### Section 4: Opportunities for Research, Transfer of Technology, and Technical Assistance

Provide research, transfer of technology, and technical assistance to Indian tribal governments.

- Together, develop research and environmental programs to meet American Indian's objectives.
- Extend Forest Service programs to tribal governments.
- · Exchange and share technical staffs and skills.

This section includes information about opportunities for—

- Collaboration on ecosystem management
- · Collaboration on research
- · Collaboration on technical assistance
- · Additional opportunities

The Forest Service and tribes often share similar ecosystem management and resource conservation goals. We need to collaborate with tribal governments to benefit both government's forested ecosystems, communities, and, ultimately, the world in which we live. It is time to include tribes in all Forest Service programs. Our relationship with tribal governments needs to be a corporate, ACTIVE partnership for the ACCOMPLISHMENT of mutual goals across the forested ecosystem!

### Collaboration on Ecosystem Management

As my mother taught me, and she in turn was taught, the plants, animals, birds—everything on this earth—they are our relatives, and we had better know how to act around them or they will get after us.

—Kathleen Rose Smith, Mihilakawna Pomo/Olemitcha Miwok

Because ecosystems extend beyond land ownership boundaries, cooperation and collaboration between national forest, tribal, state and private landowners and governments is essential. Cooperation and collaboration involve the exchange of research, technology transfer, technical assistance, shared skills, and cooperative planning, land and resource programs, and project activities among all parties who have interest in the ecosystem.

Tribes and their members can contribute traditional ecosystem knowledge. Traditional ecosystem knowledge is generally defined as a body of information and skills learned and passed down by clans, societies, and tribes through generations of living in a close relationship with the land and resources. It includes a framework of classification, a set of empirical observations about the local environment, and a manner of living in balance and harmony with all things.

Traditional knowledge is adaptive and dynamic and offers a means to evaluate new technologies and socioeconomic situations. It also offers a unique opportunity for sharing knowledge and expertise that are vital to land and resource survival, restoration, and management. Such knowledge as may be shared should prove valuable to Forest Service goals and objectives.

As the first people who cared for the lands now known as national forests and grasslands, tribes can tell us something about the ecosystems of the past and how to manage ecosystems today for present and future generations. Indian people's long history of living and learning about the land and its resources can contribute to understanding the relationship among all things within an ecosystem.

The Forest Service should consider traditional knowledge in managing ecosystems in the same manner as American Indians and Alaska Natives use western science to assist them—blending all information so that outcomes benefit all.

To many Indians, community identity and survival are dependent on continued access to national forests and use of certain landscapes that contain key resources and locations. For example, certain plants are meaningful in restoring balance to the world, by ensuring the passage of a child into adulthood, and to health and social well-being. Maintenance of traditional gathering, hunting, fishing, and other activities is a particularly acute issue for American Indian and Alaska Native peoples, who are affected by changes in access to or availability of these important resources. The loss of traditional plants, uses, practices, and learning are a critical issue to Indian and Alaska Native tribes and their peoples.

Traditional knowledge may not only improve the Forest Service's understanding of national forest ecosystems, but also guide the maintenance of uses and needs of American Indian and Alaska Native peoples.

The Forest Service should incorporate traditional knowledge in ecosystem management by learning from the people who have lived on and cared for the land for millennia. In turn, the Forest Service can share its own expertise, data, and technology across administrative boundaries.

As an example, California Indians have employed a body of knowledge and a variety of management methods to foster the production and quality of certain plants and animals in selected locations and predictable times over the centuries. They have burned the land to create and maintain certain kinds of landscapes. They have coppiced, pruned, and cultivated native plants. A complex system of spiritual, social, and political practices governed the use of plants and foods.

Today, National Forest, Research, and State and Private forest ecosystem managers consult with these tribes to identify what forested ecosystems were like in the past and how they can be restored and maintained.

## Collaboration in Research

The Forest Service's Research Branch provides scientific knowledge and technology to improve management, protection, and use of forest and rangelands. Research programs focus on a variety of natural resource issues such as global change, biological diversity, forest health, ecosystem dynamics, and resource productivity and sustainability.

Since ecosystems extend beyond land ownership and governmental boundaries, Forest Service Research work often requires cooperation and collaboration with many entities, including tribal governments.

Seek the tribal perspective on research needs or on information sought as ecosystem strategies are developed. Examples of research collaborations are on the next page.

#### **Examples of Research Programs**

- · An example of current collaborative research work involving tribal governments includes the Chippewa Tribe, which has off-reservation rights to gather miscellaneous forest products from national forests that are within the territories ceded by the 1837 and 1842 treaties. To exercise these rights, the Chippewa developed a joint research and monitoring initiative through the Great Lakes Fish and Wildlife Commission and the Northeast Research Station to "investigate acceptable harvest levels of wild plants and examine the effects other management activities on these species; properly monitor harvests; and participate in the long-range planning efforts to ensure that wild plant resources continue to be provided on Forest Service managed lands." The tribe singled out ginseng and club moss for specific research. These species are currently relatively rare or endangered and there is little information on sustainable harvest levels.
- Many forests confer with traditional basketweavers to learn how to manage basketry materials. Fire prescriptions, land management plan direction, and other resource management activities are perpetuating the basketry resource and helping sustain the tradition and the ecosystem. In turn, the whole Forest Service is sharing the new technology, resource data, and management prescriptions with tribes for their use.
- A cooperative agreement between the Kenaitze tribe and the Forest Service established the Kenaitze Interpretive Site on Alaska's Chugach National Forest in 1992 to preserve, protect, and present the area's important archeological and natural resources. Tribal youth depict Dena'ina life through drawings, exhibits, and traditional dancing; tribal elders share family memories of living, hunting, and trapping on the land. Dena'ina values, customs, and history are presented at the site. The site rests on the Russian River—a very popular red salmon fishing area during the summer months. Because of its accessibility, the site and its resources had become damaged. Collaboration with the Kenaitze tribe has led to providing protection, preservation, and interpretation of a very significant Alaska Native cultural site.
- · Burns Paiute Elders, in field visits on Oregon's Ochoco and Malheur National Forests, are providing knowledge to Forest Service botanists, ecologists, and land and resource managers about the American Indian names and uses of the many plants that are used by the tribe. The tribe can also provide knowledge on keeping these important plants in place or within the forested landscape.

### Collaboration on

The Forest Service's State and Private Forestry (S&PF), National Forest **Technical Assistance** System, and Research Programs offer technical assistance to tribal governments. This section will focus on the unique Forest Service program opportunities.

> The Nation's commitment to our forest resources provides a 100-year history of legislation directing the Forest Service to assist State and private landowners including Indian tribes. Forest Service partnerships and programs support forest and tree stewardship with private, community, tribal, State, and industry forest resource owners and managers.

> The Forest Service's Cooperative Forestry Branch, in partnership with State Foresters and other key partners (such as Indian tribes), connects Federal natural resource management programs, expertise, and objectives to the Nation's rural and urban communities.

Cooperative Forestry generates and supports partnerships that—

- Design, deliver, and manage programs that advance tree and forest resource stewardship and sustainability and align national forest resource management goals with community, landowner, and tribal objectives.
- Strengthen the capabilities and capacities of State and local forest resource agencies and organizations including Indian tribes.
- Improve the capacity of non-Federal forest lands to meet the Nation's need for forest resources and multiple benefits.
- Convene and facilitate the interests and energies of natural resource focused publics.
- Employ and advocate nonregulatory approaches and respect for private property rights.

### **Examples of Cooperative Forestry Programs**

- The Pueblo of Zuni in New Mexico has received a grant to develop a furniture factory using local materials. The project provides an economic opportunity for the Pueblo and its individual members, and a product that is unique to the Southwest.
- The Port Gamble S'Klallam Tribe of Washington state has received a grant to construct a 6,000-square-foot longhouse cultural center—a timber frame building with carved cedar posts.
- The Tuolumne Me-wuk Tribe has received a grant and technical assistance for developing a native plant nursery. The nursery provides traditionally important plants for traditional purposes, native plants for ecosystem restoration (on and off the national forest), and jobs for tribe members.

#### **Examples of National Forest System and State and Private Forestry Programs**

- For many years, the Forest Service's fire management program has employed American Indian firefighting crews. Some tribes, such as the Kiowa and Comanche, are new to this activity and have been recently trained and activated for wildfire suppression.
- Self-governance tribes (those assuming the programs and activities formerly performed for their benefit by, essentially, the Bureau of Indian Affairs (BIA) and Indian Health Service (IHS) are considering addressing their fire management needs or responsibilities by participating in interagency fire groups.
- The Eastern Cherokee Tribe, in conjunction with the Forest Service, is developing a comprehensive social, economic, and land and resource plan. This effort will identify multiple opportunities for both the tribe and the Forest Service.
- The Santa Fe National Forest in the Southwestern Region provided its recreation planning skills to the Navajo Nation for recreation site development.
- The Cibola National Forest provided planning and forestry skills for the completion of a Navajo Nation Forest Management Plan.

*Results:* Cooperative Forestry provides leadership and technical and program assistance to activities that promote and serve—

- · Sustainable ecosystems
- Vital communities
- Effective organizations
- · Informed, involved publics
- Strong, effective partnerships
- · Application of relevant technologies
- · Efficient use of resources

Tribal governments or tribal members can participate in these programs to the benefit of the tribe, communities, and tribal members.

# Additional Opportunities

The Forest Service can provide technical assistance or shared resources to work with tribes in the planning and development of tribal land and resource management programs. These actions may include training, transfer of technology, or cost-sharing projects and activities.

- Hiring tribal members or sharing staff positions with tribes to facilitate skills, knowledge, and information exchange, and appreciation of Forest Service/tribal opportunities for collaboration.
- Consulting with tribal governments on their research, cooperative forestry, and technical assistance needs and assets and gaining an understanding of their natural resource contributions.
- Developing youth programs such as youth practicums and other activities.
- Conducting joint training, information mailing lists, and information.
   The Forest Service's Eastern Region has provided NEPA training to tribes within the Great Lakes states.
- Contracting Forest Service activities or projects with tribal governments helps the tribes and the Forest Service meet mutual objectives.
- Establishing cost-share and participating agreements to develop, plan, and implement projects that benefit both the tribe and the Forest Service and improve Forest Service activities. Projects are financed with matching funds and in-kind services from cooperators and the Forest Service (see Interior and Related Agencies Appropriations Act of 1992 and P.L. 94–148 (16 USC 565a–1)).
- Collaborating with BIA and tribal governments. Under the Economy Act
  of June 30, 1932, the Forest Service can pass money through the BIA
  for tribal governments to work on projects that benefit both the tribe
  and the Forest Service.

There may be other opportunities for the Forest Service and tribal governments to work together. Consultation is critical to developing and using all the tools we need to fully realize our partnerships with tribes.