

VISION 2020

RESTORATION FORESTRY AND ECOSYSTEM MANAGEMENT

The **TREES Foundation** has brought together the **US Forest Service**, the **Karuk Tribe** and practitioners of sustainable forestry to draft a long-term Ecosystem Management Strategy for the Bluff Creek watershed of Six Rivers National Forest (SRNF). The three parties signed a Memorandum of Understanding to formalize commitment to the goals of Vision 2020 in June, 1993. With the full support of local Congressman Dan Hamburg, the original project focus was expanded to encompass cooperative management of the entire Orleans Ranger District.

The Orleans Ranger District is 200,000 acres bisected by the Klamath River and located between the Salmon and Trinity Rivers and Northern California. Surrounding landscape includes heavily degraded private lands, the Siskiyou Wilderness and Redwood National Park. The 52,000 acre Bluff Creek watershed is located entirely within the Orleans Ranger District, near the town of Orleans.

The Ecosystem Management Strategy requires gathering and integrating extensive biological, hydrological, social, and economic data. Vision 2020 is using this data, and a firm commitment to Native American values, to attempt to restore and maintain a healthy ecosystem in the District. The economic well-being of the local community will benefit from the commercial and cultural uses of the forests managed under the Strategy.

The Karuk tribe, with thousands of years of land management tradition in the area, is integrating the Forest Service's substantial biological and geographical databases into their own Geographic Information System (GIS). In addition, they are combining the GIS with satellite imagery resources. University of Washington, Quarterney Research Center is analyzing twenty years of area satellite images to assist in the effort.

The **TREES Foundation**, founded to improve public forestry policy and provide organizational assistance to others involved in that field, is coordinating the Vision 2020 project. **TREES** will also convene the **Vision 2020 Conference** in 1995. A large part of the Conference will be held in the Bluff Creek watershed in order to gain on-the-ground perspectives of the scientific community for the final Ecosystem Management Strategy.

SRNF is providing staff and personnel to complete a Watershed Analysis and a Draft Ecosystem Management Plan for Bluff Creek. The Plan will establish restoration practices until the year 2020 as outlined in the Strategy. SRNF will plan, manage, and monitor the contracting of all work.

On-site prescriptions are scheduled to begin upon approval of the Final Plan. The three partners are currently readying a thinning sale on Karuk ceremonial grounds, at the request of the tribe, to invigorate understory flora. The thinning will be undertaken in 1994.

THE NEED FOR VISION 2020

U.S. Federal courts have reacted to diminishing old-growth ecosystems by requiring comprehensive plans for maintaining existing habitat and restoring previously logged areas. This will help to ensure the survival of threatened species, specifically the Northern Spotted Owl, the Marbled Murrelet, and the anadromous fish stocks. Essential to the survival of the native salmon is the rehabilitation of riparian as well as upslope forests. Restorative forestry reduces weather related soil movement allowing natural river processes to continue performing their complex functions.

Portions of the Orleans District were clearcut initially in the 1950s and more extensively in the 1970s. Subsequent plantations are characterized by thick, crowded stands. Once ignited by wildfire, short, dense timber burns rapidly and vertically into the canopy. These fires set back regeneration several decades. One of the best protections against a catastrophic fire is to open up the plantations by thinning and pruning. This also denies fire access to the crowns of the remaining old-growth within the watershed.

The ancient forest that once occupied the region cannot be rapidly recreated. Thinning, pruning and logging of carefully selected trees diversifies the landscape and stimulates the growth of young plantations, raising the canopy and shortening the time until the forest will be capable of providing complex wildlife habitats and quality timber products.

ECONOMIC BENEFITS

Removing suppressed trees in dense plantations as well as the thinning of crowded hardwoods presents an opportunity for economic benefit. Products harvested under this Strategy qualify for *ecological forest product certification*. This market-oriented approach to sustainable forestry is at the forefront of the prevailing political and economic climate. European and American consumers have requested certified products because of their concern for the future of forest ecosystems.

Recent data gathered by Six Rivers National Forest indicate a sizable component of plantations in need of thinning. Thinning sales will fund ongoing data collection, monitoring, and review of the Plan and provide employment opportunities for displaced timber workers.

The TREES Foundation has been working closely with the community and the Orleans/Somes Bar Chamber of Commerce to develop primary and secondary manufacturing industries from the traditional and non-traditional materials about to become available from the implementation of Vision 2020.

ECONOMIC BENEFITS OF VISION 2020

Restoration forestry practices accelerate the growth and increase the value of future stands. This makes valuable non-traditional timber products available. Abundant tanoak has been considered a "weed species" by the timber industry because of its presence in the mixed conifer forest. The industry has chipped it for pulp at a value of \$350 per thousand board feet. Yet in Briceland and Arcata, California small manufacturers successfully produce premium flooring and finished lumber from these same hardwoods, worth \$2500 per thousand board feet.

Tanoak and Chinquapin saplings can also be utilized as a growing medium for shiitake, oyster, and other mushrooms, much in demand for the domestic and Asian market. Three-foot-long, four to seven inch diameter logs sell for \$1.25 each. An acre of thinnings yields 300 such logs, each capable of producing \$12 worth of mushrooms, or \$3,600 from less than a half cord of firewood worth \$75.

Another new timber product is suppressed Douglas fir, characterized by its slowly grown tight-grained wood. In Eugene, Oregon, Springfield Forest Products, Inc., pays ten per cent above California sawlog prices for five inch and greater diameter poles from which they peel veneer. Suppressed sapling lumber can also be remanufactured into finished lumber replacing fine-grain old growth boards for handrails, molding, trim, etc. at a value twice that of framing timber. This undervalued material has been chipped for pulp and electricity, generating very little income for the local economy.

Recent data gathered by Six Rivers National Forest indicate a sizable component of plantations in need of thinning. Ecologist Tom Jimmerson has calculated that 1,762 acres of pole stands exist in Bluff Creek, which could benefit from the removal of 50 to 200 trees per acre. This yields from 1000 to 4000 board feet per acre of four- to eight-inch diameter conifers. At current value, these poles represent from \$1,101,250 to \$4,405,000 worth of material delivered to the mill. With minimal retraining, the same loggers can remain working in the woods. It requires two person days per acre to complete the restoration prescription and up to an additional six person days per acre to land harvested timber, or from 8,810 to 14,096 person days for Bluff Creek. At a wage of \$15 per hour, the labor cost delivered to a mill in Orleans will be from \$1,092,440 to \$1,832,480. Hardwood sawlogs coming off of the prescriptions could be even more profitable. There is substantial capital remaining for modifying equipment to handle smaller diameter material. Timber revenue will also fund the ongoing data collection, monitoring and review of the Ecosystem Management Plan.

Product research and market development will contribute greatly to the economic success of industries springing up to process the steady flow of raw material coming off the project area. The Chamber of Commerce of Orleans and Somes Bar have ranked Vision 2020 as a top priority.

Revenue-enhancing processes to bring high-end products to the market must be encouraged. The material is there in abundance and some needs removing. Since old-growth sawlogs are scarce, suppressed poles will become a major commodity available from cut-over lands throughout the Pacific Northwest. The young forest can be utilized to sustain rural communities while the vital work of restoring ecosystems proceeds.

VISION 2020 PROJECT PRINCIPALS

TREES Director **Michael Evenson** is the **Vision 2020 Project Coordinator**. Michael has been working in the North Coast woods since 1967, most recently as a horse logger, and a Licensed Timber Operator. Michael is the sole proprietor of a recycled lumber business, a Resource Professional, on the board of the Mattole Watershed Salmon Support Group, a Senior Advisor to the Mattole Restoration Council's Estuary Project, and on the Coordinating Council of the Mattole Watershed Alliance. Michael also sits on the Forest-Based Rural Development Practitioners Steering Committee. In 1990, he was the Field Producer for the award-winning video *The Forest Through the Trees*.

TREES Director **Tracy Katelman** is the **Vision 2020 Project Assistant**. She is currently consulting on public education projects for the Institute for Sustainable Forestry, and was the organization's first Executive Director and a co-founder. She is also helping to develop a North Coast Mushroom Growers Cooperative and a BLM component to Vision 2020. Tracy has a Master's Degree from the Department of Forestry and Resource Management at UC Berkeley. She currently sits on the State of California Forest Stewardship Coordinating Committee. Tracy has over a decade of grassroots environmental experience, working with organizations such as the Environmental Protection Information Center (EPIC) and the Rainforest Action Network.

Six Rivers National Forest (SRNF) **Acting Forest Supervisor Martha Ketelle**, has been with the Forest Service, and SRNF, for two years. As Supervisor, Martha is moving SRNF into the future defined at the Forest Conference by building science into the land management approach. She established a Watershed Analysis Group, whose mandate will include an analysis of Bluff Creek. She is a strong advocate for change in the agency, and has been very successful at promoting Vision 2020 in Region 5. Martha came to the North Coast after ten years with the TVA, working both in Tennessee and Washington DC. She served on the board of directors of local and regional environmental groups in Tennessee. Martha has degrees from the University of Wisconsin and Harvard in Water Resources Management and Landscape Architecture.

Six Rivers National Forest, **Orleans District Ranger John Larson** has been with the Forest Service for 26 years, and has been a District Ranger since 1978. He has served as Orleans District Ranger for eleven years and is active in Orleans community organizations with his wife, a lifelong resident of the area. John has a degree from the Department of Forestry at UC Berkeley.

John Moriarty is the **Vision 2020 Conference Coordinator**. John is currently finishing a three year project with the Peace Corps in Chile, where he is the assistant to CODEFF's (Committee for the Defense of Flora and Fauna) Forestry Program Director. John worked so well with his Chilean counterparts that he was entrusted to organize the recent (January 1994) premier conference on sustainable forestry in Chile. As conference coordinator, he met and networked with key forestry experts in Chile, as well as international experts. He received his Masters Degree in Forestry from Humboldt State University in 1991, with his thesis research entitled Pacific Certified Ecological Forest Products: Their Effect on Management Planning and Timber Harvesting Costs in Humboldt County, California.

Natural Resources Manager for the Karuk Tribe Robert Rohde has recently been named Technical Work Group Chair for the Klamath River Basin Fisheries Task Force. He also serves on the Executive Committee of the Interagency Implementation Team. Robert has a degree in Natural Resources Management, Fish and Wildlife Specialty, from California Polytechnic State University and a Masters of Science Degree in Forestry Management Planning from Humboldt State University. Robert is a PhD candidate in Remote Sensing of Forest Resources at the University of Maine.