Summary of Major Findings and Key Issues

Washington’s forests show great diversity across the state, differing in tree species, productivity for timber growth, land ownership, age, volume, health of standing timber, and availability to contribute to the timber supply. The base of forest land available for commercial production has been shrinking while forests dedicated to environmental protection have been expanding. Many productive forest areas have been converted to development and other non-forest land uses. While average forest age and standing volume of trees are increasing, crowding to unnatural densities of trees is also increasing.

**Key Issue**

Can the state’s forest policies recognize the diversity and the alterations to forests and provide tailored incentives for sustainable forest management?
Washington’s timber harvest has dramatically declined in the past 15 years on all ownership categories, from 5.9 billion board feet per year to 3.6 billion board feet per year, a 40 percent aggregate decline. The greatest declines have been on national forests as a result of federal policy. Unanticipated harvest declines have also occurred on state trust lands, on western Washington tribal lands, on industrial forest lands, and on western Washington non-industrial private lands, largely in response to changing regulations and market conditions and to land conversions.

To the extent that the major harvest declines of the past 15 years were unintended, what policy decisions can help stop further declines and possibly reverse the trend?

Washington’s timber supply is primarily – about 61 percent – consumed by sawmills producing lumber and similar building products. Other mills consume another 17 percent. The vast majority of lumber from Washington mills serves the North American market for house construction and remodeling, mostly in the southern and western United States. Exports of logs and finished products (that once provided premium outlets for Washington wood), have declined significantly since the 1980s as a percentage of state timber production. The global marketplace still sets the context for domestic markets, and some exports from Washington remain important, such as logs and newsprint to Japan. However, the product diversity which formerly buffered Washington suppliers from the cyclical housing market has been much reduced, exposing marginal producers to cyclical downturns.

Should Washington’s forest policy emphasize support for the dominant domestic lumber market for housing, or emphasize peripheral domestic or export markets that are in decline and/or could possibly grow in the future?
Since the 1980s, sawmills and other wood processing facilities have undergone a major restructuring. Many small, less efficient mills in rural areas have closed while fewer larger, modern, computerized mills have opened closer to major transportation routes. Loss of processing capacity close to forests in the eastern Cascades and other rural areas reduces the market for timber from forest lands in those areas, and thereby constrains forest management, restoration for forest health, and economic options for owners of those lands.

Should the state attempt to influence the evolutionary restructuring in the timber processing industry? **Key Issue**

Despite past declines in timber harvest and number of sawmills, portions of Washington’s forest industry are recovering and have increased their contribution to the state’s economy in the past five years. Since 1994, employment in sawmills increased from 7,721 to 8,565, and since 1991, lumber production increased from 3.6 billion board feet to 5.7 billion board feet (58 percent), also increasing Washington’s share of total U.S. lumber production. The forest industry’s share of manufacturing jobs statewide is 15 percent and rising, and its share of gross business income is as high as 22 percent in Washington’s south coast region and 15 percent in southwest Washington. Washington now ranks second among U.S. states in capital investment in forest products manufacturing.

Can state policy recognize serious infrastructure needs in timber-dependent rural areas while acknowledging an increasingly healthy lumber production sector? **Key Issue**
A critical influence over Washington’s supply of forest products is the cost of producing them. While capital, labor, and energy are critical components of cost, of increasing importance for private forest landowners are the costs of taxes and forestry regulations. Western Washington has one of the highest tax obligations in the U.S. for owning timberlands and harvesting timber. Washington’s stringent stream buffer requirements for forestry, intended to benefit salmon, make forests in Washington the most salmon-friendly environment but impose a significant cost, especially on owners of small forest parcels. High costs can undermine the incentive to sustain land in forestry. Landowners’ economic choices to forego allowed thinning may actually miss an opportunity for long-term ecological gains along streams.

Can the state reduce the unintended costs borne by forest landowners, while continuing to provide protection to streams?

Private landowners practicing intensive commercial forest management are moving away from thinning young forests in favor of increased early vegetation control to promote fast growth and then harvesting at younger harvest ages. This reduces landowner costs but also reduces forest biodiversity.

Does the state have sufficient interest in the intensive forest management practices of large private landowners to seek to influence those choices?

Loss of old growth forest habitat in Washington due to timber harvest has ended, with almost all remaining old growth forests protected, mostly on national forests. Remaining old growth is still subject to loss from windstorms, uncharacteristically severe fire, insects and disease. While some second growth forests are increasing in age and habitat diversity, many other second and third growth forests have become overcrowded with dense stands of small trees with low habitat value. In industrial forests practicing intensive, “plantation” forestry, forest age will rarely exceed 40-60 years except in protected streamside buffers.

What mechanisms could the state use to encourage thinning on overcrowded second-growth forests on all ownerships to improve habitat?
Unprecedented infestations of pine beetles are causing a surge of mortality in eastern Washington forests. Beetle infestations are driven by a combination of increased summer dryness and temperature – outside the 100-year range of observations – and unhealthy overcrowded forest conditions resulting from past suppression of natural forest fires. A recent twentyfold increase in tree mortality sets the unhealthy forests up for increases in unnaturally severe and costly fires, with accompanying economic losses, increased emission of greenhouse gases, and threats to community safety.

**Key Issue**

How can the state encourage economically viable thinning of unhealthy forests to make them more resilient in the face of insect pests and disease and more resistant to severe fires?

Washington’s timber market coexists with current and potential parallel markets, for products such as biofuel, services such as carbon storage, or real estate markets for the forest land itself. The biofuel market could make it economical to thin in unhealthy eastern Washington forests. Potential sources of increased income to forest landowners could be realized if carbon storage can successfully be marketed. Land conversion to real estate development represents an attractive source of income to landowners, but a loss of productive forest land. Compensation for these “development rights” may be needed to keep developable land in forestry.

**Key Issue**

How can the state stimulate development of new markets that are compatible with or complementary to the forest products market?

Forest land has declined by as much as 17 percent in western Washington since the late 1980s, converting to agriculture, urban development, or other non-forest land uses. The conversion is usually a multi-step process, with industry landowners selling to large or small non-industrial owners, who then may convert to non-forest uses or divide the land into developable parcels. Even low-density residential use usually eliminates commercial forestry on surrounding lands. Conversion is greatest closest to urban populations and major transportation routes. In these cases development values of land can exceed commercial forestry values by 15-20 times. Regulatory cost and complexity, social pressure from new residents and, for family forest landowners, generational changes and estate taxes are other motivations to convert. Forest conversion eliminates timber economic benefits and much of the ecological benefit of forest lands. Current incentives to support continued forest management are under-funded and sporadic.

**Key Issue**

What effective incentives can be brought to bear that will protect and retain working forests at and beyond the urbanizing fringe, while accommodating inevitable growth and providing a high quality of life for state residents? How can disincentives for sustaining lands in forestry be reduced?

**Potential Sources of Increased Income to Forest Landowners Could Be Realized If Carbon Storage Can Successfully Be Marketed.**
Washington’s timber supply from all owners is projected to stabilize at approximately 3.3 to 3.6 billion board feet over the coming one to two decades, before potentially increasing to 4 billion board feet or higher in the following decades, as intensively managed stands mature. Because harvest, combined with natural mortality, is expected to continue to be less than growth in western Washington, overall standing volume of Washington’s forests will also increase over time, at an average of about 1 percent each year (about 2.4 billion board feet), concentrated especially on non-industrial private lands and state-owned trust lands. Eastern Washington harvests are likely to decline, especially on non-industrial private and tribal lands, while standing timber volume also declines due to insect and fire mortality.

As modern sawmills are built in Washington independent of forest land ownership, the predictability and stability of timber supply will become critical in investment decisions, along with transportation, business climate, and other factors. The supply from state-owned trust lands, for example, can be viewed as a stable and important component of Washington’s timber supply. The share of supply from industrial lands has increased from 64 percent to 73 percent, from a shrinking industrial land base.

Due in part to the influence of changing federal tax structures, large industrial forest products companies now have a strong financial incentive to separate ownership of forestlands from ownership of processing facilities. This has occurred for many of the large companies who formerly owned forest lands to feed their own mills. In the process, large amounts of Washington’s private forest lands have come to be owned by Timber Investment Management Organizations or Real Estate Investment Trusts, who are motivated by financial return from the forests and land rather than by timber as a raw material for manufacturing.