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NEW PERSPECTIVES PROJECTS



New Perspectives Cut, Blue River Ranger District, Willamette NF. Trygve Steen.

Cascade Center—Examining Northwest Ecosystems

The Cascade Center for Ecosystem Management provides a good example to trace some of the development and impact of the Forest Service's New Perspectives program. The Center involves land managers and researchers

and is based on the H.J. Andrews Experimental Forest, the Blue River Ranger District/Willamette National Forest, and the Forestry Sciences Laboratory in Corvallis, Oregon. The Center has its roots in the

research program on the Andrews Forest which began in the 1950s. Since 1970 the research effort has focused intensively on forest and stream ecosystems. Over the past 10 years, researchers and Willamette NF employees have increasingly worked together to incorporate new information into management of forest stands, stream systems, riparian zones, and landscapes. The resulting concepts and techniques comprise a system of ecosystem management, often referred to as "New Forestry" in much of its public discussion to date.

The models provided by the Andrews Forest/Blue River Ranger District partnership and a number of other grassroots efforts around the nation have been instrumental in formulation of the Forest Service's national New Perspectives program and its new commitment to ecosystem management.

The New Perspectives program has also had important influences on development of this partnership. In part through New Perspectives direction and funding, the Cascade Center was formed in 1991 to encompass the Andrews-based research program, a variety of activities directed by the Willamette National Forest, and activities conducted by land managers and researchers together.

Important contributions of the Cascade Center over the past few years include:

- Evaluation of alternative silvicultural techniques through demonstrations, monitoring, and research. These tests examine economic and ecological effects in both regular timber sales and experimental trials and in natural stands as well as in plantations.

- Management guidelines have been developed for stream and riparian systems, based on ecosystem research, experience of land managers, and public input through the forest planning process. These ecosystem

concepts and management guidelines are finding wide application.

- A series of projects have addressed effects of alternative forest cutting patterns on landscape structure and selected ecological processes. These modeling studies examine past forest conditions and made projections over several next centuries. This work has lead directly to new policies in Region 6 aimed at reducing forest habitat fragmentation resulting from timber cutting.

- An integrated resource analysis project on the South Fork McKenzie River is using an understanding of natural wildfire patterns as a basis for designing stand and landscape management systems with improved potential to sustain biological diversity.

- Long-term studies (up to 200 years) are underway to provide answers to questions that cannot be addressed by short-term studies (2-5 years). These studies include tests of effects of alternative management systems on long-term productivity of Cascade forests.

In summary, the Cascade Center exemplifies many aspects of the New Perspective program. The Center is grassroots effort by a large number of individuals committed to development and use of sound approaches to ecosystem management. Distinctive features of the Cascade Center are: a major commitment to ecosystem research and its strong, long-standing management-research partnership.

—Lynn Burditt, District Ranger

—John Cissel, Cascade Center Coordinator

Blue River RD, Willamette NF

—Art McKee, Director

H.J. Andrews Experimental Forest, Dept. of Forest Science, Oregon State University

—Fred Swanson, Team Leader, USFS PNW Research Station

Zuni Mountains Road—Bridging the Functional Gap

The Zuni Mountains of northwest New Mexico were owned by private interests until the 1940s. Following the Civil War, enormous herds of cattle severely overgrazed the Zuni Mountains. The intense thunderstorms typical of the Southwest combined with the bare ground initiated massive erosion gullies.

Reforestation began in the Zuni

Mountains in the 1940s, the land had been subjected to decades of overgrazing. Almost the entire area had been clearcut. The Forest Service acquired over 300,000 acres of land needing lots of TLC. But twenty five-year grazing reservations, allowed for in the land exchanges, restricted Forest Service management of livestock until the early 1970s. Since that time, the range

by the railroad loggers, the road continues to contribute to degradation of the watershed. Road 50 is a single lane dirt road, parts of which are incised as much as two feet into the ground. Improperly constructed drainage features contribute to the progress of erosion gullies, draining of wet meadows, and concentration of runoff which initiates more erosion. In

may affect the road, we began to ask "How can we manage the road as of the ecosystem?"

John Caffrey, Mt. Taylor District Ranger, and John Fehr, Cibola NF Engineer, initiated the idea of reconstructing the 57-mile road in the fall of 1990. The ID team was given instructions to capitalize on as many opportunities as possible. An initial objec