

Great Lakes - Northern Forest Cooperative Ecosystem Studies Unit: Opportunities for Collaboration



CESUs are partnerships between federal agencies, universities, and organizations based on university campuses, organized into a national network.

Objectives of CESU Network:

- ❖ Create and maintain effective partnerships to share resources and expertise.
- ❖ Provide **scientific research, technical assistance, and education** to federal land managing agencies.
- ❖ Include biological, physical, social, & cultural sciences at multiple scales.
- ❖ Deliver research and technical assistance that is timely, relevant to resource managers, and needed to develop and implement sound adaptive management approaches.

Benefits of CESU Network:

- ❖ Provides broadened scope of scientific services for federal agencies
- ❖ Increases technical assistance to resource managers
- ❖ Increases scientific resources and opportunities for universities
- ❖ Increases diversity of research scientists and institutions
- ❖ Promotes similar approaches and data bases across boundaries
- ❖ Provides access to expertise and databases throughout the country

Key Elements of each CESU:

- Multiple federal agencies
- Host university
- Partner institutions
- Role and mission statement
- Managers' committee
- Strategic and annual work plans



Noxious weeds inventory and mapping



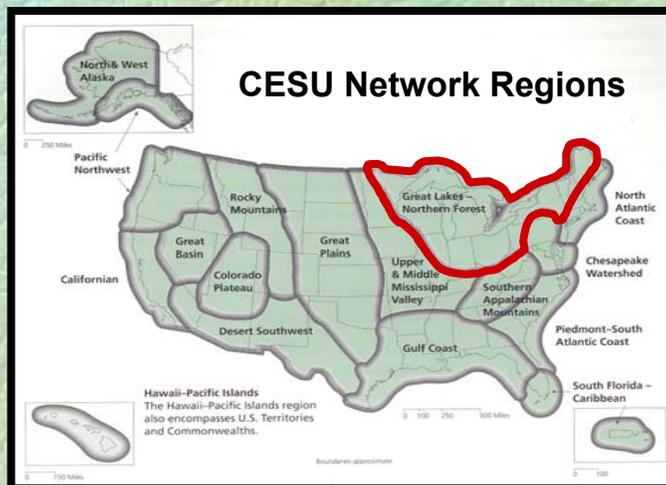
Video documentary of historical land use



Understanding perceptions & concerns of communities



Estimating economic impacts in heritage areas



“Pressure Point Topics” identified at Great Lakes-Northern Forest CESU strategic planning meeting:

Focus on full system of interacting issues:

- ❖ Integrate economic, social and cultural with biophysical
- ❖ Conduct landscape level studies
- ❖ Conduct watershed/water resources studies
- ❖ Determine the sustainability of Great Lakes aquatic and terrestrial systems
- ❖ Determine the use, protection, & management of forested landscapes
- ❖ Determine impacts of diseases and exotic species on resources
- ❖ Measure and monitor biodiversity & habitat fragmentation
- ❖ Develop effective species restoration and resource conservation techniques
- ❖ Monitor climate change and its impact on GLNF resources
- ❖ Identify and manage for renewable energy sources
- ❖ Measure and monitor continued growth in outdoor based recreation and tourism, including growth in second homes, and its impacts on GLNF resources
- ❖ Link landscapes to *lifescapes*
- ❖ Develop knowledge and tools to manage ecosystems

Great Lakes-Northern Forest CESU Mission:

To conduct a program of research, technical assistance and education that involves the biological, physical, social and cultural sciences needed to address, manage and preserve Great Lakes Northern Forest ecosystems in a rapidly changing social, economic and environmental landscape.

University Partners:

- ❖ University of Minnesota – Host
- ❖ Cleveland State University
- ❖ Fond du Lac Tribal and Community College
- ❖ Indiana University
- ❖ Michigan State University
- ❖ Michigan Technological University
- ❖ Minnesota State University – Mankato
- ❖ Southern University and A&M College
- ❖ SUNY—Environmental Sciences & Forestry
- ❖ University of Iowa
- ❖ University of Massachusetts, Amherst
- ❖ University of Toledo
- ❖ University of Vermont
- ❖ University of Wisconsin at Madison
- ❖ University of Wisconsin at Stevens Point
- ❖ West Virginia University

Organization Partners:

- ❖ American Indian Science and Engineering Society
- ❖ International Association for Great Lakes Research
- ❖ Great Lakes Commission
- ❖ Great Lakes Forest Alliance
- ❖ Minnesota Department of Natural Resources
- ❖ Minnesota Forest Resources Council
- ❖ National Council for Air and Stream Improvement
- ❖ Science Museum of Minnesota

Federal Partner Contacts:

Bureau of Land Management

Geoffrey Walsh, 703-440-1668, Geoffrey_Walsh@es.blm.gov

National Aeronautics and Space Administration

Michael Blotzer, 216-433-8159, Michael.J.Blotzer@grc.nasa.gov

National Park Service

Jerrilyn Thompson, 612-624-3699, Jerrilyn_Thompson@nps.gov

Natural Resources Conservation Service

Sheryl Kunickis, 301-504-4787, shk@ars.usda.gov

Forest Service (North Central Research Station)

Rob Doudrick, 651-649-5295, rdoudrick@fs.fed.us

U.S. Geological Survey

Kirk Lohman, 608-783-7550 ext 58, klohman@usgs.gov



Host University Coordinator
Dorothy H. Anderson
dha@umn.edu, 612-624-2721