Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Identify Sites for Whitebark Pine Restoration

Type of Project: Research

Funding Agency: National Park Service

Other Partners/Cooperators: University of Montana

Effective Dates: May 3, 2004 - June 3, 2005

Funding Amount: \$26,400

Investigators and Agency Representative:

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Project Abstract:

Funding of this proposal will be used to: 1) identify and quantify variables significantly influencing seed dispersal potential and 2) map measured and predicted values of dispersal potential across whitebark pine habitat in Glacier National Park. This information will benefit Glacier's whitebark pine restoration program by identifying restoration areas that have 1) a high potential for seed dispersal into burned areas, or 2) little to no dispersal potential that will require planting rust-resistant seedlings in burned areas.

Objectives of this study are to: 1) determine whitebark pine seed dispersal potential in Glacier Park to distinguish sites where restoration through natural regeneration can be relied upon versus those where planting is needed. 2) Identify predictor variables of dispersal potential at multiple spatial scales (plot, stand, and Park).

3) Map measured and predicted dispersal potential for whitebark pine habitats to guide restoration project site selection by Glacier National Park restoration managers.

Outcomes with completion dates:

- ullet Interim Report describing work accomplished and preliminary findings.
- ullet Map depicting spatial distribution of observed and predicted cone survival values.
- Final report listing whitebark pine habitats within the park where restoration efforts would be most beneficial.
- Copies of data products and associated metadata.

Final Report, Map, and accompanying data to be delivered no later than June 3, 2005.

Keywords: whitebark pine, seed dispersal potential, restoration, natural regeneration, Glacier National Park, University of Montana, blister rust

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Date Annual Report Received: Date Final Report Received: Publications, etc. on file: