

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Development of western juniper fuel loading layer for the Owyhee Plateau
Type of Project : Research
Funding Agency: USDI BLM
Effective Dates: 1-1-02 to 6-1-04
Funding Amount: \$85,863
Investigators and Agency Representative (include name, address, phone, email): Stephen C. Bunting, Department of Rangeland Ecology, University of Idaho, Moscow, ID 83844-1135 208-885-7103 sbunting@uidaho.edu Steven Jirik, Bureau of Land Management, Lower Snake River District, 3948 Development Ave, Boise, ID 83705 208-384-3337 Steven_Jirik@blm.gov
Project Abstract: The project will utilize LANDSAT imagery to develop a vegetation classification of community types found within the western juniper zone of the Owyhee Plateau of southwestern Idaho. The classification will include all vegetation types found within this zone but the primary focus will be on those sites potentially dominated by western juniper. The western juniper zone site classification would include at least 5 structural stages. A fuel loading layer will be developed for each vegetation type identified. A total of 308 training plots were collected during the 2002 summer field season. A supervised landscape classification will be produced utilizing an August 2002 Landsat 7+ image and field training plots. Currently 41 vegetation classes are being used (combinations of Potential Vegetation Type and structural stage). Classification techniques being tested include: linear discriminant analysis, nonparametric discriminant analysis and maximum likelihood estimator. A preliminary classification of the landscape has been produced that will be evaluated during the next field season.
Outcomes with completion dates (reports, publications, workshops, videos, etc.): 1) Classification of current vegetation of western juniper 2) Documentation of classification procedures to allow periodic update of the vegetation layer 3) Fuel loading layer for the western juniper zone with focus on sites potentially dominated by western juniper
Keywords: western juniper, fire behavior, fuel loading, FARSITE, BEHAVE
<u>For Administrative use only:</u> Date Annual Report Received: Date Final Report Received: Publications, etc. on file:

Attach any appropriate supporting materials.