

REPORT OF THE ROCKY MOUNTAINS COOPERATIVE ECOSYSTEM STUDIES UNIT FOR FY2003

This is the fifth annual report for the Rocky Mountains Cooperative Ecosystem Studies Unit, which was established in June 1999. It outlines activities for the RM-CESU throughout FY2003.

RM-CESU highlights of FY2003 activities

- Two Executive Committee meetings were held this year. One at the University of Montana- Missoula on January 14 and the other at Washington State University on June 9-10.
- The RM-CESU and Pacific Northwest CESU held a joint Managers Meeting and Symposium at Washington State University on June 9-10.
- Several members of the RM-CESU attended the Third Biannual CESU Network Meeting in Washington, D.C. on June 24-25. Members included the University of Montana, University of Colorado, University of Idaho, Utah State University, National Park Service, US Geological Survey, and USFS Rocky Mountain Research Station. Salish Kootenai College received a National CESU Award for its accomplishments within the CESU.
- The RM-CESU visited the University of Wyoming at Laramie on March 10-11. The RM-CESU met with faculty/administrators/ gave seminar, and toured departments/facilities. The purpose of the visit is to let more people on campus know about the CESU, to build supporters of CESUs, and to help CESU better understand the capabilities of the University of Wyoming. Participants included Perry Brown (UMT), Lisa Gerloff (UMT), Kathy Tonnessen (NPS), John Tolliver (USFS-RMRS), Zack Bowen (USGS), Don Simpson (BLM), and Terry Terrell (Rocky Mountain NP).
- The Executive Committee approved the addition of the Environmental Protection Agency as a partner on June 10. Due to internal conflicts within the EPA, the partnership is on hold until conflicts are resolved.
- \$6,770,484 in 108 research, education and technical assistance projects were initiated through the CESU agreement (see Project Summary Report for breakdown of projects).
- The RM-CESU established a monthly newsletter. The newsletter includes information on RM-CESU, National CESU, and partner activities. Also, includes announcements on courses, funding opportunities, scholarships, and job opportunities.
- To highlight its national theme, wilderness, the RM-CESU created a wilderness page on its website and a wilderness brochure. Both the brochure and the web-page highlight the wilderness activities and projects of the RM-CESU and its partners.
- Kathy Tonnessen continues to represent the NPS at the University of Montana, coordinating research, technical assistance, and education for NPS managers through the RM-CESU partnership.
- Christine Whitacre accepted the position of cultural specialist with the National Park Service at RM-CESU. She will be hosted by Department of Anthropology, University of Montana. Christine started the job on August 24 while still in Denver. She will relocate to Missoula, MT in mid-January.
- Lisa Gerloff continues to serve as executive coordinator to oversee RM-CESU administration, communication, and outreach. This position is based at the University of Montana.

RM-CESU Meetings and Workshops

Meeting	Date	Host	Participating Partners
Management of Habituated Grizzly Bears Workshop	October 22-23, 2003	University of Montana	Partner Institutions: Utah State University Agency Partners: NPS, USGS, USFS
Wolverine and Canada Lynx Management, Research, and Cooperative Funding Opportunities in Glacier, Grand Teton, and Yellowstone National Park	September 9, 2003	University of Montana	Agency Partners: NPS, USFS
CESU National Meeting	June 24-25, 2003	Washington, D.C.	Partner Institutions: University of Montana, University of Idaho, University of Colorado, Utah State University Agency Partners: NPS, USGS, USFS
Joint Pacific Northwest and Rocky Mountains CESU Managers Committee Meeting and RM-CESU Executive Committee, Summer 2003	June 9-10, 2003	Washington State University,	Partner Institutions: University of Montana, University of Idaho, Salish Kootenai College, Utah State University, University of Colorado Agency Partners: NPS, USGS, USFS
RM-CESU Outreach Visit to the University of Wyoming	March 10-11, 2003	University of Wyoming	Partner Institutions: University of Montana Agency Partners: NPS, BLM, USFS, USGS
RM-CESU Recruiting Trip to Salish Kootenai College to get students interested in working on NPS projects	February 12, 2003	Salish Kootenai College	Partner Institutions: University of Montana Agency Partners: NPS
Wilderness Stewardship in the Rockies: Let's Talk—Workshop for wilderness managers.	January 22-24, 2003	Glacier National Park	Partner Institutions: University of Montana, University of Idaho Agency Partners: BLM, NPS, USFS, USGS
RM-CESU Executive Committee Meeting, Winter, 2003	January 14, 2003	University of Montana	Partner Institutions: Utah State University, University of Idaho, Salish Kootenai College, Montana State University, University of Wyoming, University of Colorado at Boulder, University of Colorado at Denver Agency Partners: NPS, USGS, USFS

Executive Committee

Executive Committee is composed of one representative from each RM-CESU partner. The 2003 members of the Executive Committee were:

Perry Brown, Dean, School of Forestry, University of Montana, Chair of the RM-CESU Committee

Keith Blatner, Chair, Natural Resource Sciences, Washington State University

Terry Sharik, Department Head, Department of Forest Resources, Utah State University

Pat Hurley, Chair, Environmental Science Program, Salish Kootenai College

Steven Daley Laursen, Dean, College of Natural Resources, University of Idaho

Jeffrey Jacobson, Interim Dean, College of Agriculture, Montana State University

Rollin Abernethy, Vice President for Academic Affairs, University of Wyoming

Mark Williams (Boulder)/Michael Holleran (Denver), University of Colorado at Boulder and Denver

Richard Jachowski, Director, USGS Northern Rocky Mountain Science Center

John Toliver, Deputy Director, USFS Rocky Mountain Research Station.

William Volk, State Soil Scientist, Planning, and Biological Resources, Montana State Office, Bureau of Land Management.

Bob Moon, Chief, Natural Resources, Research, and Technology, National Park Service Intermountain Region.

Executive Committee Meeting, January 14, 2003, University of Montana, Missoula, MT

The purpose of the meeting was to evaluate the year's progress and prioritize goals for 2003.

Highlights of Meeting:

- **Discussion of 5-year review and renewal.** The CESU renewal will be completed by May-June, 2004. Each CESU will have an independent reviewer. The reviewer will have a checklist to see if each CESU has completed a mission statement, strategic plan, and yearly work plans, and has demonstrated shared activity. Each CESU will also have 4 questions that it will answer. Based upon the checklist and response to questions, the reviewer will make recommendations to the National Council. The review will likely be no more than a 7-page document.
- **Criteria for listing partner projects as affiliated with RM-CESU (how to credit projects that are facilitated by the CESU, but did not use the CESU mechanism)** If CESU resources were used to initiate a project (even if the project did not go through the CESU agreement) that project should be listed as a project affiliated with the RM-CESU. A site on the Projects page of the RM-CESU website has been created to log such affiliated projects. Partners are asked to forward the projects they identify as "affiliated" to Lisa Gerloff to post on the web.
- **Wilderness Theme- discuss ways to actively make "wilderness" a national theme for the RM-CESU**
 - Glacier workshop is a good start
 - Create page on RM-CESU website to specifically highlight wilderness and the expertise the RM-CESU has in this area
 - Presentation on RM-CESU wilderness expertise at the National Meeting in June
 - Use the Aldo Leopold guest column in the International Journal of Wilderness to highlight RM-CESU expertise in Wilderness
 - Use Alan Watson's AK model to identify management/science issues. Work with each agency to:
 1. Identify questions and need

2. Identify resource dollars
3. Pull groups together to work on proposals

Executive Committee Meeting, June 10-11, 2003, Washington State University, Pullman, WA

Highlights of Meeting:

- **Report on University of Wyoming Outreach Visit** . Outreach visit to The University of Wyoming was very successful. The RM-CESU gave a seminar/panel discussion, met with faculty/administration, and toured departments/facilities. Perry Brown, Kathy Tonnessen, and Lisa Gerloff represented the RM-CESU. Agency partners participating in the visit included John Toliver (USFS-RMRS), Zack Bowen (USGS), Don Simpson (BLM), and Terry Terrell (Rocky Mountain NP).
- **How to involve Salish Kootenai College in more projects?**
 - SKC may fill role to outreach to other tribes and tribal colleges (6 tribal colleges in MT and 1 in WY)
 - Possible Internships with Yellowstone NP
 - New cultural possibilities with new NPS Cultural Specialist
- **The EPA Region 8 requests membership to the RM-CESU**
The executive committee voted to accept the EPA Region 8 as a member of the RM-CESU contingent on the following two conditions:
 1. Clarification of EPA membership at the National level.
 2. In letter of acceptance, responsibilities of a RM-CESU agency partners will be clearly identified
- **Thoughts on the Joint Meeting with PNW** All committee members present were enthusiastic over the joint meeting with PNW. The joint meeting proved to be an excellent opportunity to share ideas and exchange experiences. Utah State University has volunteered to host next year's managers meeting and committee members would like to explore having another joint meeting possibly with the Colorado Plateau CESU and the Great Basin CESU (USU is a member of all three CESUs).

Committee also discussed the timing of managers meeting and decided to flip flop its meeting schedule. The combined executive/managers meeting will take place the first part of the year (January/February) and executive meeting will take place in June. This switch will be work better for our managers' schedule and may encourage more faculty to attend meetings as well.

Manager's Committee Meeting and Symposium, June 10-11, 2003, Washington State University, Pullman, WA

This year the annual manager's meeting was a joint affair with the Pacific Northwest-CESU with chances to share experiences and lessons learned across organizations.

Managers present at the 2003 committee meeting were:

For RM-CESU:

Bruce Bernhardt, Nez Perce National Forest, ID
 Larry Ross, Clearwater National Forest, ID
 Kimberly Brandel, Payette National Forest, ID
 Leigh Welling, Glacier National Park, MT
 Terry Terrell, Rocky Mountain National Park, CO
 Lewis Brown, BLM, Idaho

For PN-CESU:

Regina Rochefort, North Cascades

David Louter, National Park Service

Jason Lyon, Nez Perce National Historical Park

RM-CESU operations are guided by the input of its Manager's Committee. Each year at the annual meeting our CESU managers are asked to identify what they see as their up and coming issues. The following is their response for 2003.

Managers Up & Coming Issues – Brainstorming session

Research Ideas:

- Understanding the context of change in parks – incorporating the scientific and historical perspectives to help shape future ecosystem change projections. (Leigh Welling, Glacier)
- Recreational impacts on resource elements – soil, invertebrates, water, etc. (Regina Rochfort, North Cascades Park)
- Species viability characterized by ecotypes (Bruce Bernhart, Nez Perce NF)
- Optimum or practical density of older age stands distributed on a limited size landscape (density per unit acre). (Bruce Bernhart, Nez Perce NF)
- Science dealing with federal energy policy (Bob Alverts, USGS)
- West Nile Virus (Bob Alverts, USGS)
- Rangeland Health (Bob Alverts, USGS)
- Water Issues – Headwater, dam removal, hydrology, geomorphology (Bob Alverts, USGS)
- Exotic Species (Leigh Welling, Glacier)
- Develop and disseminate methodology for determining equivalent clear-cut acres, what thresholds affect animal species, what are the triggers? (Kimberly Brandel, Payette NF)
- What constitutes an adequate fuel break, etc. Better quantifiable information about fire management will ease the job of educating (and convincing) the public about federal fire management policies. (Kimberly Brandel, Payette NF)
- Characterization of fire behavior and effects on ecological type – integrated characteristics (Bruce Bernhart, Nez Perce NF)

Tech Transfer/Education ideas:

- Extension education for the public about fire management and fire risks (Leigh Welling, Glacier)
- Working with the National Forest Plan, creating fire education seminars and materials for home-owners in sub-divisions near federal lands (Kimberly Brandel, Payette NF)
- Engineering issues related to maintenance problems faced by agencies (e.g. living snow fence construction) (Terry Terrell, Rocky Mountains NP)
- Training on statistical and economic analysis for things other than timber sales
- USGS and USFS have existing research mandates and considerable political pressure to effectively disseminate the information they already collect. They don't have the capacity to be both the researchers and the educators. Taking on the science transfer/educator role could be a very useful niche for the CESU network. (John Toliver/RMRS)
- There is a need for better methods of scientific information transfer to land managers
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Solutions:

- Annotated Bibliographies (Jeff Braante/University of Idaho)
- Information threads (Bruce Berhardt/Nez Perce NF)
- Target ranger level managers (e.g. District ranger or lower) (Bruce Berhardt/Nez Perce NF)
- Multi-audiences (managers, resource specialist, rangers); therefore multi-strategies to target the different groups (Terry Terrell/Rocky Mountain NP & Regina Rochefort/North Cascades Park Complex)
- Need involvement and/or support of senior managers (Park Superintendents and Forest Supervisors) (Terry Terrell/Rocky Mountain NP)
- Ways to get answers to questions- discussion groups, newsgroups, etc. (Bruce Berhardt/Nez Perce NF)

General Management issues: How can CESU help?

- Making scientific information available and accessible to managers in an understandable and palatable way. Can university partners assist with information packaging for managers? Integration of disciplines: use resources available on university campuses for business and marketing techniques (Terry Terrell/Rocky Mountain NP, John Toliver, RMRS, Bob Alverts, USGS)
- Looking across agencies: Differing mandates and management practices and how they affect one-another. (Terry Terrell/Rocky Mountain NP) (Regina Rochefort, North Cascades Park noted that this work is already well supported in the PNW region)
- The importance of place based research – integrated packages of science will help earn political support. This is original emphasis of CESU network. Place based research also provides the opportunity to integrate the natural and cultural sciences (Bob Moon, NPS-Intermountain region, Bob Alverts, USGS)
- Information explosion is real- how to handle? Managers' work covers a broad spectrum. Scientists tend to specialize. How do we connect the two? (Kelly Brendan/University of Alaska Southeast)

Annual Work Plan approved for 2003

- Hold two Executive Committee meetings- autumn/winter and spring summer. **Completed**
- Hold one Managers' Committee meeting in conjunction with spring/summer Executive Committee meeting. Managers' Meeting will also include symposium of RM-CESU projects. **Completed**
- RM-CESU participation at 2003 CESU National Network Meeting, June 24-25, 2003 in Washington D.C. **Completed**
- RM-CESU visit to University of Wyoming, Laramie in March. **Completed**
- RM-CESU visit to University of Colorado, Boulder in Fall 2003. **Completed in FY04**
- Develop and implement plan to promote "wilderness" as the RM-CESU national theme. **Completed- developed wilderness web page and brochure.**
- Complete expertise directory and develop a searchable version. **Expertise directory complete except for the University of Colorado. Options have been explored for a searchable database.**
- Design new home page for RM-CESU website. **Completed**
- Continue RM-CESU Newsletter. **Completed**

- Design power point presentation on RM-CESU to be available on-line for all partners to use. **Completed and is available to partners on the background page of the RM-CESU website.**
- If funding can be obtained, conduct a survey of managers regarding research, education, and technical assistance. **Not Completed.**
- Develop a searchable database for RM-CESU Projects. **Not Completed.**
- RM-CESU Self-Study in preparation for CESU renewal process. **Completed**

Projects Accepted

Under the protocols established for managing the RM-CESU, each university's Executive Committee member has authority to accept projects under the RM-CESU umbrella. In 2003, 108 projects were accepted under the RM-CESU agreement. Please see the RM-CESU 2003 Project Report Summary.

Many additional projects are affiliated with the RM-CESU even though they did not use CESU protocols to become established. Examples of such projects in 2003 include:

Research

- [Snow Chemistry in Glacier National Park](#)
- [Wilderness Travel Simulation Modeling](#)

Technical Assistance

- [Levels of Acceptable Change Issues in the North Fork Region, Glacier National Park](#)
- [Effects of Irrigation Ditches on Water Quality/Cutthroat Trout Habitat on Selected Snake River Tributaries in Grand Teton National Park](#)

Education

- [Exotic Weed Workshop](#)
- [Workshop on Management of Grizzly Bears](#)
- [Curriculum Based Lesson Plans at Grant-Kohrs National Historic Site](#)