

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Hyperspectral Imagery Acquisition and Analysis of the Elwha River Corridor, Olympic NP
Type of Project: Technical Assistance
Funding Agency: National Park Service
Other Partners/Cooperators: University of Idaho, Pacific Northwest CESU
Effective Dates: August 1, 2003 - June 1, 2004
Funding Amount: \$41,250
Investigators and Agency Representative (include name, address, phone, email): NPS KEY OFFICIAL: Brian D. Winter, NPS, 826 E. Front Street, Port Angeles, WA 98362-3613 360-565-1323 (v), 360-565-1325 (f), brian.winter@nps.gov PRINCIPAL INVESTIGATOR: F. Richard Hauer, Professor of Limnology, Flathead Lake Biological Station, The University of Montana, 311 Bio Station Lane, Polson MT 59860-9659, 406-982-3301 ext 232 rhauer@selway.umt.edu
Project Abstract: The primary purpose of this project is to obtain hyperspectral imagery of the Elwha River Corridor prior to the removal of the Elwha and Glines Dams in Olympic NP, Washington. Imagery will be collected and processed in a manner suitable for subsequent analyses of floodplain-scale metrics. This remotely-sensed digital dataset will serve as a baseline for long-term floodplain studies of geomorphic and ecological responses to dam removal.
Outcomes with completion dates (reports, publications, workshops, videos, etc.): 1) acquisition and post-processing of hyperspectral data (remote-sensed digital data, up to 50 spectral bands) of the Elwha River Corridor from river mile 20 (RM 20) to the Strait of Juan de Fuca (via AISA hyperspectral sensor deployed from high performance, slow-flying aircraft); 2) analysis of hyperspectral data for ecological attributes and floodplain-scale metrics; and 3) specific assistance with riparian and wetland vegetation assessments along the Elwha River Corridor (RM 20 to delta); 4) written report of findings.
Keywords: Elwha River, Olympic National Park, hyperspectral imagery, riparian zone, dam removal
<u>For Administrative use only:</u> <i>Date Annual Report Received:</i> <i>Date Final Report Received:</i> <i>Publications, etc. on file:</i>