Cooperative Ecosystem Studies Units Network

Cooperative Ventures

An update of activities from the Pacific Northwest Cooperative Ecosystem Studies Unit

Fall 2005

The Elwha River Research Consortium

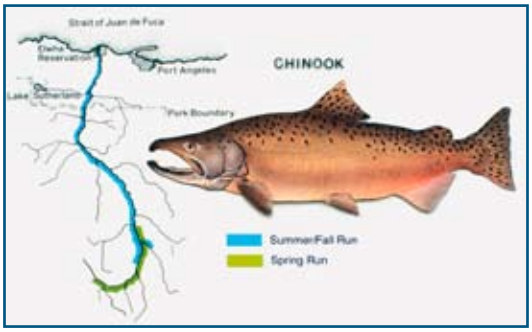
Studying dam removal and ecosystem recovery

Jim Allaway, Consortium Research Coordinator, Huxley College of the Environment, Western Washington University.

Jerry Freilich, Research and Monitoring Coordinator, Olympic National Park.

The Elwha River on Washington's Olympic Peninsula will become the centerpiece for an unprecedented scientific opportunity in ecosystem recovery when removal of two hydroelectric dams begins in 2008. A consortium of agency, academic, and Tribal partners has launched an effort to document conditions prior to dam removal and establish a long term research program to understand ecosystem response after the dams are gone.

The scientific significance of Elwha River restoration is unique. Since over 80% of the watershed lies within Olympic National Park, little has changed there since 1910 when construction of the lower dam began – except for the absence of anadromous fish. This lack of salmon and steelhead for almost a century from all but the lower five miles of the river has likely had profound ecological effects. Perhaps most importantly, the ecosystem has been deprived of vast quantities of marine-derived nutrients that formerly were distributed annually through 70 miles of river and stream habitat by tens of thousands of returning salmon of all five Pacific species. In addition, the lower reaches of the river bed and the nearshore marine environment have been deprived of sediments, and large woody debris has become much scarcer. Because of the otherwise little-changed state of the watershed, Elwha River dam removal can become a case study on the ecological impacts of one factor: anadromous fish restoration.



Chinook Salmon run in Elwha watershed

Although $185 million has been authorized – to acquire and remove the dams, construct water supply facilities for the nearby city of Port Angeles, relocate a fish hatchery, restore salmon, and revegetate the exposed banks of the drained reservoirs – the Elwha restoration project itself provides no funding for research or education. Recognizing the scientific significance of removal of the dams and the potential lessons to be learned for salmon restoration and dam removal projects elsewhere, a small group of agency and academic scientists began working together several years ago to find ways to learn from this unique ecosystem-scale opportunity. Essential leadership came from Olympic National Park managers and scientists, with key participation by scientists with the Lower Elwha Klallam Tribe, Northwest Fisheries Science Center of NOAA Fisheries, US Geological Survey, Peninsula College, and Western Washington University.

Between 2001 and 2004, the Park and others organized a series of three well-attended workshops – on sediment monitoring and management, biological research and monitoring, and the marine environment – to identify research topics and projects. As the date for dam removal grew closer, the need to organize and find funding for compre-

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Mission

The Pacific Northwest Cooperative Ecosystem Studies Unit (PNW CESU) is a partnership for research, technical assistance and education to enhance understanding and management of natural and cultural resources.

In this issue:

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PNW CESU Partners

Federal:
US Bureau of Reclamation
US Forest Service
(PNW Research Station)
National Park Service
Environmental Protection Agency
Bureau of Land Management
US Geological Survey
US Fish and Wildlife Service
Natural Resource Conservation Service

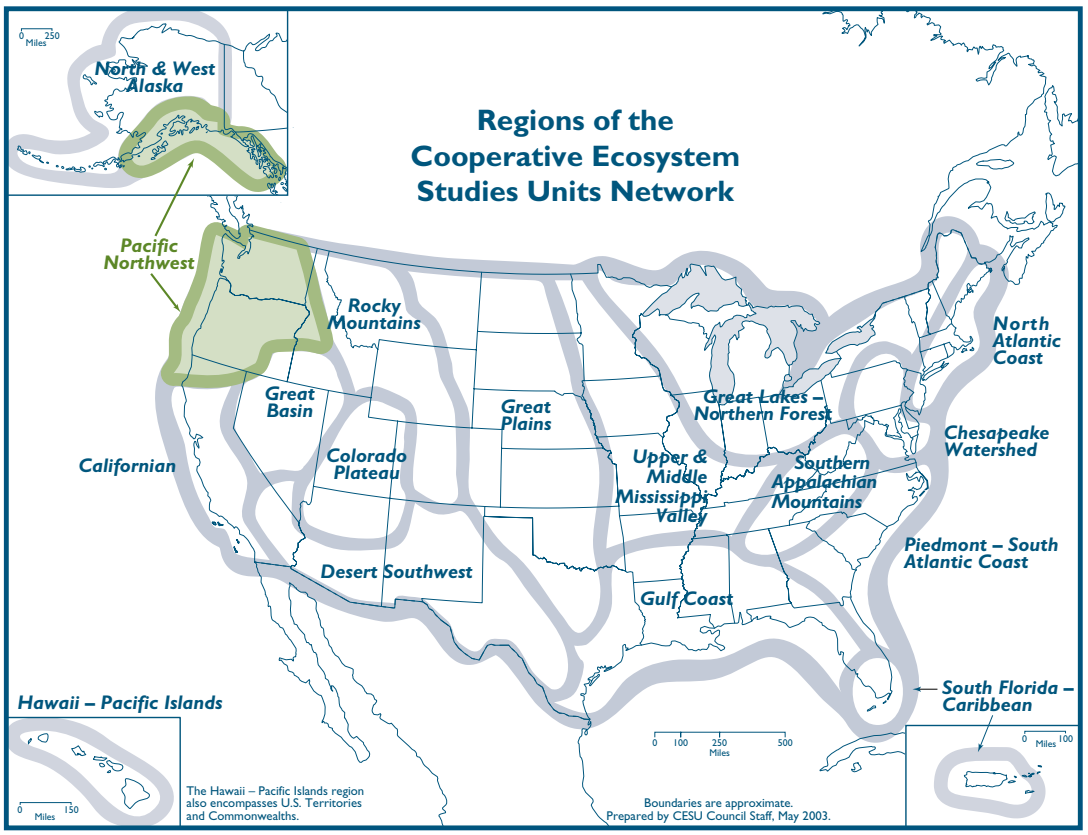
University:
University of Washington (HOST)
Oregon State University
Southern Oregon University
University of Vermont
Tuskegee University
Heritage University
University of British Columbia
University of Alaska - SE
University of Alaska - Anchorage
Washington State University
University of Oregon
University of Idaho
Western Washington University
Alaska Department of Fish and Game

Contact information for all our representatives can be found on our Web site:
www.cfr.washington.edu/research.cesu

Visit our Web site at:

www.cfr.washington.edu/research.cesu
- Browse our on-line project library
- Download the project summary form
- Find helpful materials for initiating a project through the PNW CESU.

The PNW CESU and the CESU National Network



The **Pacific Northwest Cooperative Ecosystem Studies Unit** encompasses a region extending across 5 states (Washington, Oregon, Northern California, Western Idaho and South East Alaska) and is hosted by the University of Washington. As a member of the National CESU Network, the PNW CESU is a working partnership among leading academic institutions, federal, state and non-governmental organizations.

The **CESU National Network** is organized around biogeographic regions across the United States. Each Region is served by a distinct CESU, with all CESUs linked together in the National Network. The goal of the Cooperative Ecosystem Studies Unit Network is to improve the scientific base for managing federal lands by providing resource managers with high quality scientific research, technical assistance and education through their working partnerships.

Cooperative Ventures is published 3 times per year by the PNW CESU host university office, located in the College of Forest Resources, University of Washington.

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The Elwha River Research Consortium

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hensive research became more urgent. In 2003, Park staff sought assistance from Western Washington University in developing plans and a strategy for a comprehensive and long term research program. From mid-2003 to early 2005 the PNW CESU administered two small agreements to evolve strategies for consortium development and fund raising, with financial support from Olympic National Park and the Park Service's North Coast and Cascades Research Learning Network.

Meanwhile, even in the absence of a formal structure, scientific cooperation expanded, with researchers meeting prior to the last two field seasons to coordinate sampling, methods, and protocols. As awareness of the significance and opportunities posed by Elwha restoration spread, more institutions and individuals became interested and active, and additional workshops have been convened within the last year to review past work and identify needed future efforts.

Establishment of an Elwha research and education program took a big step forward with the awarding by NSF of two grants in early 2005. A Research Coordination Network grant to Western Washington University (with Peninsula College as co-lead) will support part-time coordinator services, consortium workshops, and similar expenses over five years. A Research Experience for Undergraduates grant to Peninsula College (with WWU as co-lead) supports undergraduates at Peninsula College and in WWU's Huxley College of the Environment BS/BA program to participate in Elwha research over four years. Additional grant applications to NSF are pending.

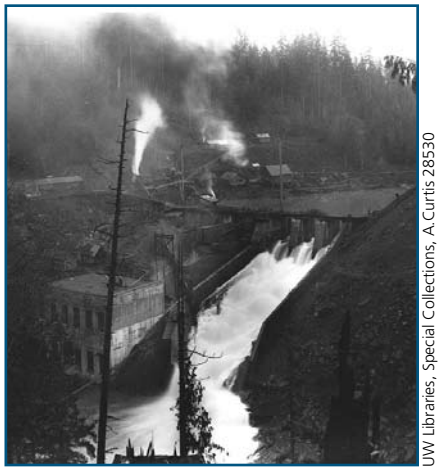
The basic strategy of the consortium is to facilitate, coordinate, and promote research and education efforts. The consortium has no funds to offer researchers, and largely operates through the efforts of those who are active on the Elwha. The consortium will support researchers and their efforts to obtain additional funding from any possible source. In particular, the consortium will seek ways to encourage researchers to fill in gaps in the baseline data needed to characterize conditions prior to removal of the dams.

From the beginning, several principles were seen as critical to the success of the consortium. The effort is intended to be coordinative not directive, inclusive of all with an interest, and participatory – i.e., operating by the efforts of its members. It aims to develop long term and comprehensive research plans to help ensure coordination between, and coverage of, all important related research topics.

The integration of research and education programs is vital to the success of the consortium. A broad spectrum of education programs is essential to distributing the knowledge gained through Elwha related research and participation in ongoing research is a highly effective educational tool. Activities of the consortium may include convening workshops, developing publications, conducting core research or monitoring, and eventually providing data management and other support services.

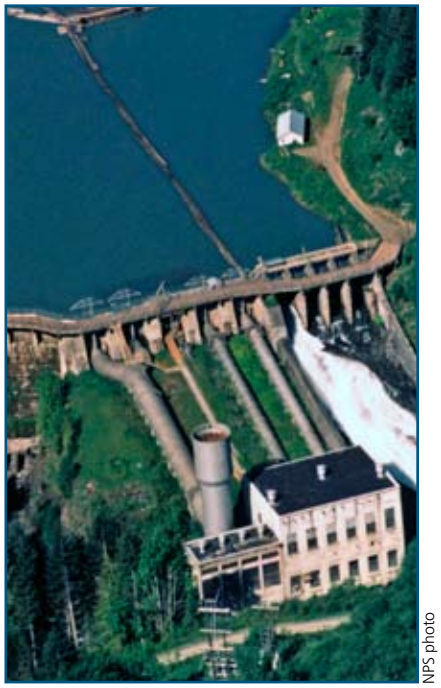
With the availability of NSF funding, the first steps toward formally organizing a consortium have been taken. A steering committee met in June to consider the most suitable structure and modes of operation for the consortium. The first cohort of 16 students has been selected and they will start their research participation in September. Work plans for the consortium are in preparation and next steps will follow within a few months of the 2005 summer field season. A Web site is under development. Meanwhile, several research projects are already underway and more are in preparation as awareness of Elwha restoration spreads.

As time runs out before the Elwha dams start to come down, the assistance of the PNW CESU and the Research Learning Network has helped launch an important part-



UW Libraries, Special Collections, A.Curtis 28530

Elwha Dam as it first appeared in 1914



NPS photo

Elwha Dam as it appears today

Please see National Park Service on page 4

The Elwha River Research Consortium

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nership between agencies and academia. The emerging Elwha research consortium stands as an example of the important role the PNW CESU and the Research Learning Network can play in helping catalyze collaborations directed at pressing scientific issues.

Scientists and educators with an interest in any of the many facets of natural and human-influenced ecosystem response to dam removal on the Elwha River have several sources of information available about the background to Elwha restoration and the developing research and education consortium. For example, Olympic National Park and the Lower Elwha Klallam Tribe have web sites on Elwha River restoration, at www.nps.gov/olym/elwha/home.htm, and www.elwha.org/River%20Restoration.htm. Copies of consortium background and strategy planning reports can be obtained from Jerry Freilich, Research and Monitoring Coordinator at Olympic National Park (jerry_freilich@nps.gov). Inquiries about the consortium can be directed to research coordinator Jim Allaway (jim.allaway@wwu.edu) and education coordinator Dwight Barry (dwightB@pcadmin.ctc.edu). **cv**

NPS web site, NPS images

Before and after sketches of Glines Canyon

PNW CESU Update

News from the Host University office
Fiscal Year 2005 draws to a close…

Project Activity

Fiscal Year 2005 was a year of change and expansion for the PNW CESU. All but one of our seven agency partners initiated at least one project! Active federal partners in FY 2005 include: USDA Forest Service, U.S. Bureau of Reclamation, The Natural Resources Conservation Service, U.S. Geological Survey, Bureau of Land Management, and the National Park Service. Complete project accounting will be available after fiscal year close. In the mean time, visit our web site project library to view detailed information about all PNW CESU projects.

Master Agreement Renewal

The 2005-2010 PNW CESU Master Cooperative and Joint Venture Agreement has been distributed for signature among partners. All partners MUST sign the new agreement by October 20, 2005. An email sent 8/8/05 to all university and federal representatives included complete signature instructions.

As previously announced, the Environmental Protection Agency and the Alaska Native Science Commission will not return as partners while Portland State University is joining the PNW CESU via the new agreement. Please contact Tracy Woodman with any questions about the agreement renewal process. A complete unsigned version of the new agreement is available on our web site.

Fully executed copies of the Master Agreement will be distributed to all partners once completed. Thanks to all partners for their support and cooperation during the renewal process this spring and summer.

New Partner News

As mentioned above, we are pleased to welcome Portland State University (PSU) as our newest partner. View PSU's complete membership application, including an extensive list of their research programs and faculty expertise on our web site.

As noted in the accompanying article on the CESU National Network Meeting, the Mineral Management Service (MMS) recently joined the National CESU Council; a first step to joining individual CESUs around the country. MMS contacted the PNW CESU and expressed their desire to join the PNW CESU as soon as possible. We expect MMS membership to be official soon after the new Master Cooperative Agreement is in place this fall. You can read about the MMS at their web site: http://www.mms.gov/aboutmms/. Details about MMS and their application to join the PNW CESU will be distributed via email to all member representatives soon.

Another National Council member, National Marine Fisheries Service (NMFS), has long expressed interest in joining the PNW CESU and we remain hopeful this will happen soon. News from the national office continues to indicate NMFS is committed to joining the PNW region as part of their first round of memberships.

In addition, preliminary discussions regarding PNW CESU membership are underway with the Oregon Institute of Technology, the Nature Conservancy, and the Department of Defense. Watch for continuing email updates about membership activity. cv

The PNW CESU is pleased to announce first ever projects with the National Forest Service and US Bureau of Reclamation in 2005.

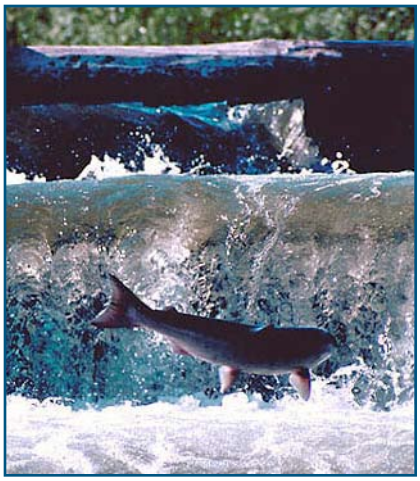
FOREST SERVICE
Project title: Soil contributions to watershed functions: Influence of basin characteristics on carbon and nutrient inputs to southeast Alaska streams
Funding: $40,000
Collaborators: University of Alaska, Southeast and the Pacific Northwest Research Station, Juneau Forestry Sciences Lab, USDA Forest Service.

For more information contact:
Eran Hood
Eran.hood@uas.alaska.edu
Or
David D'Amore
ddamore@fs.fed.us

BUREAU OF RECLAMATION
Project title: Development of Life-Stage Specific Population Dynamics Models for Lost River and Short-nose Suckers in the Upper Klamath Basin
Funding: $99,498
Collaborators: Oregon State University and U.S. Bureau of Reclamation.

For more information contact:
Dr. Douglas F. Markle
Douglas.markle@oregonstate.edu
Or
Richard Piaskowski
rpiaskowski@mp.usbr.gov

Federal Partner Profile - US Bureau of Reclamation

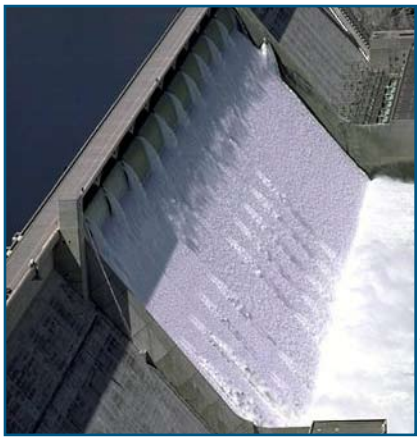


Diversion Dam. Reclamation photo

Salmon jumping the ladder at Wapato East

Reclamation History Program Photo Archive

One-hundred, ninety-three pound nut and bolt, one of 16 used to join sections of the generator shaft of a 75,000 kW generator - Grand Coulee Dam, 1942



Reclamation photo

Grand Coulee Dam Spillway. Columbia Basin Project, WA.

The Mission of the Bureau of Reclamation (Reclamation) is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American Public. Water conservation and management are at the heart of the Pacific Northwest Region's largest and most visible challenge—restoration of anadromous fisheries. Reclamation is committed to continuing to work with federal, regional, state, local, and private partners to meet this challenge.

Originally conceived under the Reclamation Act of 1902 as a means to help settle the West by providing infrastructure for agricultural development, the Reclamation program focused on the construction of dams and facilities to store and convey water. Unlike other Interior agencies that operate under an overall organic act or authority, Reclamation operates under specific authority for each project. As the potential for additional project purposes was identified by the states and local entities, Congress supplemented the Reclamation Act to add hydropower production, flood control, municipal and industrial water, recreation, and fish and wildlife enhancement to the list of authorized project purposes.

Today, Reclamation projects continue to support this multipurpose mission. And, as the demand for water increases, Reclamation is improving its water management expertise and expanding partnerships with states, Indian Tribes, local communities, and other Federal agencies to meet the growing demand. Existing projects are being modified to meet the changing needs and desires of society, to support economic development, to enhance environmental benefits, and to continue to ensure public safety.

Pacific Northwest Region

In the 21st century, Reclamation's programs, activities, and functions remain a central element in the Pacific Northwest Region's thriving economy and enviable quality of life. The Region includes the entire Columbia River Basin watershed in the United States. Since 1904 Congress has authorized 39 projects throughout the region. There are 72 dams, dikes, and diversions and more than 4,700 miles of canals. Reclamation programs in the Pacific Northwest are managed from four area offices based in Yakima and Grand Coulee, Washington; Portland, Oregon; and Boise, Idaho, with support and oversight from a Regional Office in Boise, Idaho.

Today, project water for irrigation and power generation is supplied from 54 reservoirs with a total active capacity of approximately 18 million acre-feet. Power production facilities at Reclamation's Grand Coulee Dam are among the largest in the world. Reclamation delivers water to 175 irrigation districts. Approximately 2.9 million acres are irrigated by Reclamation-delivered water, for an estimated annual crop value of about $2.1 billion. Annual power production averages about 22 billion kilowatt-hours of electricity from 10 power plants for a gross annual value of more than $600 million.

Programs and Initiatives:

Water 2025

An initiative launched by Secretary Gale Norton in the spring of 2003, Water 2025 represents a commitment by the Department of the Interior to work with states, Tribes and local governments to prevent crises and conflicts over water. Through the Water 2025 challenge cost share program, Reclamation will focus resources in areas where scarce Federal dollars can provide the greatest benefits.

Water Conservation Field Services Program

Competing needs for a limited water supply have provided an opportunity and incentive for groups to work together on water management and water conservation improvements. The Water Conservation Field Services Program provides a non-regulatory,

Please see Partner Profile on page 7

Partner Profile - Bureau of Reclamation

Continued from page 6

incentive-based approach to assisting water districts with development and implementation of efficient water conservation plans. Each Area Office has a water conservation coordinator to provide technical and financial assistance to the irrigation districts.

Hydromet

Reclamation's Hydromet system forms a complementary network of nearly 400 real-time hydrologic and meteorologic data stations dedicated to forecasting and managing the water supply in the Pacific Northwest. The Hydromet system is the primary operational tool for managing runoff events at many Reclamation projects. Reclamation uses the Internet to share streamflow, weather, and runoff forecast data with other Federal agencies that is used, in turn, to determine reservoir releases from over 50 dams in the Pacific Northwest. Near-real-time data is accessible via the Internet at Reclamation's website.

AgriMet

Reclamation uses a network of over 70 automated agricultural weather stations, called AgriMet, to collect and transmit the weather data required to model crop water use. Use of AgriMet information provides numerous benefits to agriculture in the Northwest, including reducing water and pumping costs to farmers, improving crop yields, and improving efficiency of fertilizer and pesticide use.

Environmental benefits include water conservation, reduction in soil erosion and nutrient-laden runoff, reduction of non-point source pollution, and enhancement of surface and ground water quality. Information from the AgriMet network is available at Reclamation's website.

BR photo by Dave Walsh. Sept, 1999.

Apple harvest north of Ephrata, WA. Columbia Basin Project, WA.

Native American Affairs program

Reclamation's Native American Affairs program coordinates activities and programs among some 50 Tribes in the Pacific Northwest. The program provides technical assistance to Tribes for the use, protection, or development of water-related tribal assets. This includes participation in water rights negotiations, water resource and water management studies, water quality analyses, groundwater studies, irrigation system analysis, drought management, and Geographic Information System (GIS) assistance.

Managing Cultural Resources

The operation of Reclamation's many projects has potential to affect cultural resources such as historic buildings, archeological sites, and Native American traditional use areas. Also, recreational use of Reclamation facilities exposes cultural resources to damage and theft. The Pacific Northwest Region is committed to managing cultural resources to minimize these impacts in accordance with the National Historic Preservation Act, the Native American Graves Protection and Repatriation Act, the Archaeological Resources Protection Act, and other Federal legislation. Reclamation maintains close working relationships with other Federal agencies and with Indian Tribes, who advise and collaborate in the management of cultural resources.

Reclamation photo

Reclamation Scientist in the field

Reclamation and the CESU Network

The CESU network provides Reclamation with additional resources for meeting mission and resource management goals by integrating university scientific rigor and objectivity into Reclamation science, and research and development. Past cooperative activities between Reclamation and the CESU network have involved hydrology model development/improvements, fisheries research and monitoring, management of Reclamation natural history collections, effects of land terracing, assessment of inland saltgrass, GIS database collection projects, research on the ecology of moose in the Northern Great Plains, and tracing connections between waterbodies using dissolved gases. Opportunities for cooperative partnerships exist in nearly all Reclamation program areas. **cv**

For more information about the Bureau of Reclamation contact the PNW CESU representative, Jennifer Smout Program Coordinator

USBR 1150 N Curtis, #100
Boise ID 83706-1234

jsmout@pn.usbr.gov
(208) 378-5114

University of Idaho Graduate students working as instructors for McCall Outdoor Science School, MOSS.

For more information contact:

At the NPS
Alyse Cadez
alyse_cadez@nps.gov
Nez Perce National Historic Park
39063 US HWY 95
Spalding, ID 83540

At University of Idaho
Steve Hollenhorst
stevenh@uidaho.edu
Dept. of Resource Recreation and Tourism
University of Idaho
Moscow, ID 83843

Project Profile - Education Partnerships

Nez Perce National Historic Park and University of Idaho

MOSS, NEPE, PCEI, NPS, PAC, UI, CESU; what might seem like a confusing jumble of bureaucratic acronyms in reality developed into a productive partnership to further environmental stewardship in school children throughout Idaho.

Nez Perce National Historical Park (NPNHP) a unit in the National Park Service (NPS) first became a partner with the McCall Outdoor Science School (MOSS) in 2002. MOSS itself is a collaborative effort between the University of Idaho Colleges of Education and Natural Resources and the Palouse-Clearwater Environmental Institute (PCEI). MOSS's mission is to use the outdoors as an integrating context for learning about science, place, and community. The outdoor school provides graduate students, from a variety of majors, to live, learn and teach at a residential camp for 5th and 6th graders throughout the state of Idaho.

In 2002, the Nez Perce NHP and MOSS staffs coordinated to develop an education module on archeology with a companion evening program. Then to continue the partnership in 2003 Nez Perce NHP wrote a Parks As Classroom grant (PAC) and was awarded funding for work in 2004. The PAC grants are available from the National Park Service for parks developing or expanding existing curriculum based educational programs. The funding was administered through the PNW CESU and provided room, board, and a stipend to two graduate students to work at MOSS. Their assignment was to develop curriculum on ethno-geography – how concepts of location, space, and time are molded by culture and oral traditions that connect people to the landscape. This interdisciplinary curriculum was incorporated into existing modules currently taught at MOSS. It combined geography, history and language arts. It also combined exercises that involve mapping, trade patterns, story telling, and how people view and consequently interact with the land around them.

By reaching out to park neighbors and communities, Nez Perce NHP accomplishes the goal of promoting stewardship of park resources. Education is a core value of the NPS and through the partnership with the outdoor school the park is able to strengthen alliances, stimulate creativity, foster scholarship and promote effective uses of current technologies among school children. **cv**

Recap of CESU National Meeting

June 22-23, 2005

Tracy Woodman receiving CESU National Award, presented by John Haugh, BLM

The biennial gathering of the 17 CESU partners convened at the American Association for the Advancement of Science (AAAS) headquarters in Washington, DC, this past June. The Pacific Nothwest CESU was represented by Tracy Woodman, PNW CESU Program Coordinator, and Jennifer Smout, US Bureau of Reclamation. Tracy Woodman received one of three National CESU Awards for "contributing substantially to the development, implementation, or accomplishments of the CESU Network". On behalf of the PNW CESU, Tracy also gave an "exemplary project" presentation focusing on successful communication efforts of the unit – particularly the PNW CESU newsletter and web site.

Plenary sessions included excellent overviews by Gary Machlis, CESU National Coordinator, who presided over the induction of two new federal agency partners: The U.S. Army Corps of Engineers and Minerals Management Service. Other Penary sessions included a presentation, *Research Needs of the Federal Government: A Perspective from*

Please see CESU National Meeting Recap on page 9

CESU National Meeting Recap

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the White House by Teresa Fryberger, Assistant Director for Environment, White House Office of Science and Technology Policy and *Integrating the Science Generated by Universities with Federal Decision-Making* by Mike Soukup, Associate Director, Natural Resource Stewardship and Science, National Park Service.

During a panel discussion, ten federal representatives presented their agency's natural and cultural resource and social science research, education and technical assistance needs. Copies of all presentations from the national meeting, including federal agency needs presentations are available on the **National CESU web site**. A **2005 briefing Statement** on the state of the CESU National Network is also available at the site. **cv**

Neon Update

Part of our continuing series on the development of NEON

Content from the NEON website

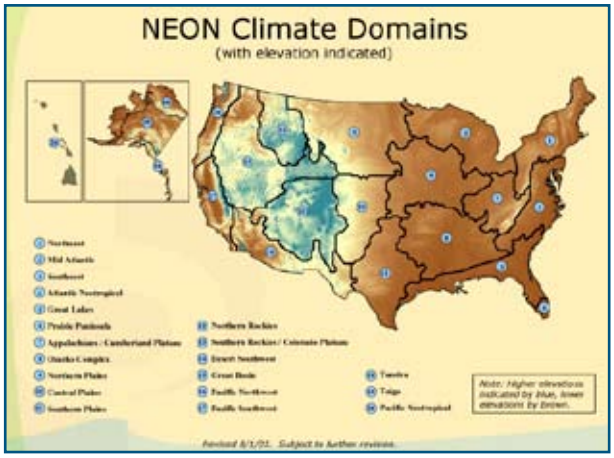
NEON's Design at the Halfway Point

Members of the NEON Senior Management Team and Advisory Board presented a detailed planning update of the proposed National Ecological Observatory Network at a special session of the Ecological Society of America conference in Montréal on August 10, 2005. The presentation covered the NEON science mission, infrastructure, integrated science and education plan, the role of embedded networked sensing in NEON, and more. Links are provided to the symposium presentation on the right side of this page or **connect to the webcast**.

National Ecological Observatory Network (NEON), is a major NSF initiative to establish a national platform for integrated studies and monitoring of natural processes at all spatial scales, time scales, and levels of biological organization. Visit the NEON website for more information.

Draft NEON Domain Maps available for view

In recent meetings, the National Network Design Committee has explored the idea that NEON's observatory infrastructure should gather data across land use types reflecting a gradient of human influence and transitions from terrestrial to aquatic landscapes. A second consideration is to span the range of climate types across the United States. To that end, committee members have defined 20 climatic domains by using a cluster analysis of climate state variables, combined with airmass seasonality data, to create zones of similar climate. Two views of the 20 zones show the climate domains overlaid on an elevation map and state boundaries. While the ongoing NEON design process could generate revisions in the future, here's a **snapshot of the current maps** (pdf; 1.8 MB). Tech-savvy visitors can access the **Shapefile** (370 kB) and **EOO Interchange Format** (372 kB). **cv**



NEON Climate Domains

Stay Informed:

Sign up for the NEON Design Consortium mailing list, email **neon.at.large-subscribe@aibs.org**

Subscribe to the PNW Regional NEON Consortium mailing list, email: **PNWREO@u.washington.edu**

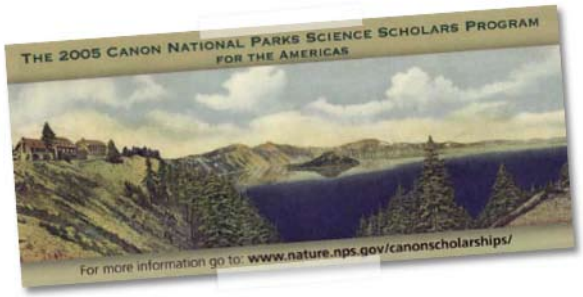
View slides presented at the symposium:

- Introductions (308 kb PPT), Jeffrey Goldman & Jerry Melillo
- NEON's past, present and future (1.3 mb PPT), Bruce Hayden
- The NEON science mission (740 kb PPT), Jim MacMahon
- Integrating Education with NEON Science (356 kb PPT), Carol Brewer
- The role of embedded networked sensing in NEON (32.2 mb PPT), Deborah Estrin
- Building the infrastructure for NEON (43.6 mb PPT), Bill Michener
- The role of biodiversity science and bio-collections in ecological observatories (3.1 mb PPT), Jorge Soberon
- Delivering results of local, national and continental scale research and monitoring to decision-makers and society (4.7 mb PPT), Hague Vaughan

Partner Announcements

Canon Scholars Special Report Released: Training the Next Generation of Conservation Scientists

[From NPS News Release August 3, 2005]



The Canon National Parks Science Scholars Program has been developing leaders in the field of conservation science since 1997.

The scholarship program is a collaboration between Canon U.S.A., Inc. (Canon); the American Association for the Advancement of Science (AAAS); and the National Park Service (NPS). A recently released report: Training the Next Generation of Conservation Scientists provides details about the status and many accomplishments of Canon National Parks Science Scholars.

For more information about the report or the program contact Dr. Gary Machlis, Program Coordinator, Canon National Parks Science Scholars Program, Natural Resource Stewardship and Science, National Park Service, gmachlis@uidaho.edu.

The report can be viewed at:
http://www.nps.gov/pub_aff/csp_report/index.html. **cv**

University of British Columbia news:

Thanks to the enterprising work of NPS Contracting Officer Theresa Fisher, the University of British Columbia (UBC) can now directly sign agreements with the NPS through the PNW CESU. This replaces the previous system where UBC worked as a sub-contractor for the University of Washington (PNW CESU host university) to cooperate with federal partners. This breakthrough in signing agreements directly with foreign institutions is a positive step for the entire CESU Network. The mechanism used by the NPS to establish agreements with UBC may be available to other federal partners as well. For more information on the contracting details contact Theresa Fisher @ the NPS Pacific West Regional Office, Oakland, CA (Theresa_Fisher@nps.gov). **cv**

Conferences and Workshops:

September 23, September 30 and October 20, 2005:
Design to Dirt 2005: Beyond Basics
A Workshop Series for Restoration Practitioners, Everett, WA

September 27 - October 5, 2005:
National Preservation Conference: America: Vision, Economics, and Preservation, Portland, OR

October 17–19, 2005:
8th Biennial Scientific Conference on the Greater Yellowstone Ecosystem-
Greater Yellowstone Public Lands: A Century Of Discovery, Hard Lessons, And Bright Prospects,
Mammoth Hot Springs Hotel Yellowstone National Park, WY

October 27, 2005:
Washington State 2005 Regional Climate Change Conference
Seattle, WA, Qwest Event Center.

October 27-29, 2005:
Human Dimensions of Natural Resources in the Western United States Conference,
Park City, UT (Abstract Submission deadline 8/31/05)

November 7-10, 2005:
2005 Annual Conference of the American Water Resources Association,
Seattle, WA. **cv**