white pine blister rust infections, all serious threats to the health and distribution of white pines throughout western North America. A coordinated effort is underway with the Bureau of Land Management and partners to inventory assess and evaluate the current ecological conditions of these pine species.



FIVE NEEDLE PINE ASSESSMENT – EVALUATING

Whitebark pine is the iconic high elevation tree of the Northern Rocky Mountains and, as a keystone, supports approximately 130 wildlife species in the ecosystem. Whitebark and limber pine are highly vulnerable to climate change and related stressors. Over 1.3 million acres, in Wyoming alone, of five-needle pines (limber and whitebark) have been infested by mountain pine beetles and are experiencing landscape wide mortality.

A coordinated effort is underway between the Bureau of Land Management and partners to inventory, assess and evaluate the current ecological condition of limber and whitebark five-needle pines on BLM lands. The projects are surveying and inventorying whitebark and limber pine populations to evaluate stand structure and the extent of mountain pine beetle and white pine blister rust infestations. The limber pine project is the first Intermountain survey of the condition of limber pine. The Greater Yellowstone Coordinating Committee is establishing white pine blister rust monitoring plots on BLM lands. The BLM is developing a BLM-wide Whitebark Pine Conservation Plan for this species. For



more information, please go to:

<http://www.blm.gov/style/medialib/blm/wy/programs/forestry/docs.Par.65180.File.dat/FHMposter.pdf>

The BLM also is working with partners to produce an integrated, west-wide genetic survey of ponderosa pine. The goals of the project are to increase our understanding of the ability of ponderosa pine to adapt to climate change, and to identify genetically unique populations as priorities for conservation. The project is the largest ponderosa pine genetics study ever undertaken, extending from central Nebraska to the Pacific Ocean and from northern Montana to southern Arizona.