SECTION 1

INTRODUCTION

The Loomis State Forest was created in 1925 as part of a federal land grant for the support of Washington State's common school trust. The forest is located in Okanogan County in north central Washington, east of the North Cascade Mountains, 12 miles west of Tonasket. The vicinity map on the next page shows the location of the Loomis State Forest (Figure 1). Fire suppression and cattle grazing were the main management activities in the forest until 1957 when the Department of Natural Resources was formed.

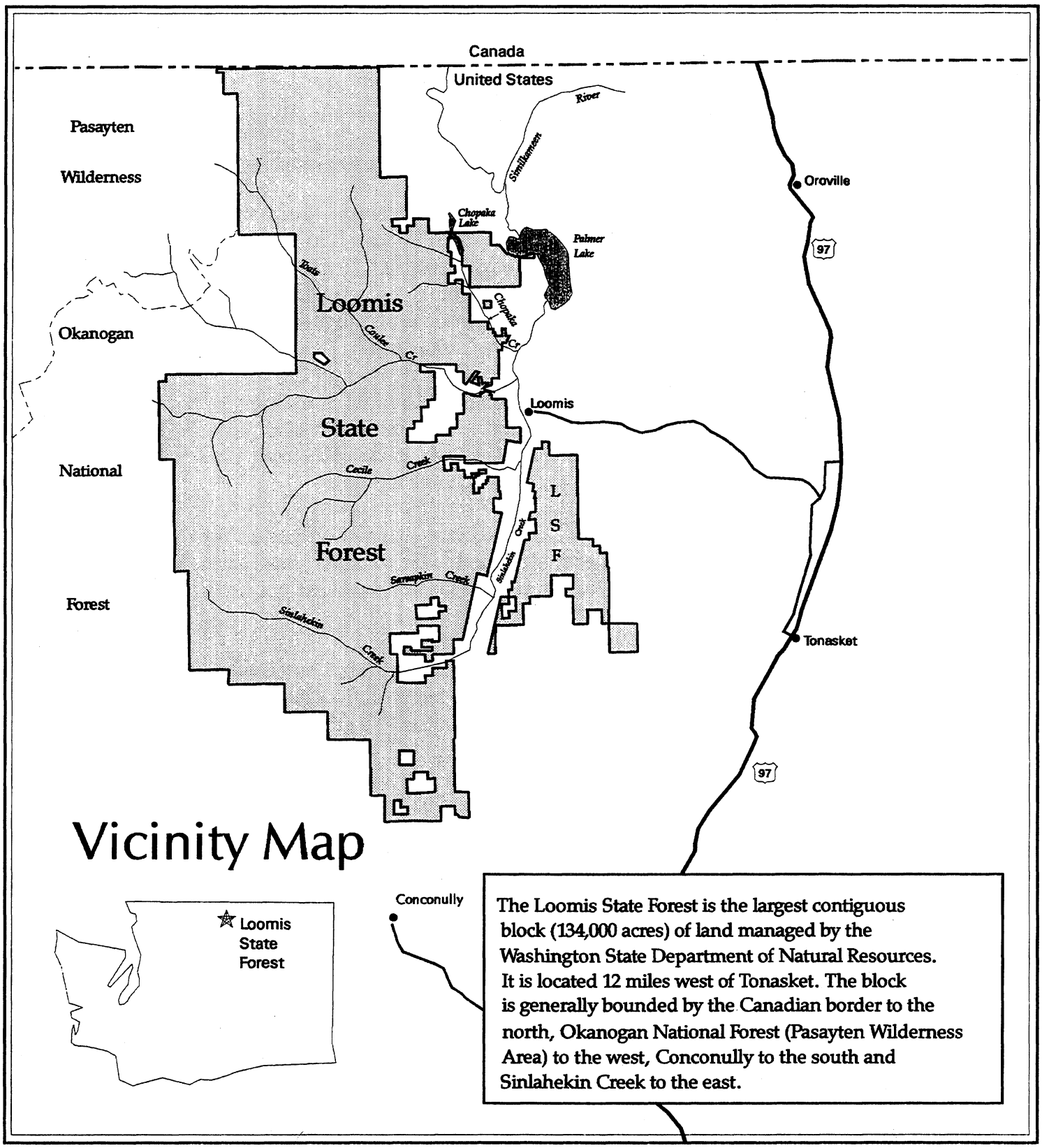
The 1960s saw the expansion of a road network into the forest to allow for better fire control access. Forest inventory work was also completed for the first time, allowing the Department to see what resource values were available. The State inherited a forest with a unique biological make-up of a multitude of vegetative communities.

The 1970s saw an expansion of timber harvest and recreation management activities, and an increased flow of dollars from forest management to the common school trust. A spruce budworm epidemic in the late 1970s and early 1980s resulted in heavy cutting in some Douglas fir stands.

Throughout the 1980s, economic factors affecting the timber industry caused a roller coaster effect on timber prices and timber sale plans in the forest. Spruce budworm populations declined, but mountain pine beetle populations increased. Increased recreational use was also seen.

With the start of the 1990s, more questions were asked about the impacts of road construction and timber harvesting on wildlife habitat, soil stability, water quality, etc. In 1991, the Department's Northeast Region established a planning process with a 12-member citizen advisory committee reviewing each timber sale.

VICINITY MAP



The Loomis State Forest is the largest contiguous block (134,000 acres) of land managed by the Washington State Department of Natural Resources. It is located 12 miles west of Tonasket. The block is generally bounded by the Canadian border to the north, Okanogan National Forest (Pasayten Wilderness Area) to the west, Conconully to the south and Sinlahekin Creek to the east.

Also, after decades of having little or no market value, the Loomis' lodgepole pine became valuable to purchasers and mills as timber supplies diminished on federal lands. Timber sales in the forest continued experiencing intense review and legal challenges based on environmental concerns. The Loomis Forest became one of the most controversial blocks of state trust land to manage because of public concern about wildlife species such as the lynx. There were additional concerns about revenue loss from bark beetle damaged timber. As each timber sale was offered, and sometimes challenged, it became evident that a more comprehensive landscape planning effort was needed, if the department was going to be able to successfully manage the forest.

To respond to this need, in 1993 the Commissioner of Public Lands appointed a 13-member Loomis State Forest Advisory Committee representing a range of viewpoints. The committee participated in a public process to develop goals and objectives for ecosystem-based trust management of the forest. The Department used the Forest Resource Plan, citizen advisory committee goals and objectives, public comment, and general trust obligations to guide development of the Loomis State Forest Landscape Plan.

Landscape Planning

A landscape is defined as a broad geographic area delineated by natural boundaries, identified for the purposes of making land management decisions. A landscape is made up of vegetative communities, terrain features, aquatic elements and animals, which provide the environment to support life needs for the plants and animals located in an area.

Landscape plans are living documents which provide the land manager specific operational guidance for achieving goals over a long period of time and covering large geographic areas. They also assure that future land managers understand reasons for previous decisions, and provide for management consistancy. Management activities are planned, implemented, evaluated and modified as new information is discovered. Landscape planning is a dynamic and flexible process that responds to new information and technology, changing regulations and public concerns.

The Board of Natural Resources adopted a Forest Resource Plan in 1992 (DNR, July 1992). The Forest Resource Plan sets overall policy direction for management of all state forest trust lands. As noted in the introduction of the
Forest Resource Plan, page 1, the policies require the Department to

> "continue to generate income from state forest land to support schools and other beneficiaries..... to analyze and, if necessary, modify the impact of its activities on watersheds, wildlife habitat, special ecological features, wetlands and other natural resources. The plan focuses the Department's land management decisions on the public's need for school revenue, forest products, healthy forests and environmental benefits."

The Loomis State Forest Landscape plan has been developed to implement policies in the Forest Resource Plan. The landscape plan should be read within the context of statewide policy direction from the Board of Natural Resources through the Forest Resource Plan.

Purposes of A Landscape Plan for the Loomis State Forest

The purposes for a landscape plan were developed consistent with the Department's obligations as trust manager, and incorporate public scoping following the State Environmental Policy Act (SEPA). The purposes are:

- To implement the Department's statewide Forest Resource Plan (July, 1992).
- Achieve, to the extent consistent with trust obligations, the following goals: 1) the harvest of at-risk and dead timber susceptible to fire, insects and disease; and 2) a transportation system on a forest-wide basis for timber harvest, fire protection and other management needs.
- To assure that proper management and long-term productivity of trust lands achieve the following long-term goals: 1) soils are generally stable, productive and in a functioning state; 2) water in each watershed meets or exceeds Forest Practices standards; 3) the forest, as part of a larger ecosystem ensures a diversity of habitats capable of supporting native species of plants and wildlife; 4) the forest has healthy habitat to support viable fish populations and aquatic organisms; 5) known cultural, historical and archaeological resources are protected, valued and maintained; and 6) the forest contributes to good air quality.
- Provide implementation measures for timber harvest, grazing, recreation and mining, that strive to provide the most substantial support for the trust, while prudently managing to protect trust assets (as described by trust management objectives for implementation listed in Section 2).
- Comply with all applicable laws, regulations and legal instruments executed by the Department prior to implementation of this plan. Examples include but are not limited to the Forest Practices Act and regulations, Surface Mining Act and regulations, the Multiple Use Act, grazing permits, timber sale contracts and right-of-way easements.

Loomis State Forest Landscape Plan

The Loomis State Forest Landscape Plan is one example of the Department's commitment to act as a prudent land manager. The plan is created to guide management of the forest in a transition from today's forest conditions to the desired future conditions of multiple forest resources. The Plan is to be used as an operational document; region field staff will use the plan as a guide to implement both short and long-term management strategies to accomplish the desired future condition of the ecosystem.

The long term productivity of trust assets is best maintained through management developed with an ecosystem perspective. Within an ecological framework (understanding how forest ecosystems are created and how they function), we define a healthy forest as one that maintains healthy relationships among all the resources. The condition of a specific resource may vary over time and space, but the ecosystem's ability to support that resource should not be impaired.

For planning purposes, the Loomis landscape was stratified by vegetation zones. Each zone reflects functional differences that influence the way in which management objectives can be achieved. Vegetation zones provide a common map base to express resource conditions and management requirements. The department, for management purposes, intends to manage the Loomis Forest at the landscape or ecosystem level.

The Department used the Citizen Advisory Committee's vision of the forest as the general desired future condition for the forest. Committee goals were used as resource-specific desired future conditions. Those committee resource objectives that were consistent with the Forest Resource Plan were used in developing landscape plan objectives (see Section 2), management guidelines and planning strategies (Section 4).

The Landscape Plan strives to ensure long term productivity of trust assets while integrating the needs of 10 resources over time and space to the extent that their protection is consistent with the department's trust obligations. It contains general landscape objectives that reflect policies of the Forest Resource Plan, Department program goals, state and federal regulations and advisory committee recommendations. It also contains guidelines for each resource that will be applied as site specific management actions are designed and implemented.

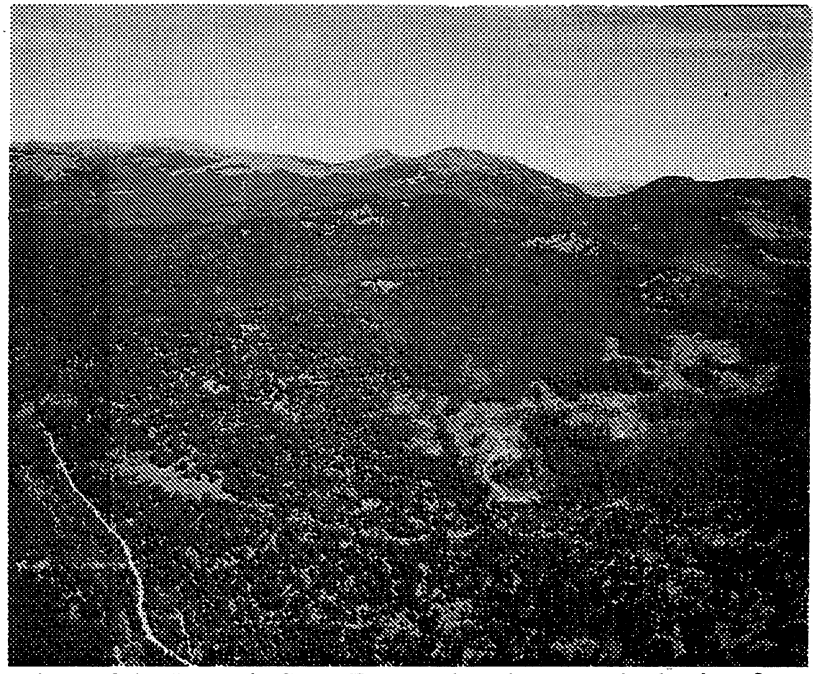
To accommodate the amount of information necessary to create this plan and deal with the dynamic nature of forest activities, Loomis planning will be map-based. This means maps will be used as a basic planning tool. Mapping and planning are supported by the Department's Geographic Information System (GIS) and the Scheduling Network Analysis Program (SNAP). Physical information such as soil types, streams, wetlands and wildlife habitat can be stored electronically and produced in map format. GIS provides a framework to provide easy updating, analyzing, modifying and monitoring for integrated planning.

SNAP was used as the primary feasibility modeling tool to test planning assumptions and superimpose desired future conditions for landscape level resources.

The Loomis Landscape

The Loomis State Forest contains 134,000 acres managed by the Department of Natural Resources as Common School Trust lands. It is bordered by the Okanogan National Forest on the west and south, Canada on the north, and private, Bureau of Land Management and State Department of Fish and Wildlife lands on the east. The average elevation is approximately 6,000 feet, ranging from 1,500 feet to just under 8,000 feet.

The Loomis Forest landscape is a combination of numerous vegetative communities which, for planning purposes, were grouped into six zones: Shrub steppe; Ponderosa pine; Douglas fir; Subalpine fir/lodgepole pine; Subalpine fir, and Alpine (see Appendix B). Unless otherwise noted, use of the term subalpine fir zones in the plan refers to both the subalpine fir/lodgepole pine zone and the subalpine fir zone.



View of the Loomis State Forest showing a typical mix of alpine areas (Chopaka Natural Area Preserve on horizon), timber stands and natural openings in the subalpine fir zone, and harvested areas in the lower elevation Douglas fir zone.

The Department used the above listed vegetative communities as a basic framework for planning and developing landscape management regimes. Each zone has fairly common biological characteristics, physical capabilities and responses to disturbance patterns. Natural disturbance events such as fire, insects, and disease create a shifting vegetative mosaic. Correct timing, location and scale of land management practices within each vegetation zone can mimic processes of the forest in its natural range of variability to the greatest extent possible. With this in mind, management regimes were developed for each zone that suggest different harvest methods, rotation ages, and management assumptions that will help move the forest from current conditions to desired future conditions.

Current Conditions in the Loomis Forest

The Loomis State Forest is generally in poor health in the context of forest stands and trees, as indicated by the current mountain pine beetle epidemic in lodgepole pine stands that average 90+ years old. Summertime drought conditions have continued since 1985, stressing forest stands so that mortality from dwarf mistletoe and defoliating insects is increasing.

Fire has historically been a major element of the forest cycle. Most lodgepole pine stands were established after major fires. During the last century, fire suppression efforts have attempted to exclude large fires. This factor combined with past selective harvest practices has allowed a change in species structure in some areas of the forest, particularly with Douglas fir growing in vegetation zones more suited to ponderosa pine.

Water quality is generally good throughout the forest, with water being cool and clear. However, one hundred years of grazing by domestic animals has contributed to some streamside damage and some changes in forest vegetation.

The forest provides habitat for over 300 wildlife species that could be present on the forest. A wide spectrum of plant communities and structural habitat components contribute to this large diversity of wildlife species. Due to limited timber harvest and current fire suppression practices, most of the Loomis is composed of mid and late successional forest stands. Habitat for wildlife species dependent on younger age stands and forest ecotones is limited.

Areas in and around the forest are experiencing an increase in recreation use, as State populations increase.

Desired Future Conditions

The department has considered Forest Resource Plan policies, public input, program goals and state regulations to set appropriate Landscape Plan objectives outlined in Section 2. The next step in this process is to translate these landscape level objectives into operational plans and working maps which reflect the composite of the objectives for the Loomis Forest (see Section 3).

The department has used the Loomis Citizen Advisory Committee's vision of the forest and resource specific goals as the general desired future conditions of the forest. These desired future conditions are believed to be in the best interest of the affected trusts and will be pursued only to the extent that they are consistent with trust obligations.

The desired future condition is well expressed by the Loomis Citizen Advisory Committee's vision of the forest:

> *"The Loomis State Forest, the largest block of Common School Trust land in Washington, is part of a larger dynamic ecosystem. This 134,000 acre area of trust land will be managed sensitively and monitored to ensure multi-generational forest productivity, excellent water quality and quantity, viability of wildlife species and their habitat, regional biodiversity and traditional, cultural and recreational uses.*
>
> *All resources of the Loomis State Forest are an intrinsic part of the Common School Trust. Certain resources may have priority over others at specific points in time or in specific locations on the forest. DNR cooperation with other state and federal agencies, governments, adjoining landowners and interested citizens will assure support of the trust and management of conflicts."*

In addition, the Loomis Citizen Advisory Committee developed the following goals for each of ten resources identified as essential components and uses of the forest. The goals express resource specific desired future conditions of the forest.

> *"The Loomis State Forest contributes to good air quality."*
>
> *"All historical and cultural sites of significance are identified and protected."*
>
> *"Loomis Forest has healthy, viable fish populations and the aquatic organisms and habitat to support them."*

"Ecologically acceptable grazing is a viable component of the Loomis Forest."

"Mineral exploration and extraction occur only where it is environmentally sound."

"A mix of recreation and visual opportunities compatible with other resources is available in the Loomis Forest."

"Soils are stable, productive and in a functioning state."

"Maintain a healthy, productive and diverse forest which provides for the long-term support of the trust."

"Water is of excellent quality and appropriate quantity in each watershed of the Loomis State Forest."

"The Loomis Forest as part of a larger ecosystem contributes to the viability of the existing species of wildlife and a diversity of habitats capable of supporting them."