

FOREST LANDS (Goal 4)

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FOREST LANDS ELEMENT

(Goal 4)

1. FORESTRY IN TILLAMOOK COUNTY

1.1 Overview

Tillamook County=s forests are an essential natural resource. The forest land that covers over 90 percent of the County provides (1) a perpetual harvest of commercial timber; (2) fish and wildlife habitat; (3) maintenance of clean air and water; (4) protection of soil; (5) outdoor recreation activities; and (6) scenic open space.

Tillamook County=s forest lands are among the most productive in the United States. The harvesting and processing of timber is by far the County=s largest industry. The timber industry generates over 55 percent of the County=s combined General Fund, Road Fund, and School Fund revenues, along with a substantial share of the revenues of the County=s other taxing districts. They are responsible for over 30 percent of the County=s labor and proprietor=s income, 30 percent of its total employment, and over 70 percent of its manufacturing employment. They also provide valuable water shed protection, fishing and hunting, and other recreational activities.

The remainder of this section provides an overview of the productivity of the County=s forest lands, their ownership and management, the economic benefits that they provide, and the need to maintain them for forest uses.

1.2 Forest Land Productivity

Tillamook County contains some of the most productive forest land in the United States. The productive potential of forest land is determined by such physical characteristics as soil, drainage, rainfall, temperature, altitude, slope and aspect. ¹ The combined effect of these characteristics on a timber stand is usually measured in terms of tree height (site index) or tree volume (cubic foot site class). The different systems for measuring productivity and their interrelationships are described in Appendix A. The relatively high productivity of the County=s forest land is illustrated in Table 1 which

¹ *The U.S. Forest Service does have computerized information that includes the productivity of specific stands that range in size from 100 to 1,000 acres. However, this information is not currently digitized and available for mapping. The Bureau of Land Management is in the process of mapping their lands according to*

productivity.

provides a summary of the cubic foot site class of virtually all of the County's commercial forest land, excluding the 142,000 acres in federal ownership. 36.2 percent of this land is rated as a high site class (cubic foot site classes 1 and 2). By comparison, only 27.5 percent of the commercial forest land throughout western Oregon receives a high site class rating.²

LCDC has interpreted the forest lands goal as requiring the mapping of forest land according to cubic foot site class (see Section 2 of this element). This was done at the urging of the Oregon State Forestry Department because such information enables the governing body to estimate the economic value of the land in timber production when a change of use is being considered. Tillamook County has done as much as possible to comply with this requirement, particularly since the County recognizes the value of having such information available.

TABLE 1

PRODUCTIVITY OF TILLAMOOK COUNTY'S STATE AND PRIVATE FOREST LANDS BY CUBIC FOOT SITE CLASS

Cubic Foot Site Class	Potential Yield Cubic Foot/Acre	Site Rating¹	Acres	Percent
1 & 2	165 +	High	172,410	36.2%
3	120 - 164	Medium	153,990	32.3%
4	85 - 119	Low	149,608	31.4%
5	50 - 84	Low	270	0.1%
6 & 7	0 - 49	Low	0	0.0%
ALL	0 - 165 +	High - Low	476,278	100.0%

¹ This descriptive high-medium-low site class rating, which corresponds to cubic foot site class, was designed by McArdle, et.al., op cit, 1961.

SOURCE: Connie Swales, Tillamook County Cartographer, as compiled from forest lands productivity maps available in the County Planning Department.

Tillamook County has developed detailed soil mapping of all of its state and

private forest lands. The 308,000 acres of state land and approximately 20,000 acres of private land represent almost 80 percent of the County's forest land. The mapping of state lands was done by the Weyerhaeuser Corporation for the State Forestry Department. This information has been compiled in a book of township maps entitled *A Soils Survey of Northwest Oregon Area: Tillamook County*, and is available in the County Planning Department. The productivity mapping of private forest lands is derived from the State Department of Revenue's Forest Land Classification system. This information is also available in the Planning Department on maps color-coded according to cubic foot site class.

The 141,000 acres of federal forest land that is managed by the U.S. Forest Service and Bureau of Land Management has not been mapped because the required information is not currently available.¹ The absence of this information is not significant as federal lands are generally not subject to County regulations and there is virtually no possibility that a land exchange would occur that would permit nonforest development on forest land that is currently in federal ownership.

1.3 Commercial Forest Land Definition

The May 30, 1979 LCDC policy paper entitled *A Common Questions on the Forest Lands Goal* points out that *A commercial forest land* is not defined in the Forest Lands Goal, and that *A jurisdictions which use the phrase A commercial forest land* should clearly define it. The policy paper suggests that *A counties may wish to use the State Department of Forestry's Forest Program for Oregon definition of A commercial forest land* as *A forest land that is capable of producing crops of industrial wood generally in excess of 20 cubic feet per acre of annual growth*.

Tillamook County defines *A commercial forest land* as that forest land that is capable of producing 50 cubic feet of wood growth per acre per year without man's management. This definition is consistent with the Oregon Forest Practice Rule which defines commercial forest lands that are subject to the reforestation requirement as those forest lands *A which are capable of a mean annual production of at least 50 cubic feet per acre* (OAR 24-501). This rule was referred to as the definition of *A viable commercial forest land* in the State Forestry Department's *A Forest Land Classification - for Northwest Area Counties Use*.

This definition will not encourage the losses of any commercial viable forest land in Tillamook County since the County has no significant acreages with a potential productivity of less than 50 cubic feet per acre per year. (See Table 1 in Section 1.2.) Any less productive land would be isolated rock

outcroppings or areas of extremely steep slope that would not be suited for nonforest development.

This definition must be qualified by the fact that potential productivity is not the sole determinant of viable commercial forest land. There are significant limitations to the forest site classification system. Since it employs physical rather than economic criteria, it provides incomplete information on the economic profitability of growing wood on different forest sites. Other considerations that should be taken into account include differences in ownership size and type, location with respect to market, accessibility of a forest tract to existing roads, and ease of cutting and replanting. For Example, there are a number of forest land ownerships that are too small for commercial forest use despite their relatively high productive potential on a per-acre basis.

1.4 Forest Land Ownership, Management and Revenues

Forest land ownership is an important determinant of forest land management. Each agency, corporation or individual involved with management of the timber resource has developed a different set of management goals and prescriptions for lands under their control. The differences in these management policies reflect the diversity of the motivations of the various land managers and owners.

The federal agencies, and to a lesser extent, the State, counties, and municipalities involved, manage their land on a multiple-use, sustained yield basis. This general policy reflects the fact that these agencies are in some sense representative of society as a whole: a society interested in all aspects of the forest resource. On the other hand, the private timber corporations have as their primary motive the production of the maximum amount of wood fiber per acre, per year. Private non-industrial owners, however, may lack the awareness or incentives needed to commit their land to long-term timber production. If so, they are more likely to hold their forest land for speculative reasons without regard for the forest products that could be grown on it (see subsection 4.5).

The forest land ownership pattern in Tillamook County is shown in Table 2. Seventy percent (470,000 acres) of the County's forest land is in public ownership. The State of Oregon is the largest single landowner with 308,000 acres (46%). Federal ownership totals 142,000 acres (21.2%). Private ownership totals 199,000 acres (29.8%), with 157,000 (23.5%) of these acres in industrial ownership. This leaves only 41,000 acres (6.3%) in private non-industrial ownership.

TABLE 2

TILLAMOOK COUNTY'S FOREST LAND OWNERSHIPS

Ownership	Total Acreage	Percent
U.S. Forest Service	92,000	13.7%
Bureau of Land Management	50,000	7.5%
State Department of Forestry	308,000	46.0%
Other Public	20,000	3.0%
Private Industrial	157,000	23.5%
Private Non-industrial	42,000	6.3%
TOTAL - ALL OWNERSHIPS	669,000	100.0%

SOURCE: Oregon State Department of Forestry, Summary of Acreage, Forest Protection Districts (July 1, 1979 - June 30, 1980).

TABLE 3

**TILLAMOOK COUNTY AVERAGE ANNUAL TIMBER HARVEST,
BY CLASS OF OWNERSHIP, 1970 - 76**
(In thousands of board feet, Schribner Log Scale)

Ownership	Volume Harvested	Percent
U.S. Forest Service	44,627	17.5%
Bureau of Land Management	41,540	16.3%
State Department of Forestry	35,728	14.0%
Private Industrial*	125,931	49.5%
Private Non-industrial*	6,614	2.6%
TOTAL - ALL OWNERSHIPS	254,407	99.9%

* Separate harvest information for industrial and nonindustrial lands was provided only in 1975

and 1976. From 1970 to 1974, this information was combined into one *Private* category. Table 2 assumes that the harvest ratio between industrial and nonindustrial ownerships that existed in 1975 and 1976 is similar to what occurred from 1970 to 1974.

SOURCE: Tillamook County Economic Information, Oregon Department of Economic Development, June 1979, p. TIL-36-38.

Table 3 shows the percent of timber harvested from the different ownership classes during the seven-year period between 1970 and 1976. The significant variations reflect differences in both management objectives and management conditions. The private industrial ownerships provided almost 50 percent of the County's average annual harvest during this period on only 23.5% of the County's timberland. By contrast, private non-industrial ownerships totaled only 2.6 percent of the harvest on 6.3 percent of the land. This reflects differing commitments to timber production on these two different types of private ownership. On the other hand, the State's harvest of only 14 percent of the total from the 46 percent of the land in their ownership reflects different management conditions. The Tillamook Burn covered most of the state's land, and the timber planted on this burned over land has not yet reached harvestable age. (See discussion under subsection 1.41 below.) By 2030, these state lands should be in full production and the percentage of timber harvested should approximate the proportion of forest land in state ownership.

1.41 Public Forest Lands

A. State Ownership

The 308,000 (46%) of County forest land in state ownership represents 47 percent of all the state forest land in Oregon. Most of the state forest land in Tillamook County was acquired as a result of the Tillamook Burn - - the series of fires that devastated the north-west third of the County between 1933 and 1945. As a result of these fires and the Depression of the 1930's, a vast amount of forest land reverted to the County due to nonpayment of taxes. The County was induced to transfer these lands to the state in return for a share of the revenue generated from them. Over the years, 15 Oregon counties have turned over a total of 654,837 acres to the state for management. The statutes governing these lands comprise ORS Chapter 530.

The Tillamook District office in Tillamook administers 251,500 acres (82%) of the state forest land in Tillamook County. The remaining 56,500 acres are administered through the Astoria and Forest Grove District offices.

The goal of the State's forest program is to optimize the sustained contribution made by the state forests to the people of Oregon by maximizing the growth and harvest of forest products, consistent with the financial resources available and consistent with the need to protect soils, streams, wildlife habitat, recreational opportunities and other environmental values.¹ The overwhelming majority of the state forest land (95.5 percent) in Tillamook County is classified for timber production as a primary uses. One percent is classified for special use (watersheds, research, forest parks, etc.) and 2.5 percent is classified as conservancy.²

The state-owned forests of Tillamook County are quite young. The average conifer stand is only 20-25 years old because of the Tillamook Burn and the timing of the State's subsequent reforestation program.³ There will be significant increases in timber harvest on state lands as the forest matures. The current annual harvest of approximately 9 million cubic feet (about 45 million board feet) will remain fairly steady until the year 2000. However, the harvest is expected to double during the first decade of the 21st century, and is projected to double again by the third decade (2020-2030). After that, the annual harvest is expected to be sustained at a rate 3 to 4 times greater than it is today.⁴ there should be a corresponding increase in forest revenues and employment (see Section 1.5).

The County receives 63.75 percent of the receipts from timber harvested on state lands, with the remainder going to the state. This percentage is significantly higher than the share of timber receipts that are received from other types of forest ownerships. The lands contained in ORS Chapter 530 has been changed a number of times by the State Legislature. The current formula provides 15 percent off the tip to the state for fire protection and intensive management, with 75 percent of the remaining revenues going to the County and the other 25 percent to the state. (The County's share is therefore 75 percent times 85 percent which equals 63.75 percent.)

ORS Chapter 530 also provides a formula for distribution of the County's share of the revenues. After the County's General Fund is reimbursed for any costs of managing the lands, 25 percent of the remaining County share is required to go to the County School Fund and the rest is apportioned to the various taxing districts where the lands are located. ¹ Tillamook County

received an average of over \$2,000,000 a year in revenue from its state forest lands between 1977 and 1981. These revenues totaled \$3,392,965 during fiscal year 1981.¹ (See further discussion in subsection 1.5.)

B. Federal Ownership

The 142,000 acres of federal forest lands in Tillamook County comprise 21 percent of the County's forest ownership. The U.S. Forest Service manages 92,000 of these acres, while the Bureau of Land Management manages the remaining 50,000 acres. A little over half of the BLM lands are O & C lands. The remainder are public domain lands. The management objectives for federal lands have been rather precisely defined. The Abalance use≡ a concept of the O & C lands (Act of August 28, 1937), and the Amultiple-use≡ concept of the National Forests (PL 86-517) place similar responsibilities upon both agencies. Federal laws, regulations, policies and plans govern, the management of these lands and they are generally not subject to County planning regulations. However, the County does have input into the management plans for federal lands. The management of these lands is of great importance to the County, particularly because of the revenues received from timber harvests.

(1) National Forest Lands

The 92,000 acres of U.S. Forest Service lands are all within the southern half of the County. They are managed by the Hebo Ranger District of the Siuslaw National Forest, located in Hebo. This District administers 151,222 acres of national forest land, 62 percent of which lies in Tillamook County. The remainder is in Lincoln County (21%) and Yamhill County (17%).

These national forest lands comprise over 80 percent of the southern third of the County. They provide a full array of forest uses, including timber production, wildlife and fisheries habitat, watershed protection, outdoor recreation and scenic open space. The area is characterized by a relatively young, even-aged, Asecond growth forest≡, with approximately 65 percent of the standing timber ranging between 55 and 125 years of age. This type of forest resulted from the fire

that swept the area in 1849. In 1910, another major fire engulfed the west and south slopes of Mt. Hebo. This largely accounts for the 30,000 acres of alder and brush in the Hebo District. Very little of this national forest land is within the Tillamook Burn area, consequently these south County forests are more mature than the state forest lands that were burned over one or more times between 1933 and 1945.

The above information is taken from the AFinal Environmental Impact Statement for the Hebo Planning Unit≅, which was adopted in the fall of 1978.

This FEIS, which is the current land management plan for the Hebo District, describes available resources; it evaluates management alternatives, including their relationship to state-wide planning goals and guidelines; and it provides a rationale for the selection of a particular alternative as the plan for the management of these national forest lands. This plan allocates 78 percent of the Districts are to full-yield, commercial forest use; 4 percent is in a 300-year rotation that maintains an older forest community; 5 percent is commercial forest land whose yield is constrained to meet visual objectives; 10 percent has no programmed harvest, with three-fifths of this in the Cascade Head Experimental Forest; and the remaining 3 percent is in the Cascade Head Scenic Research Area, which is in a Aproductive reserve≅ category (FEIS, p. 50).

The plan projects a potential annual yield of 133,957 million board feet (about 25 million cubic feet), with a stumpage value of \$23,174,561 (based on 1976 values). Annual return to counties would be \$5,793,640. Jobs supported include 1,004 in the forest industry, and 2,000 in service and trades. Business income generated is expected to exceed \$100 million. The FEIS also describes the plan=s impact on wildlife, recreation, soil stability, and other environmental factors (see pp. 57-58). Since about 60 percent of the Hebo District=s lands are in Tillamook County, a similar percentage of these effects are likely to occur in the County.

The Count receives 25 percent of the receipts from

timber sales on the national forest lands within its boundaries.¹ These receipts, which appear in the County budget as Forest Reserve Rentals, averaged about \$1,800,000 a year between 1977 and 1981. By federal law, 75 percent of these forest revenues must go into the County Road Fund and the remaining 25 percent must go into the County School Fund. Over the past five years (1977-81), 73.8 percent of the County's Road Fund budget came from the receipts from timber sales on national forest lands. These receipts also provided an average of \$454,662 a year for the County School Fund during the 1977-81 period. (Revenues from all of the County's timber lands provided 93.6 percent of the School Fund budget.)

(2) Bureau of Land Management Lands

The approximately 50,000 acres of BLM lands are located primarily within the southeastern portion of the County. These lands are within BLM's Tillamook Resource Area whose administrative office is at the Industrial Park south of Tillamook. They are administered on a sustained-yield, multiple-use basis according to the O & S Act of 1937 and the Federal Land Policy and Management Act of 1976.

BLM's Tillamook Resource Area is within the Westside Salem District Planning Area. BLM expects to complete an intensive multiple-use planning effort for all lands in this area by late 1982. This effort was begun in 1977 with the objective of preparing a timber management environmental impact statement (EIS) prior to the next 10-year allowable harvest declaration. This process is described in the Westside Salem Timber Management Draft Environmental Impact Statement (DEIS) and the Preferred Land Use Alternative for the Westside Salem District Planning Area. These two documents contain useful information on the resources of the planning area as well as a description of proposed decisions, alternatives and outputs for the Westside District Land Use Plan. The DEIS also includes a discussion of the proposed plans relationship to LCDC Statewide and Coastal Goals.

The current annual harvest on the BLM lands in Tillamook County is close to 40 million board feet (about 8 million cubic feet).¹ This can be expected to decline somewhat in 12-15 years because much of the standing timber is currently of harvestable age.² This 75-100-year old second growth timber is the result of the natural reseedling that occurred after the fire that burned over most of the area in 1849.

Approximately 27,500 acres (55%) of BLM's ownership in Tillamook County are O & C lands. The remaining 22,400 acres are public domain lands.³ This distinction is important to the County because of the quite different formulas for calculating the revenue that the County receives from these two different ownership categories.

The O & C lands were revested by the federal government in 1916, after the Oregon and California (O & C) Railroad company violated grant terms. These lands are often in a checkerboard pattern because the original O & C grants called for conveyance of alternate, odd-numbered sections.

TABLE 4

TILLAMOOK COUNTY O & C REVENUES, FISCAL YEARS 1977-81

1977	1978	1979	1980	1981
\$386,630	\$593,854	\$483,223	\$541,935	\$546,599

SOURCE: Tillamook County Treasurer, October 8, 1981

This complicates management, particularly when the alternative blocks on this checkerboard are in private ownership.

O & C receipts are derived from timber sales, road use fees, and miscellaneous sources such as the sale of rock and other materials. Timber sale receipts are by far the most important of these three sources, with 50 percent of the revenues going to O & C counties. The remainder is evenly divided between the federal treasury and BLM's management program. The latter includes road building and maintenance, recreation

improvements, resource protection, and other forest improvements on BLM lands.

There are O & C lands in 18 western Oregon counties. Under the O & C Act of 1937, the receipts from these lands are placed in a common pool, and then divided among the 18 O & C counties according to a formula based on the proportion of the total assessed value of the O & C lands that were in the County in 1915. Tillamook County receives 0.56 percent of each year's O & C receipts according to this formula.¹ The payments to Tillamook County from O & C receipts for the past five fiscal years are shown in Table 4. The year-to-year variations in O & C revenues are caused by variations in the volume and market price of timber harvested.

**TABLE 5
OTHER PUBLIC FOREST LAND OWNERSHIPS**

Ownership	Acreage
State Parks	6,289
Division of State Lands	5,584
Tillamook County	4,390
Municipalities	3,748
State Fish and Wildlife	49
OSU/U of O	10
TOTAL	20,070

SOURCE: Oregon State Department of Forestry, Summary of Acreage, Forest Protection Districts (July 1, 1979-June 30, 1980).

Unlike other federal forest land receipts, these O & C revenues are not earmarked for any particular purpose, and are therefore allotted to the County's General Fund. They provided 18 percent of the General Fund's total receipts during the five-year, 1977-81 period. (See subsection 1.5 for a comprehensive discussion of forest land timber receipts.)

In addition to its O & C lands, BLM administers 22,400 acres of public domain lands within the County. These are essentially the federal lands that were left over after the original federal ownership was acquired by private individuals and corporations, state and local governments, and other federal jurisdictions. While these lands are managed the same as the O & C lands, they provide relatively little revenue to the County because of the formula for allocating timber sale receipts from these lands. Seventy-six percent of the receipts from these lands go to the Federal Bureau of Reclamation and 20 percent go into the federal General Fund. The remaining 4 percent goes to the State's Common School Fund.

Tillamook County also receives a little over \$10,000 each year from the federal government as a payment-in-lieu of taxes. This payment was authorized by the U.S. Congress as an additional compensation for tax exempt federal lands within their boundaries. Counties receive from 10 cents to 75 cents an acre for their national forest and public domain land (O&C lands are exempt) under a formula that takes into account population and other revenues from federal lands. Tillamook County receives the minimum because of its relatively low population and relatively high revenues from timber sales on other federal lands.

C. Other Public Forest Lands

In addition to the lands administered by the State Forestry Department and the federal agencies, there are 20,000 acres of other public forest lands in Tillamook County. These ownerships and their respective acreages are shown in Table 5.

Oregon State Parks has 7,521 acres in the County, of which 6,289 acres are included in a forest protection district. Approximately two-thirds of these forested acres are in Cape Lookout (1,946 acres) and Oswald West (2,271 acres) State Parks. Timber is not harvested on State Park lands, except for salvage purposes. These lands are important for other forest uses, including wildlife habitat, recreation, and scenic open space, that directly benefit local citizens and contribute significantly to the County's tourism industry.

**TABLE 6
PRIVATE INDUSTRIAL FOREST LAND OWNERSHIP IN TILLAMOOK COUNTY**

	Acres	Percent
Publishers Paper	65,482	41.7%
Crown Zellerbach	46,747	29.8%
Longview Fiber	10,742	6.8%
Stimson Lumber	8,723	5.6%
Boise-Cascade	5,780	3.7%
International Paper	5,320	3.4%
Willamette Industries	4,694	3.0%
Miami Corporation	4,212	2.7%
Burlington Northern	3,530	2.2%
Mountain Fir	505	0.3%
Willamina Lumber	485	0.3%
Hampton Tree Farms	469	0.3%
Louisiana-Pacific	368	0.2%
TOTAL	157,057	100.00%

SOURCE: 1982 Assessment Role, Tillamook County Assessor=s Office, Tillamook, Oregon, 1981.

The 5,584 acres in Division of State Lands ownership is managed by the State Forestry Department for timber production. Revenues from these lands go into the State=s irreducible School Fund. These monies are invested, with the interest being distributed to the State=s school districts on a per-student basis.

The State Forestry Department also manages the timber on

1,600 acres of Tillamook County's 4,390 acre ownership. The County receives 75 percent of the revenues, with the state getting the remainder for managing the land. The remaining 2,800 acres are in other uses, including county parks.

The cities of Tillamook (2,447 acres) and Nehalem (975 acres) own over 90 percent of municipal holdings. Bay City and Manzanita own 175 and 130 acres respectively, and Neahkahnie and Netarts Water District each own approximately 10 acres. Most of the municipalities' acreage is in their respective watersheds. Timber has been harvested on some of this land, with the revenues going to the city or water district that owns the land.

1.42 Private Forest Lands

The 199,000 acres of private forest lands in Tillamook County comprise 29.8 percent of the County's total forest acreage. About 157,000 acres (79.3%) of these private lands are in industrial ownership, with the remaining 42,000 acres being owned by private individuals. As noted earlier in this section, the industrial ownerships provided 49.5 percent of the County's annual average timber harvest between 1970 and 1976 (see Table 3), while the non-industrial ownerships provided only 2.6 percent of the harvest during this period. Table 6 shows that Publishers Paper and Crown Zellerbach together own over 70 percent of the County's industrial timber land. The remaining 30 percent is divided among 11 other industrial ownerships. (An industrial ownership is characterized by ownership of a processing facility.)

**TABLE 7
PRIVATE NONINDUSTRIAL FOREST LAND OWNERSHIPS**

	Number Owners	Number Acres
10 - 100 Acres	567	21,372
100 - 500 Acres	119	22,708
500 + Acres	0	0
TOTAL	686	44,080

SOURCE: Forestry Program for Oregon, Supplement No. 1, p. 27

The industrial ownership pattern in the County is described on the 1978 Tillamook County Timber Ownership map that was prepared by the Oregon State Forestry Department for the State Department of Revenue. This map is available in the County Planning Department office.

Table 7 shows that in 1977, 44,000 acres of private non-industrial ownership were divided among 686 forest landowners, 567 of whom owned less than 100 acres. The Oregon State Forest Department most recent assessment (1981) based on the acreage in forest protection districts, shows approximately 42,000 acres in private non-industrial ownership. Since this includes parcels as small as 2 acre, some of the 42,000 acres are in ownerships that are too small for commercial forestry. The management of these lands is described in ore detail in Section 4.5.

Since 1978, most of Tillamook County=s private forest land has been taxed according to the provisions of the Western Oregon Forest Land and Severance Tax which was adopted by the 1977 Oregon Legislature. This includes an ad valorem tax on the base land value of forest land and a 6 2 percent tax on the appraisal stumpage value of trees harvested for use or sale. Under this system, the land on which timber is grown is taxed annually, while the timber itself is not taxed until it is harvested. ¹

¹ See *AThe Tillamook County Economy: A Working Model for Evaluating Economic Change*, Oregon State University Extension Service, Special Report 478, March 1977.

TABLE 8

TILLAMOOK COUNTY TIMBER RECEIPTS

Fiscal Year - Source	General Fund	Road Fund	School Fund
1981			
Timber and Land Sales ¹	\$700,986		\$654,273
O & C Land Grant ²	546,599		
Forest Reserve Rental ³		1,361,058	459,991
Total Fund Receipts (all sources)	3,845,392	1,750,892	1,181,201
1980			

Timber and Land Sales	519,395		438,073
O & C Land Grant	541,935		
Forest Reserve Rental		1,649,612	557,794
Total Fund Receipts (all sources)	3,605,120	2,075,860	1,068,878
1979			
Timber and Land Sales	438,474		284,534
O & C Land Grant	483,223		
Forest Reserve Rental		1,533,636	511,414
Total Fund Receipts (all sources)	3,081,594	1,965,574	849,201
1978			
Timber and Land Sales	589,919		(1)
O & C Land Grant	593,854		
Forest Reserve Rental		1,311,298	437,099
Total Fund Receipts (all sources)	2,210,552	1,790,632	437,261
1977			
Timber and Land Sales	221,239		(1)
O & C Land Grant	386,630	110,000 ²	
Forest Reserve Rental		921,041	307,014
Total Fund Receipts	1,917,827	1,597,239	363,823

- 1 Prior to 1979, there was no required allocation of Timber and Lands Sales receipts to the School Fund.
- 2 This represents a one-time transfer of O & C Land receipts from the General Fund to the Road Fund.

SOURCE: Tillamook County Treasurer, October, 1981.

TABLE 9
TILLAMOOK COUNTY'S AVERAGE ANNUAL TIMBER RECEIPTS,
BY SOURCE, 1979-81

SOURCE	AMOUNT	PERCENT
State Forest Lands	\$2,271,304	41.4%

National Forest Lands	1,514,769	27.6%
O & C Lands	523,919	9.5%
Timber Severance Taxes	1,167,452	21.3%
Payments-in-Lieu of Taxes	10,489	0.2%
TOTAL	\$5,487,933	100.0%

SOURCE: Tillamook County Treasurer, October, 1981.

During the three fiscal years (1979-81) since this tax law has been in effect, the County has collected an annual average of \$1,167,452 from timber harvested under the severance tax, with a high of \$1,303,737 in 1981. ² These revenues are dispersed to the various taxing districts in the County, including County government, incorporated cities, school districts, port authorities, rural fire protection districts, sanitation authorities, water districts, hospital districts, and the educational service district.

The other taxing approach that is available to private timber land owners is the Western Oregon Small Tract Optional Tax. This tax applies only to the bare land according to its productivity; timber is exempt whether harvested or not. Those who own between 10 and 2,000 acres of forest land may elect this option instead of the severance tax. This includes all 686 of the County's private non-industrial land owners. In 1980, only 18 landowners, with a combined total of 1,406 acres and \$434,582 in valuation, had elected to be taxed by this approach. ¹ At a tax rate of \$15 per thousand, this would result in only \$6,519 in revenues.

1.5 Economic Benefits

Tillamook County is highly dependent upon the employment, income, and public revenues that are generated by its forest lands base. The timber industry is by far the largest of the County's four basic industries. (The other are agriculture, recreation/tourism, and marine food production.) The harvesting and processing of timber produces over 55 percent of the County's combined General Fund, Road Fund, and School Fund revenues, and they provide a substantial share of the revenues of the County's other taxing districts. They are responsible for over 30 percent of its total employment, and over 70 percent of its manufacturing employment. They also generate almost 50 percent of the County's export income. ¹ Other forest uses, including fishing, hunting and other outdoor recreation, also

provide substantial benefits to local citizens and contribute to the tourism industry.

1.51 Public Revenues

One of the substantial public benefits generated by the County=s forest lands are the revenues that the County=s taxing districts receive from the sale of timber. The sources and amounts of these revenues were discussed in Section 1.4. Their contribution to the County=s General Fund, Road Fund and School Fund are described in Table 8.

During the 1977-81 period forest land revenues provided 34.4 percent of the County=s General Fund budget, 75.0 percent of its Road Fund budget, and 93.6 of its School Fund budget. this does not include the ad valorem forest lands tax receipts that went to the General Fund and School Fund. Nor does this include the more than \$2,000,000 a year in timber revenues that went to other taxing districts in the County. A reduction in these timber revenues would require a corresponding increase in property taxes if the current level of services is to be maintained.

The sources of these timber revenues which were described in Section 1.4, are summarized in Table 9.

TABLE 10

**INCOME AND EMPLOYMENT GENERATED BY TILLAMOOK COUNTY
TIMBER INDUSTRY, 1978**

Worker Earnings in the Timber Industry	\$19,223,200
Earnings Multiplier ¹	1,595
total Earnings Generated by Timber Industry	\$30,661,000
Total Labor and Proprietor=s Income (all sources)	\$103,880,000
Average Earnings per Worker	
- - - - Timber Industry	\$15,966
- - - - All Industries	\$12,746
Total Employment Generated by Timber Industry	2,406
Percent of Total County Employment	30%

1 *The earnings multiplier provides a measure of the Aturn-over effect≅ of the initial worker earnings in the timber industry. The eventual total earnings generated are 1.595 times as great as the initial earnings because of this turn-over effect.*

SOURCE: AWestern Salem Draft Timber Management Environmental Impact Statement≅, Bureau of Land Management, 1981, pp. 2-40.

TABLE 11

TILLAMOOK COUNTY ANNUAL AVERAGE EMPLOYMENT 1974-78, 1960-69

	1978	1977	1976	1975	1974	Average 1960-69
Total Employment	5620	7760	6740	6680	6970	5825
Manufacturing Total	1651	1500	1350	1120	1480	1802
Lumber and Wood Products	1204	1100	990	770	1130	1494

SOURCE: ATillamook County Economic Information≅, Oregon Department of Economic Development, P TIL-6 and TIL-9. (1977 and 1978 figures where obtained by phone from the Oregon Employment Division.)

1.52 Income and Employment

A particularly important measure of economic benefit is sales outside of the County (exports). Exports add to the wealth of the community, whereas sales within the community simply redistributes the wealth. In 1973, the timber industry generated over \$65,000,000 in exports. This amounted to almost 50 percent of the County=s total exports, and over three times the income generated by the agricultural sector, the second most important income generator.¹

Table 10 shows the income and employment provided by the County=s timber industry in 1978. The over \$30,000,000 in total earnings generated by the industry was 30% of the County=s total labor and proprietors income. The average earnings per worker in the timber industry were \$15,966 as compared to \$12,746 in all industries. Employment generated was 2,406, which was 30 percent of the County=s total employment. These figures somewhat understate the income and employment effects of the timber industry because they omit employment and resultant income from forest management activities.

Table 11 provides another perspective on timber industry employment by comparing it with manufacturing employment and total employment on an annual average basis from 1974 to 1978. During this 5-year period, total employment averaged 6,754 persons a year, with 1,420 of these in manufacturing and 1,038 in wood products. Timber industry employment was 15 percent of the total employment and 73 percent of manufacturing employment. This somewhat understates the employment effects of the timber industry as it does not include employment generated in other sectors by this basic industry (the multiplier effect).

Forest lands also provide a wide variety of other benefits including fish and wildlife habitat, watershed protection, recreation, and scenic open space. While the benefits of these other forest uses are often difficult to quantify in economic terms, data gathered in 1975 indicates that sport fishing, hunting and trapping annually provides 576,366 days of recreation valued at \$13,323,840 in Tillamook County.¹ The County's scenic forest vistas and other forest-related recreational activities are not only enjoyed by local citizens, they also contribute significantly to the County's tourism industry.

1.53 Past and Future Trends

Timber industry employment experienced both an absolute and a relative decline during the 1974-78 period as compared with the decade of the 1960's. Lumber and wood products employment averaged 1494 persons a year during the 60's, with a high of 1810 in 1960. This was 26 percent of the total employment and 83 percent of the manufacturing employment for the decade. While some of this decline has resulted from particular local conditions, some of it can also be attributed to the general relative decline in timber industry employment because of the increased use of labor-displacing technology in harvesting and processing. In western Oregon, the number of employees required to process a given amount of lumber in sawmills and plywood plants was cut in half between 1950 and 1970.¹ Since much of this decline was caused by the closure of less efficient mills and the emergence of larger integrated mills, the rates of decline are expected to diminish over time. However, a 1973 Forest Service study revealed that even if wood products output were held constant at 1970 levels through the year 2000, employment would still decline by 36 percent because of capital substitution and increased labor productivity.²

Dependence on the timber industry places Tillamook County's economy on a wooden roller coaster, with employment, income, and public revenues all rising and falling to respond to changes in the interest rate. Table 11 shows some of the fluctuations in timber industry employment that are caused by changing economic conditions. Employment in the timber industry fell by

360 persons (32%) from 1974 to 1975, with 1975 being a year of high interest rates and the closing of the Oregon-Washington Plywood facility in Garibaldi. Over the next three years, with improved economic conditions, timber industry employment climbed steadily until it reached 1,204 persons in 1978. Now in 1981, the County has experienced another severe decline in timber employment because of high interest rates, low housing starts, and a consequent lack of demand for lumber. With interest rates hovering around 20 percent, timber and industry employment reached 500 persons in September, 1981. This is over half of the industry's current labor force. the County's largest mill (Publishers) is shut down for an indefinite period, and the second largest mill (Louisiana Pacific) is operating on a reduced, day-to-day basis.

The future health of the County's economy will continue to depend upon the lumber industry to a significant extent even if needed diversification of the economy occurs. Harvest projections place Tillamook County in a relatively favorable position compared to other areas in western Oregon. The 1976 Bueter Report revealed that in western Oregon, under current management policies, only the north coast timber shed can maintain current harvest levels over the next 20 years. For all of western Oregon a harvest decline of up to 22 percent is projected by the year 2000.¹ Since western Oregon currently produces 16 percent of the nation's softwood timber, and since national timber demand is projected to increase 47 percent by the year 2000,² the north coast areas has a substantial opportunity to increase its share of the timber harvest. This possibility is reinforced by the anticipated four-fold increase in timber harvest by the year 2030 on the 46 percent of the County's forest land that is in state ownership (see Section 1.4). this should not only generate a substantial increase in public revenues (6 to 10 million dollars in 1981 dollars), it could also provide a significant increase in local income and employment if a substantial amount of this timber is harvested by local contractors and processed in the County.

1.6 Conserving the Forest Land Base

The value of Tillamook County's forest resources establishes the need to conserve the County's commercial forest land base. This need is reinforced by the County's opportunity to increase its share of the timber harvest in the future (see end of previous section), and because of anticipated increases in the demand for forest-related recreational activities, including fishing and hunting.

The State Board of Forestry, in their Forestry Program for Oregon, stresses the role of land use planning in the protection of productive forest land. They point out that Aa decreasing supply of timber, increasing demands on that

supply, a shrinking commercial forest land base and increasing recreational and urban demands have all combined to make the land use planning process crucial. Their concern is underlined by the 1978 Beuter Report's projection of up to 22 percent decline in timber harvest in western Oregon by the year 2000, and reinforced by the State Forestry Department's revelation that 731,000 acres of western Oregon's commercial forest land was converted to nonforest uses between 1973 and 1978 - that's a loss of 5 percent of the area's forest land over a 6-year period.¹

The following State Board of Forestry policy statement on land use planning's contribution to conserving the forest land base is taken from their Forestry Program for Oregon (pp. 6-7):

The Board of Forestry recognizes:

The vital impact on the people of Oregon of the existence, classification, dedication, management, and use of commercial forest land within the State.

The need to conserve the commercial forest land base and preserve the present 20 million acres of commercial forest land designated for timber production if community stability, commodity and amenity values demanded by the citizens of Oregon and the nation are to be realized.

Therefore, it is the policy of the Board of Forestry to:

Promote and support active forest land use planning in Oregon so that the commercial forest land base is preserved and forest land uses are established in accordance with the social and economic needs of the people of Oregon.

Seek adoption, by Oregon forest landowners and agencies, of plans and programs for all commercial forest lands that will not erode the present commercial forest land base; and that are consistent with the needs of the people of Oregon through the active participation of the Department of Forestry in such planning.

Encourage the creation and implementation of land use change criteria, including economic evaluation, by which state and local planners can evaluate the impact of withdrawals from the commercial forest land base.

Tillamook County has demonstrated its commitment to protect its commercial forest land base by placing 87 percent (620,541) of its total acreage in a forest zone that is highly restrictive of nonforest development (see Sections 4.1). In addition, 5,000 acres are protected by the County's EFU zones, and about 7,000 acres are given considerable protection by the County's Small Farm and Woodlot 10-Acres zone. Another 5,000 acres of forest land are protected for other, recreation-oriented forest uses by the County's Recreation Management zone.

An Oregon State Forestry Department publication entitled "Estimating the Economic Consequences of Commercial Forest Land Loss to Alternative Uses" (January, 1979) is available in the Planning Department. This will be used by staff to evaluate the economic impacts of withdrawals from the commercial forest land base, with assistance from State Forestry's Tillamook District Office. This publication provides a method for estimating employment and payroll impacts, income impacts throughout the economy, total economic activity impacts, and tax revenue impacts.

2. LEGISLATIVE MANDATE

Mandatory statewide forest lands planning standards were initially established by the adoption of the Forest Lands Goal (Goal 4) in 1975. This is one of the original statewide planning goals adopted by the Land Conservation and Development Commission (LCDC) pursuant to the Oregon Legislative Assembly's passage of Senate Bill 100 in 1973.

The purpose of the Forest Lands Goal is "to conserve forest land for forest uses." This is to be accomplished by (1) an inventory of lands suitable for forest use and a determination and mapping of the productivity of these lands for commercial use, (2) designation of these lands on the comprehensive plan map as forest lands, and (3) retention of forest uses on designated forest lands. The inventory of Tillamook County's forest lands is described in Section 1.2 and 1.4, and Appendix A of this element. The designation of these lands is described on the County's zoning maps. And the retention of forest uses on these lands is provided by the County's Forest zone and Small Farm and Woodlot 20 and 10-acre zones with support from the forestry findings and policies contained in Section 4.

Forest lands are defined by Goal 4 as:

Lands composed of existing and potential forest lands which are suitable for commercial forest uses; (2) other forested lands needed for watershed protection, wildlife and fisheries habitat and recreation; (3) lands where extreme conditions of climate, soil and topography require the maintenance of vegetative cover irrespective of use; (4) other forested lands in urban and agricultural areas which provide urban buffers, wind breaks, wildlife, and

fisheries habitat, livestock habitat, scenic corridors and recreation use.≡

Goal 4 defines Aforest uses≡ as:

A(1) the production of trees and the processing of forest products; (2) open space, buffers from noise, and visual separation of conflicting uses; (3) watershed protection and wildlife and fisheries habitat; (4) soil protection from wind and water; (5) maintenance of clean air and water; (6) outdoor recreational activities and related support services and wilderness values compatible with these uses; and (7) grazing land for livestock.≡

The requirements of the Forest Lands Goal were clarified by LCDC=s adoption of a May 29, 1979 policy paper (revised July 3, 1979) entitled ACommon Questions on Forest Lands Goal≡. The following clarifications were included:

- (1) That Goal 4 inventory requirements include a mapping of forest lands by cubic foot site class;
- (2) That a county must define Acommercial forest land≡ if they use the term; and
- (3) That residential use on forest land is a nonforest use and must be subject to conditional use procedures.

The policy paper also provided clarification on the planning and zoning of federally owned forest lands, minimum lot size requirements for a forest zone, and the relationship between the Oregon Forest Practices Act and the Forest Lands Goal. These issues are discussed in more detail in other sections of this element.

3. FOREST LANDS PLANNING PROCESS

3.1 Overview

Forest lands planning in compliance with current state law (ORS Chapter 197) was begun in the fall of 1978 with the productivity mapping of the County=s private forest lands, the discussion of forestry issues at citizen advisory committee meetings, and the formation of a Forestry Advisory Council. The November, 1978 issue of the Morning Star Gazette, the planning team newsletter, described these beginning stages of the forest lands planning process. This issue is included in this element as Appendix B.

The forest lands planning process was somewhat confused and complicated at this stage by the lack of policy direction at the state level with respect to

the scope and content of County forest land planning. A particularly obstructive issue was whether the County could adopt forest regulations that are more restrictive than the Oregon Forest Practices Act. This was finally clarified by the 1979 Oregon Legislature's passage of HB 3008 and LCDC's adoption of a policy paper entitled "Common Questions on the Forest Lands Goal" in July, 1979. (See Section 4.2 for further discussion of the forest practices issue.)

3.2 CAC Issues and Concerns

The County's five citizen advisory committees (CACs) became involved in forest land planning with their identification and discussion of forestry issues and concerns during November and December of 1978. Each CAC developed a list of forestry issues and concerns which were sufficiently similar that they were consolidated into one list which is included in this element as Appendix C. The CACs were also made familiar with the requirements of the Forest Lands Planning Goal.

3.3 Forest Advisory Council

a Forest Advisory Council (FAC) was formed during November, 1978 to provide technical assistance on forest land planning issues. Most members had forest management experience (see Appendix D). a representative from each of the CACs was included to establish direct communication between the CACs and the FAC, and to help assure broad citizen involvement at each stage of the planning process.

The Forest Advisory Council held four long evening meetings late in 1978 and early in 1979. These meetings brought together a broad range of interests and perspectives on forest lands planning issues. A primary function of the FAC was to respond to the issues and concerns raised by the CACs. Detailed minutes of the January 30 meeting are included in Appendix E as an example of the often informative and sometimes frustrating discussions that occurred at these meetings. In retrospect, much of what was said was not directly related to what the LCDC policy paper of the following summer indicated had to be accomplished in the planning process. Some of it was groping in the dark and walls were encountered. however, much was learned about both citizen concerns and the perspectives of those whose decisions affect the use of over 90 percent of the land in the County.

After the final, February 15, 1979 FAC meeting, forestry planning was given minimal attention while the County's natural resource planner was preoccupied with the development and approval of the Agricultural Lands Criteria, a complete staff turnover, the voluntary EFU campaign and finally, throughout most of 1980, the rezoning of all of the County's land. After

completion of the Agricultural Lands Element in March 1981, work resumed on the final writing of the Forest Lands Element.

3.4 Forestry Findings and Policies

The Forestry findings and policies (see Section 4) and a revised draft of the Forest Zone were completed by early July, 1981. Copies of this material were sent to the following persons for their review and comment:

Dave Hill, Oregon Business Planning Council
George McKibbin, Publishers Paper
Bob Olsen/Nick Nicholson, Crown Zellerbach
Bill Dryden, Boise-Cascade
Rich McEvoy, Stimson Lumber Co.
W. J. Barzler, International Paper
Carol Wood, Hampton Tree Farms
July Barker, Burlington Northern Timber, Inc.
Ed Oram, U.S. Forest Service, Hebo District
Jerry Heinz, BLM Tillamook Area
Dave Heckerth/Doug Taylor, Oregon Department of Fish & Wildlife
Tillamook Office
Millard Trout, State Forestry Department Tillamook District

These are the individuals or representatives of organizations that had previously asked to have an opportunity to review this material. The responses that were received from these people are included as Appendix F.

A number of timely and constructive comments were received from the State Forestry Department's Tillamook District and main Salem Offices. These comments were taken into account as much as possible in further revisions of the Forest Zone and forest policies. Millard Trout and Don LaFrance of State Forestry's Tillamook District Office have provided essential assistance throughout this planning process. They deserve credit from many of the positive accomplishments that are reflected in this forest lands element.

The County's five citizen advisory committees reviewed the Forest Zone and the forestry findings and policies as they were being developed and revised from April through July of 1981. This review led to a number of constructive changes and eventual formal approval by each of the CACs by a cumulative 38-1 vote.¹

4. FINDINGS AND POLICIES

4.1 Forest Land Zoning

Findings

The County's zoning ordinance is a means for implementing the comprehensive plan's goal of retaining forest lands for forest uses. Land that has been identified as forest land in the County's Comprehensive Plan has been placed in the Forest Zone (F), Farm Zone (F-1), Small Farm and Woodlot 20 Zone (SFW-20), and Small Farm and Woodlot 10 Zone (SFW-10). Eighty-seven percent (620,541 acres) of the County's total land area has been included in the F zone. Approximately 3,500 acres of the 35,500 acres included in the F-1 zone are predominantly forest land. About 1,500 acres of the 2,000 acres included in the SFW-20 zone are forest lands. An additional 7,000 acres of small woodland are included in the SFW-10 zone.

The purpose of the Forest zone is to retain forest land for forest use and to encourage the management of forest lands for the growing harvesting and processing of forest crops consistent with the requirements of the Oregon Forest Practices Act. The zone also provides for other forest uses including watershed and soil protection, wildlife and fisheries habitat, outdoor recreation activities, open space and scenic preservation, development of mineral and aggregate resources, and agricultural activities, free from the encroachment of conflicting nonforest use and influences.

Most forest uses are allowed outright in the Forest zone, while nonforest uses are limited by a conditional use process that requires review by the County Planning Commission. Nonforest uses are allowed only if they are compatible with forest and farm uses on adjacent and/or nearby land and if they do not constitute a serious fire hazard. Nonforest-related dwelling units must be situated on land that is least suitable for the production of forest or farm crops. Such dwellings must not interfere with forest or farm practices in the area.

The Forest zone contains a 40-acre minimum lot size requirement for forest and farm uses to help assure that productive forest land is not divided into parcels that are too small for commercial forest use. Such minimum lot size requirements would not be fully adequate for retaining forest land for forest use without the other criteria limiting nonforest uses which are contained in the Forest zone. Lands that are suited for smaller acreage forest-related uses such as nursery stock, forest greenery and Christmas trees have been included in the F-1, SFW-10, and SFW-20 zones which allow parcelization for such uses.

Forest lands included in the SFW-20 zone and the F-1 zone will be retained in forest use or converted to farm use at the discretion of the owner (see

Section 4.3). these are both exclusive farm use zones (pursuant to ORS 215.213) which are adequate to protect forest lands because they provide for the forest uses permitted by law, b) and because limitations on nonforest uses are similar to those contained in the Forest zone.

The SFW-10 zone is a modified resource zone which encourages small woodlot management on those portions of an ownership that are economically suited for such use. The County has prepared exceptions for the land included in this zone in recognition of the fact that it is not a primary resource zone in the same sense as the Forest or EFU zones. The County anticipates that approximately 75 percent of the forest type land included in this zone will remain available for commercial forest use, while an even larger percentage will remain suitable for other forest uses. (Further discussion of the provisions of this zone is included in Section 3.3 of the Goal 2 Element.)

Virtually all of the 141,000 acres of federal land in the County has been included in the Forest zone. This is to assure that if any such land is ever transferred to private ownership it will be subject to the provisions of the Forest zone. In the meantime, federal laws, regulations, policies and plans govern the management of these lands, and they are not subject to County zoning regulations. The one qualification is that County lands within the Coastal Zone are subject to the provisions of the Federal Coastal Zone Management Act. This requires that actions on federal lands which significantly affect nonfederal lands within the coastal zone must be consistent with the State of Oregon's Coastal Zone Management Program which includes the County's acknowledged comprehensive plan.

Before forest land is changed to another use, the productive capacity of the land in each use should be evaluated. The Oregon State Board of Forestry has recommended that An economic impact statement for proposed withdrawals from the commercial forest land base should be submitted to each local planning commission prior to a change in classification (Forestry Program for Oregon, p. 69). this can be done by staff with assistance from the State Forestry Department (see discussion on p. IV-41).

Policy

Tillamook County will maintain its Forest zone (F) to retain forest land for forest use and to encourage the management of forest lands for the growing, harvesting and processing of forest crops consistent with the requirements of the Oregon Forest Practices Act. This zone will also continue to provide for other forest uses including watershed and soil protection, wildlife and fisheries habitat, outdoor recreation activities, open space and scenic preservation, and agricultural activities, free from the encroachment of

conflicting nonforest uses and influences. All nonforest uses proposed for the Forest zone will be reviewed by the County Planning Commission to assure that they are compatible with forest and farm uses on adjacent and nearby land, and to assure that these uses meet all other criteria and standards described in the zoning ordinance. Before forest land is changed to another use, the productive capacity of the land in each use shall be evaluated. the County will not attempt to regulate actions on federal lands except to assure that those actions which significantly affect nonfederal lands are consistent with the County=s comprehensive plan as provided for in Oregon=s coastal Zone Management Program and as required by the Federal Coastal Zone Management Act.

4.2 Regulation of Forest Practices

Findings

The 1971 Oregon Forest Practices Act (ORS 527.620-527.990) as implemented through State Board of Forestry rules (OAR 629-24-01 through 629-24-648) regulates forest operations on forest land. This act, which was the first of its kind in the United State, attempts to standardize the various management policies on forest lands by providing rules and guidelines which assure at least a minimum level of forest resource protection on the part of all forest land owners and managers. The Act is enforced by the State Department of Forestry and is directly applicable to all nonfederal forest lands within the State. The State of Oregon has an agreement with federal forest management agencies that regulations on federal lands will meet or exceed the requirements of the Forest Practices Act.

The law behind the forest practices rule includes the following policy statement (ORS 527.630):

ARecognizing that the forest makes a vital contribution to Oregon by providing jobs, tax base and other social and economic benefits, by helping to maintain forest tree species, soil, air and water resources and by providing a habitat for wildlife and aquatic life, it is hereby declared to be the public policy of the State of Oregon to encourage forest practices that maintain and enhance such benefits and such resources, ans that recognize varying forest conditions.≡

This policy gives the State Board of Forestry the authority Ato develop and enforce regional rules . . . designed to assure the continuous growing and harvesting of forest tree species and to protect the soils, air and water resources, including but not limited to streams, lakes and estuaries . . . ≡ The Board has established three forest regions, each with a forest practices

committee designated to recommend forest practice rules appropriate to the forest conditions within its region to the board. Each regional committee is to consist of nine members, two-thirds of whom shall be private landowners, private timber owners or authorized representatives of such landowners or timber owners who regularly engage in operations. (ORS 527.650) Tillamook County is in the Northwest Oregon Region.

The Forest Practices Act sets minimum standards for the following forest practices (ORS 527.710):

- A(a) Reforestation of forest land economically suitable therefore;
- (b) Road construction and maintenance operations on forest land;
- (c) Harvesting of forest tree species;
- (d) Application of chemicals on forest land; and
- (e) Disposal of slashing on forest land.

These practices are regulated for the following objectives (ORS 527.630):

- (a) maintaining forest tree species;
- (b) maintaining soil, air and water resources; and,
- (c) providing a habitat for wildlife and aquatic life.

The 1979 Oregon Legislature Assembly amended the Forest Practices Act through enactment of HB 3008 to clarify the authority of local government to regulate forest operations. As codified in ORS 527.722, this provides that Any unit of local government shall adopt any rules, regulations or ordinances regulating the conduct on forest lands of forest operations governed by the Oregon Forest Practices Act or rules promulgated thereunder. This does not preclude cities from regulating forest practices on lands within their boundaries according to standards equal to or more stringent than those established by the Forest Practices Act. Nor, according to ORS 527.726, does it preclude counties from performing their planning duties pursuant to state law with respect to forest lands by:

- A(a) Designating in comprehensive plans forested lands to be conserved in accordance with the state-wide planning goals;
- (b) Zoning forested lands for uses other than or complimentary to commercial growing and harvesting of forest tree species in

implementing a comprehensive plan; or

- (c) Adopting rules, regulations or ordinances regulating forest operations on those forested lands zoned for primary uses other than the commercial growing and harvesting of forest tree species in accordance with the use or purpose for which those lands have been zoned.≡

Policy

Tillamook County recognizes the Oregon Forest Practices Act as the rule regulating the conduct on forest lands of forest operations governed by the act, while reserving the right to perform its planning duties pursuant to state law as provided by ORS 527.726.

4.3 Forestry/Agriculture Interrelationship

Findings

Many ownerships contain some combination of agricultural bottomlands, hill pasture, and forested uplands. The 1978 Census of Agriculture indicates that 9,699 (23%) of Tillamook County's 42,024 farm acres are classified as woodland. Management of these woodlands can be an integral part of a farm operation as income from timber sales may be used to overcome short-term cash flow problems or for needed investment in capital facilities. Landowners also convert land from woodland to pasture or visa versa depending upon the type of land, economic conditions and individual preference. Administration of the state land use planning law recognizes the interchangeability of resource land management by not requiring an exception to show why one resource designation is chosen over another when inventoried lands satisfy the definition requirements of both the agricultural and forest goals. ¹

The County's two exclusive farm use zones (F-1 and SFW-20) are adequate to protect forest lands because they provide for all forest uses permitted by ORS 215.213, and because they place limitations on nonforest uses similar to those contained in the Forest Zone. Forest-related uses that are allowed either out-right or conditionally include the propagation or harvesting of forest products, public and private parks, private hunting and fishing preserves and a portable or temporary facility for primary processing of forest products.

Tillamook County has taken into account both the resource potential and the preferences of owners in determining the appropriate zoning of land which meets both the agricultural and forest land definitions. The resultant acreage allocation of forest land to the County's resource zones is described in

Section 4.1.

Policy

Tillamook County recognizes the interrelationships between agricultural and forest lands management on many ownerships. The conversion of land from one resource use to another shall remain at the discretion of the property owner. The County will continue to permit forest uses in the exclusive farm use zones and to allow farm uses in the Forest Zone. Non-resource uses will continue to be restricted in both zones to assure compatibility with resource use.

4.4 Forest Advisory Committee

Findings

A County-wide forest advisory committee played a useful role in helping identify and refine forest-related issues during the early stages of the forest lands planning process. The continuation of such a committee could assist the County on appropriate forest-related matters after completion of the current land use planning process.

Among the issues that could be addressed by such a committee are land use planning decisions that affect forest lands, public awareness and availability of financial and technical assistance programs for small woodlot owners, and increased local processing of forest products. This committee could also conduct a quarterly review of important forest-related decisions made by the County's planning bodies.

The committee should be composed of representatives of the public forest management agencies (State DOF, USFS and BLM), the private timber corporations, non-corporate forest interests, forest resource processors, the State Department of Fish and Wildlife, water districts and each of the County's five Citizen Advisory Committees. Membership should be for a specified term, with meetings to be held at least every three months.

Policy

Tillamook County shall establish a Forest Advisory Committee which will advise the County on appropriate forest-related issues, and provide a quarterly review of important forest-related decisions made by the County's planning bodies.

4.5 Small Woodland Management

Findings

Approximately 44,000 acres of Tillamook County's forest lands are in private non-industrial ownership (small woodlands).¹ While this represents only seven percent of the County's forest land, the zoning of this land has presented one of the major challenges for our planning process because of existing and potential conflicts between forest uses and rural residential development. This land has a high potential for productive forest uses and some of it is subject to a high demand for rural residential homesites because of location, ownership, and parcel size. These small woodlands are generally found on the fringes of the larger corporate and public holdings near existing public roads. Their development for nonforest uses not only removes some of the County's highest site class (most productive) land from the forest land base, it can also lead to conflicts with forest practices on adjacent corporate and public forest lands. The County's challenge has been to utilize appropriate zoning to provide opportunities for rural homesites on land that isn't suitable for long-term forest management, while minimizing the adverse impact on nearby productive forest land.

The following table reveals that in 1977 there were 686 nonindustrial private forest land owners in Tillamook County, 567 of whom owned less than 100 acres.

	No. Owners	No. Acres
10-100 Acres	567	21,372
100-500 Acres	119	22,708
500+ Acres	0	0
TOTAL	686	44,080

There are good economic reasons for the County encouraging the management of these lands for timber production despite the property taxes that are realized from residential development. Site Class II forest land produces approximately 57 thousand board feet of lumber per acre on a 70-year rotation. This means that 18 acres can produce a million board feet which according to Western Environmental Trade Association calculations would result in 22.5 jobs, \$230,107 in payrolls, \$28,286 in County receipts, \$6,673 in state taxes, \$1,050,000 in total business dollars generated by manufacturing. the total estimated economic contribution to the State of Oregon from the Timber grown on a 18-acre parcel is \$1,315,066.¹ Since this is based on a 70-year harvest cycle the annual economic benefit is over \$18,000 or \$1,000 per acre per year.

Despite these long-term benefits from timber production, there will be continued pressure to convert substantial amounts of potentially productive small woodlands to nonforest uses, including rural homesites, unless the individual woodland owner perceives that it is profitable to commit the land to timber production. It is estimated that only 20 percent of Oregon's non-industrial private forests are currently managed for production.¹ In western Oregon, the harvest on non-industrial private lands immediately could be increased three times without violating sustained yield principles.²

The management of Oregon's private non-industrial forest lands has been the focus of statewide concern since Oregon State University published the Beuter Report (Timber for Oregon's Tomorrow) in 1976. This study revealed that the productivity of these so-called small woodlands would have to be substantially increased if western Oregon is to avoid a projected 22 percent decline in timber harvest by the year 2000. This concern was reinforced by the State Department of Forestry's revelation that 731,000 acres of western Oregon's commercial forest land was converted to nonforest uses between 1973 and 1978³--that's a loss of five percent of the area's forest land over a six-year period. Most of this loss occurred on private non-industrial woodlands.

The Oregon State Board of Forestry approved a Forestry Program for Oregon in 1977 in response to public concern over possible future timber shortages. One of the problems that requires immediate attention according to this study is the under productive private non-industrial forest lands in the coast range.

The Forestry Program for Oregon has identified the following major reasons why non-industrial private forest landowners do not manage their lands for timber production.¹

- (1) Many Landowners are not aware that forest management returns substantial economic benefits (State Forestry estimates that these benefits exceed the typical real rate of return from savings accounts and Grade A corporate bonds).²
- (2) Many landowners' forest management programs are limited by periodic cash flow. Factors adversely affecting cash flow include high cost of small tract management, fluctuating markets for timber, land and timber taxes, inheritance taxes, income taxes, and landowner demand for income.
- (3) Most owners lack sufficient knowledge and skills in forestry to manage

their properties efficiently, and are unaware of the educational, financial and technical assistance that is available to them.

- (4) There is no public encouragement (land management ethic) to manage these lands.
- (5) Many owners have objectives other than forest management, including utilizing the land for rural homesites for themselves or for sale to other persons.

A primary obstacle on the west side of the coast range is the high cost of preparing brush-covered land for tree planting. Site preparation costs, which range from \$300-\$700 an acre, discourage landowners from planting a crop that they can't harvest for 60-70 years.

One option for small woodland owners has been to sell to the private timber corporations, who have purchased approximately 10,000 acres of woodland in the past 15 years in Tillamook County. These transactions have slowed to a trickle over the past five years, with small woodlot ownership stabilizing at around 40,000 acres. Anticipation of continued significant increases in land values encourages holding land for speculative reasons without regard for the value of the forest or farm products that could be grown on it.

Where there isn't a long-term commitment to timber production, there will be a growing interest to convert buildable land to rural homesites. Land use regulations will ultimately not be able to stop this from happening if the owner does not have the information, assistance and incentives needed to commit the land to timber production. Much of the substantial economic return from production goes to society as a whole, and if society prefers that more land be intensively managed for timber production, society must assure that the landowner has access to the educational, financial and technical assistance programs, and supportive tax measures that are discussed in the following two subsections (4.6 and 4.7).

Policy

Tillamook County recognizes the substantial private and public benefits that can result from improved management and increased productivity on over 40,000 acres of non-industrial private forest land in the County. The County also recognizes that educational, financial and technical assistance are necessary if small woodlands are to achieve optimum growth and harvest of forest products consistent with landowner objectives and with protection and enhancement of air and watersheds, fish and wildlife habitats, and recreational and aesthetic considerations.

4.6 Technical and Financial Assistance

Findings

The need to increase productivity on Oregon's non-industrial private forest lands to avoid a projected decline in timber harvest (see subsection 4.5) has focuses attention on the adequacy of public and private programs that educate and assist small woodland owners. Such programs are currently conducted by the Oregon State University Extension Service, the State Department of Forestry, the USDA's Agricultural Stabilization and Conservation Service (ASCS), woodland owners association, timber corporations and private consulting foresters.

The Extension Service of Oregon State University runs the principal educational program in the state for small woodland owners. It operates through county agents and centralized specialists based at OSU in Corvallis. County forestry agents answer questions and run local short courses, workshops and field tours which inform woodland owners about forest management practices, marketing opportunities, technical and financial assistance programs, and tax alternatives. They also identify sources of direct assistance for landowners. Tillamook County does not have a forestry extension agent, where as Clatsop County does. The two counties have about the same amount of land in small woodland ownership.

The State Department of Forestry (DOF) conducts a service forestry program which provides direct assistance to woodland owners. Designed to be complimentary to the educational services of extension forestry, service forestry provides technical advice, administers federally funded financial assistance programs and helps coordinate other kinds of assistance. Service foresters can help a landowner develop and implement a forest management plan and refer owners to markets, consultants, and other available assistance. The Department also publishes catalogues of sources of technical, financial and educational assistance to woodland owners, including a catalogue entitled *A Woodlands Assistance in Oregon*. The nearest service forester is located in McMinnville. He is available at the ASCS office in Tillamook several days a month.

Several federally funded cost-share programs are available to small woodland owners. The Forestry Incentives Program (FIP) and the Agricultural Conservation Program (ACP) provide up to 75 percent of the cost of eligible forest practices, which include site preparation, tree planting and timber stand improvement. Applications for assistance can be made at the ASCS office in Tillamook. These programs are administered by state service foresters.

Approximately 1,000 of Oregon's estimated 25,000 small woodland owners belong to the Oregon Small Woodland Owners Association and its member county associations. The association promotes favorable legislation and publishes a newsletter, and county associations have local programs to encourage sound forest practices on small woodland properties. Tillamook County does not presently have a county association.

Several large wood products companies, including Publishers Paper and Crown Zellerbach, have recently begun assistance programs for small woodland owners. Publisher's Management Assistance Program (MAP) provides small woodland owners with the assistance of professional foresters who furnish an inventory of their land and timber, and then develop a management plan. Professional foresters also provide technical assistance in timber management, assist owners in locating and qualifying for state and federal incentive programs for improving their timberland, and assist owners in finding other markets for their timber which is not useable by Publishers. In addition, Publishers provides free seedlings for reforestation of a harvested area. In return, a small woodland owner agrees to grant the company the right of first refusal to purchase, at a price equal to or higher than the highest bid offered, any timber the owner decides to sell. Since the program began in 1977, 157 private small woodland owners in Oregon, who collectively own more than 20,000 acres, have participated in Publishers=MAP.¹ However, participation in Tillamook County has involved only about several hundred acres.

Private consulting foresters and contractors are also available to provide technical assistance on virtually all aspects of forest management. These services are often provided by local people who are knowledgeable about the conditions in a particular area.

Despite this array of available programs, approximately 80 percent of the non-industrial private forest land in Tillamook County, as in other parts of Oregon, is not actively managed for commercial timber production. This has been a matter of growing statewide concern since the Beuter Report projected a significant timber shortage in Oregon (see subsection 4.5).

The 1977 Legislature directed the Department of Forestry to study and develop legislation which emerged as the Timber Management Act of 1979. Faced by severe budgeting constraints, and the absence of a clear consensus on what should be done, the Legislature's action was limited primarily to those provisions that provided verbal encouragement to woodland owners. A 1980 Senate Interim Task Force on Forestry provided a review of the small woodlands issue along with the specific recommendation that the 1981 Legislature focus on a program that would provide loans to businesses engaged in commercial production of forest crops to conduct

forest management projects on small woodland ownerships. The stated intent of this program is to bring together the available timber lands owned by small woodland owners, the expertise and capability of managing those lands by a business entity engaged in timber production, and the financing capability of the State.¹ Some skepticism has been expressed about this approach,² and the time will tell whether it is any more effective than those programs that are already available. A number of alternative programs were proposed to the legislature.³ Some of these will no doubt be resurrected in future sessions.

In the meantime, the question remains as to what can be done in Tillamook County to increase the commitment to forest management on small woodland ownerships and thereby reduce some of the pressure to convert potentially productive lands to nonforest development. The Service Forestry Program appears to be currently adequate to the extent that the service forester who visits the area can handle all existing requests for assistance. This points to a need for greater awareness by landowners of the substantial long-term benefits of a commitment to forest management. The absence of an extension forester and of a woodland owners association in Tillamook County limits the availability of local information on the advantages and techniques of forest management. More study would be required to determine appropriate approaches at the County level.

Douglas County addressed the problem of small woodland management by appointing an advisory committee in 1977 to survey small woodland owners and prepare a woodland assistance program for the county. This resulted in the passage of an ordinance in 1980 which provides technical, financial, physical and tree seed assistance to county woodland owners to bring the non-industrial private woodlands into full production.¹ Douglas County anticipates that this ordinance will help protect their economic and employment base.

This approach could be a primary responsibility of the County's proposed Forest Advisory Committee (see subsection 4.4). This would permit a local approach to a problem that has some unique local characteristics, as well as the local application of the extensive studies and proposals that are now available.¹

Policy

A primary objective of the County's Forest Advisory Committee should be to determine the reasons for the underproductivity of the County's small woodlands, to evaluate the adequacy of existing educational, technical and financial assistance programs, and to recommend to the Board of County

Commissioners those local and state actions that would encourage a long-term commitment to timber production on small woodland ownerships. Any proposed public subsidies should result in substantial public benefits.

4.7 Forest Lands Taxation

Findings

Taxes (property, income and estate) have a significant influence on timber production on small woodland ownerships. For the public such taxes are a vital source of revenue; for the landowner they are a cost that can discourage timber management.

Depending upon eligibility and preference, the property of woodland owners will be taxed under either of the following two tax laws:

- (1) The Western Oregon Land and Severance Tax, which includes an annual ad valorem tax on the bare land value of forest land and a percent tax on the appraised stumpage value of trees harvested for use or sale.
- (2) The Western Oregon Small Tract Optional Tax, which applies only to the bare land according to its productivity (site class); timber is exempt whether harvested or not.¹

Neither of these approaches includes a tax on timber inventory as it is believed that this stimulates premature harvesting to avoid taxes.

The relative advantages of the two alternatives depends upon the woodland owners particular situation as well as the prevailing tax rates under each alternative. Some prefer the severance tax because it shifts a large portion of the tax burden to the time of harvest when the landowner has the money to pay the tax. However, some find the severance tax objectionable because it leads to double taxation at the time of harvest, with the owner paying both the severance tax and an income tax.¹

The producers of nonforest crops pay only income tax at harvest time (e.g. there is no severance tax on grain or beef). The Small Woodland Option Tax requires that only an income tax be paid at harvest time, but many woodland owners find the Small Woodland Option Tax objectionable because of considerably higher land taxes than those for grazing and other agricultural purposes.²

Estate (inheritance) taxes are perhaps the most objectionable feature of the forest tax system. Estate taxes often discourage timber production, while

encouraging the division of land and its conversion to nonforest uses. Landowners may decide not to grow timber as a business or to prematurely liquidate timber when transfer to heirs is imminent.

Heirs must usually sell their timber (often prematurely) or land to pay taxes, thus breaking up family holdings. Many landowners feel compelled to convert their timber value into liquid assets that enjoy more shelter from taxation for inheritance purposes. The inheritance tax places the small woodland owner at a disadvantage relative to the timber corporations which are not subject to this tax. The Oregon State inheritance tax is scheduled for elimination in 1987, but the federal inheritance tax will continue to affect woodland management decisions.

The Forestry Program for Oregon (p. 71) summarizes some of the adverse effects of our forest lands tax system:

ATax burdens have become so substantial to some forest landowners that they have chosen to sell or convert their property to higher valued nonforest uses. Other timber managers have made decisions not to invest in intensive management practices because, under certain tax alternatives, increased productivity leads to higher taxes many years before any returns on the investment are realized. Taxes have also been a factor in decisions to harvest timber prematurely because tax burdens are greater or more mature, higher value timber under certain tax alternatives . . . There is ample reason for concern when tax burdens contribute to reductions in the forest land base, encourage decisions to market immature timber, and discourage investments in management practices that could increase forest growth . . . all at a time when a timber supply decline is projected.≡

There have been some significant changes in Oregon=s forest lands tax laws since 1975. One important addition was a 10 percent income tax credit for reforesting underproductive forest lands. Eligibility is restricted to those people or corporations owning or leasing 10 to 500 acres of Oregon commercial forest land. The Oregon State Department of Forestry has suggested that this tax credit be raised to 50 percent, and that an alternative be provided in the form of an ad valorem property tax credit. This would benefit woodland owners who are in a sufficiently low income tax bracket that they cannot fully utilize the income tax credit. 1

The Forestry Program for Oregon (p. 81) points out that AState and federal governments with the power to tax must continue to recognize the futility of taxing the forest to the point where investment and development are discouraged≡. It adds that Alt would be far wiser for governmental units to seek new revenue sources that are related more to income than to

discourage timber production on Oregon's commercial forest lands by taxation.≡

Small woodland owners should contribute their fair shares of taxes in support of government. However, tax policies should recognize that ownerships of small woodlands involve investments held for long periods of time, often at high risk, and with many public benefits. Tax policies should encourage and stimulate professional management, profitable investments, maintenance of environmental quality, production of non-market benefits, and stability of private ownerships.

Policy

Tillamook County recognizes that forest lands tax burdens contribute to reductions in forest land base, encourage decisions to market immature timber, and discourage investments in management practices that could increase forest growth. Tax policies should recognize that ownerships of small woodlands involve investments held for long periods of time, often at high risk, and with many public benefits. Tax policies should encourage and stimulate professional management, profitable investments, maintenance of environmental quality, production of non-market benefits, and stability of private ownerships.

4.8 Erosion and Sedimentation

Findings

The erosion of land in Tillamook Bay Drainage Basin has resulted in the severe sedimentation of Tillamook Bay and its tributary streams. The continued deposition of sediment in the Bay has caused adverse effects on shipping and navigation, commercial and sports fishing, oyster production and clamming, and on environmental and aesthetic qualities of the Basin.

The U.S. Department of Agriculture's ATillamook Bay Drainage Basin Erosion and Sediment Study≡ was initiated by local citizens, particularly the Tillamook Bay Task Force, who became concerned about the erosion and sedimentation problems. This comprehensive study, which was completed in 1979, provides substantial information on the causes of this problem and what can be done about it.

The Drainage Basin Study reveals that 61,000 tons of sediment enters Tillamook Bay each year. About 85 percent of this sediment comes from the forested lands in the upper watersheds which comprise about 90 percent of the area.¹ The study claims that AErosion and sediment delivery rates on

forest lands in the basin are among the highest for any forest lands in the state.¹

The primary causes of this high rate of erosion are the devastating forest fires that burned over 228,600 acres of steep-sloped forest land within the basin between 1933 and 1945 and subsequent salvage logging practices that left the area exposed to the effects of the heavy rainfall that occurs in the area. These effects are shown by the study's estimate that the sediment rate in 1945 was about 160 times greater than what occurred prior to 1875.²

Today the average annual sediment rate is only about 12.5 percent of the 1945 rate. This very significant reduction over a 30-year period resulted from the 1949-73 reforestation of about 194,700 acres of the burned area within the basin.³ This was one of the largest and most successful reforestation efforts ever launched in this country. The resulting reduction of erosion and sediment rates were an important by-product of efforts to put the Aburn area back into production.

The USDA study reveals that erosion and sediment rates on forest lands still make significant contributions to the problems of the basin.¹ The mean annual gross erosion amounts to over 280,000 tons, and the average annual sediment yield today is still about 20 times greater than what occurred prior to 1875. Most present day erosion can be attributed to the residual effects of past fires and salvage logging practices, which is enhanced by off-road vehicle use in critical areas. The enactment of the Oregon Forest Practices Act in 1971 helps assure that present and future forest practices will not significantly increase existing erosion problems.

Any further reduction in the sediment load caused by existing problems will require an accelerated program that takes into direct account the costs and benefits of sediment reduction. According to the USDA study the following sediment control measures on forested lands are likely to provide net economic benefits: planting and fertilizing trees and grass, planting brush on stream banks, removing debris and log jams from streams, stabilizing and closing roads, and back sloping and planting brush.²

A least-cost combination of these control measures could result in a 30 percent reduction in sediment, with net annual economic benefits in excess of \$100,000.³ There are a number of potential beneficiaries that are not included in this calculation, including the commercial seafoods industry, sports fishing and hunting, the recreation and tourism industry, municipal and industrial water quality, and those who experience less flooding. These and other social and environmental considerations should be taken into account

before a sediment reduction goal is selected.

Substantial obstacles stand in the way of realizing the benefits of sediment reduction. These include the time, effort, and commitment that would be required to formulate and implement a sediment reduction plan that would necessarily require the input of many individuals, groups, and agencies - - local, state and federal.

The 500-page study provides an extensive base of information that was not available when the Tillamook Bay Task Force was organized in 1973 to consider the problems and potential of the Tillamook Bay Drainage Basin. Continued local initiative will be required to utilize this study in the development and implementation of a sediment reduction plan.

Mel Williams, past chairman of both the Tillamook Bay Task Force and County Planning Commission and present chairman of the County's Estuary Council has suggested an implementing committee, made up of representatives from the County Board of Commissioners, Planning commission, Soil and Water Conservation District Board, and Estuary Council, to put the plan into effect. Local representatives from the State Department of Forestry and forest industry would be useful additions to such a committee.

Similar studies do not presently exist for the Nehalem and Nestucca Bay drainage basins. Consideration should be given to the feasibility of conducting studies in these areas, or of applying measures that are recommended for the Tillamook Bay Drainage Basin.

Policy

Tillamook County recognizes the substantial economic, social, and environmental benefits that would result from the reduction of erosion and sediment in the Tillamook Bay Drainage Basin. The County encourages and supports the local initiative required to develop and implement an erosion and sediment reduction plan, including the establishment of an implementation committee made up of representatives of the County Board of Commissioners, Planning Commission, Soil and Water Conservation District Board, Estuary Council, State Department of Forestry and forest industry. Consideration should also be given to determining and implementing needed erosion and sediment reduction measures in the Nehalem and Nestucca Bay drainage basins.

4.9 Extension of Public Services and Facilities

Findings

The extension of services, such as sewer and water systems into rural forested areas permit a degree of nonforest development that would not otherwise be possible, and encourages the premature conversion of forest land to other uses. The construction of power transmission lines through forested areas can remove significant amounts of forest land from commercial forest use.

Policy

Extension of services, such as sewer and water, into rural forested areas shall be appropriate for the needs of forest management and for those nonforest uses permitted in the Forest Zone. Maximum utilization of utility rights-of-way shall be achieved before new ones are permitted.

4.10 Forest Lands Fire Protection

Findings

F. E. Schroeder, former head of the Oregon State Department of Forestry has warned that a "sleeping giant" fire hazard now exists because many homes and summer cabins have been built in forested areas without proper fire protection, water supplies or roads. The Department of Forestry has joined with other concerned natural resource agencies in publishing a booklet, "Fire Safety considerations for Development in Forested Areas", to point out safer ways to build forest homes and subdivisions. The purpose of this booklet is to provide guidance for wild-land fire agencies, boards of commissioners, planners, developers and builders. All share a responsibility for providing for the protection of life and property in forested areas through application of minimum fire safety standards.

Many people who have lived in cities assume a level of fire protection in rural forested areas that isn't there. Many of these people are not aware of the fire danger that exists in the heavily vegetated areas, nor are they aware of the essential fire safety measures that can provide protection for their homes and adjoining forestland.

Tillamook County has six rural fire districts which provide protection for residential development on forest lands within their boundaries. Fire equipment access and water supplies must meet minimum standards if these districts are to provide needed protection. Fire protection for residences beyond these rural fire district boundaries are virtually nonexistent. Most wildland fire protection agencies are neither responsible for or equipped to deal with structure fires. Their job is to prevent and extinguish forest and other wildland fires; their response time and pumping capabilities are not

suited for structure fires. Furthermore, whatever protection they provide is generally available only during the summer fire season. Once fall rains start, crews are terminated and equipment is assigned to other work or placed in storage.

The fire safety booklet notes that all fire protection agencies are concerned about residential development in forested areas because many developments lack proper controls or consideration for fire safety measures and are creating a design for disaster.¹ The booklet observes that A very little consideration for fire protection has been given so far in the land use planning process and that As the demand and need for . . . developments in forest areas increase, comprehensive land use planning becomes more necessary.

The booklet provides planners and developers with instructions on fire safety standards for development in forested areas. These standards address road access, water supply, fire breaks, solid waste disposal and other fire protection measures that are designed to assure that a structural fire will not spread to adjacent private or public forest land. The substantial public costs of forest fires justify the enforcement of adequate fire safety standards.

Policy

Tillamook County recognizes the significant fire hazard and potential public costs that result from improper residential development in rural forested areas. Further development in the Forest zone shall not be approved unless provision has been made for fire safety measures in accordance with the guide published by the Northwest Inter-Agency Fire Prevention Group entitled A Fire Safety Considerations for Development in Forest Areas.

4.11 Watershed Protection

Findings

Forest management practices, as well as residential development, and other commercial and industrial activities in the County's watersheds have a significant effect on the quality of public drinking water. Tillamook County currently has 48 state-licensed public water systems (those serving four or more hookups), most of which obtain their water from watersheds in commercial forest land.

A recent study by Fredricksen, Moore, and Norris of the USDA's Forest Sciences Laboratory in Corvallis provides a comprehensive discussion of the impacts of forest management practices on stream water quality in the

Pacific Northwest.¹ They point out that such practices, including road construction, clearcutting, scarification, slash burning, fertilization, and the application of herbicides Acan seriously degrade the quality of stream water≡ (p. 283). Forest roads crossing steep and unstable slopes are a primary cause of soil erosion and stream sedimentation (p. 286). Clearcuts can be a contributing factor, primarily when they cause landslides which enter streams (pp. 288-93). Forest roads crossing steep and unstable slopes are a primary cause of soil erosion and stream sedimentation (p. 286). Clearcuts can be a contributing factor, primarily when they cause landslides which enter streams (pp. 288-93). Slash burning can increase surface soil erosion and thereby increase suspended sediment concentrations in streams)pp. 294-95). Fertilizers are not likely to pose a health hazard if they are not applied directly to major streams in watershed areas (p. 302). The effect of herbicides can be minimized by avoiding drift or direct application of spray materials to stream surfaces as overland flow and leaching of herbicides are relatively unimportant factors in forest stream pollution (pp. 310-11). Fredricksen, Moore, and Norris contend that proper application of these forest management practices will minimize adverse effects on water quality.

Recreational vehicle use in watersheds can contribute to erosion and sedimentation problems, particularly in areas that have been logged recently. Such use can destabilize road banks and destroy water bars that are designed to lessen erosion from logging roads. Off-road use can destroy protective vegetation, thereby increasing the livelihood of erosion and sedimentation.

Residential development in watershed areas can reduce the quality of water through failing septic tanks, leaks in sewer lines, chemicals applied to lawns and streets, and erosion from building sites. Problems of this nature are more severe in areas of steep erosion is greater, septic tank effluent migrates closer to the surface and there is greater danger of pipeline breaks due to ground movement. Commercial and industrial uses can also have harmful effects on water quality through erosion during and after construction, chemical runoff and street and parking lot runoff.

The focus in this section is on the effect of forest practices on watersheds that are sources of public drinking water. The adverse impacts of nonforest uses are mentioned to provide perspective. These impacts are often greater than those of forest practices because nonforest impacts occur on a regular basis, while potentially harmful timber harvesting may occur only a few times in a 70-year period. It is recognized that during harvesting operations there will be a temporary disturbance of the forest environment. Residual impacts will depend upon terrain and how harvesting is conducted. Growing timber can enhance watershed protection, while harvesting timber need not lead to a serious deterioration of water quality.

The effect of forest management practices on water quality in watersheds was one of the issues and concerns raised by all five of the County's Citizen Advisory Committees (CACs) in late 1978 and early 1979 when they initially addressed forestry planning considerations. This issue was then taken up by the Forest Advisory Committee, with agency and industry representatives generally referring CAC members to the provisions of the Oregon Forest Practices Act which addresses the protection of water quality during the conduct of forest operations.

In 1979, the County conducted several surveys of water districts to obtain information that would be useful in the development of the comprehensive plan and to satisfy a state requirement to determine the needs of small water districts. The initial survey contained the following question: "Has the utility encountered or anticipated problems with land use activities (such as forest management practices) above or within the utility's water source?" Of 12 water districts that responded, five indicated that they had encountered or anticipated problems with logging practices (Bay City, Fairview, Pacific City, Twin Rocks, and Watseco-Barview). Four of these districts plus two others (Northwood and Rockaway) responded affirmatively to the question "Is there a need for the County to address land use activities in watershed areas?" (Twin Rocks did not respond to this question.) One water district (Neahkahnie) indicated that they weren't concerned because they had a subsurface system and another (Netarts Bay) receives their water from another district.

Forty-three water systems responded to a second survey; however, this survey did not include any questions on the effect of forest management practices. The City of Wheeler, which did not respond to the forest survey, did volunteer their concern for the effects of logging practices in their watershed in their response to the second survey. This survey also revealed that just over one-half of the water systems have surface water sources and approximately one-quarter do not treat water. These systems would be most likely to experience any adverse effects of forest practices in their watersheds.

The City of Wheeler attempted to gain some control over forest practices in their watershed during the development of their comprehensive plan in 1978-80. They discovered that this was not possible since their watershed is outside of their urban growth boundary and therefore not subject to their control. They then proposed that the County develop a "Community Watershed Area Zone" which would be applied by the County only at the request of special districts or cities which demonstrate a need, desire, and willingness to cooperate in planning for land use activities within their own

community watersheds. The intent was to apply the zone only to land areas from which the quality of surface runoff affects downstream use by a state-licensed water system.

Oregon Business Planning Council (OBPC) strongly objected to the proposed Community Watershed Area Zone in a letter that Dave Hill, the Council's Natural Resource Director, wrote to the County Board of Commissioners on January 2, 1980. OBPC is a product of joint participation by Associated General Contractors of Portland, Oregon State Home Builders Association, the Oregon Association of Realtors, and Associated Oregon Industries.

Hill conveyed OBPC's belief that:

Citizen concerns expressed in this proposal can best be met through cooperation with existing state agencies, such as the Oregon State Department of Forestry, through cooperation with industrial companies involved and through compliance with existing state law, such as the Oregon Forest Practices Act.

Hill wanted that a Community Watershed Area Zone in its present form, or even some modified version, would result in our (OBPC's) objecting to any request for acknowledgment when the completed plan is submitted to the Land Conservation and Development Commission.

Hill contended that the maintenance and protection of the State's water resources is one of the priority concerns of the Forest Practices Act administration and intent, and that this would be duplicated by the proposed Community Watershed Area Zone (see Findings/Policy 4.2 for a discussion of the Oregon Forest Practices Act.) Hill also pointed out that early in 1979, the Environmental Protection Agency (EPA) certified the Oregon Forest Practices Act as Best Management Practices (BMP's) for Oregon with regards to water quality.

In his letter, Hill noted that with the 1979 Oregon Legislature's adoption of House Bill 3008, the County would have to zone forest lands for primary uses other than the commercial growing and harvesting of forest tree species if they were to adopt rules, regulations or ordinances regulating forest operations on those forested lands (see Findings/Policy 4.2). Hill then asked:

Would Tillamook County be prepared at this point in time to zone privately-owned, industrial forest lands for primary uses other than the commercial growing and harvesting of forest tree species? Would the

County have sufficient staff and professional forest management expertise to administer and enforce such restrictions? Has the County considered how appropriate compensation would be awarded to property owners who could no longer commercially grow and harvest forest tree species on their lands? These and other hard questions will have to be answered during any discussion of the ACommunity Watershed Area Zone proposal.

Paul Steele, Mayor of Wheeler has questioned whether the Forest Practices Act provides adequate protection for watersheds that contain licensed water systems. At the June 29, 1981 North County CAC meeting Steele pointed to three deficiencies in the Forest Practices Act in regard to watershed protection:

- (1) The Act does not require notification to downstream water users prior to commencement of forest operations in a watershed (State Forestry must be notified 15 days prior to the beginning of operations; however there is no requirement that they pass this information on to downstream users);
- (2) The Act makes no distinction between management practices in watersheds that supply water for human consumption and those that do not;
- (3) The Act allows the introduction of chemicals into watersheds.

Steele states that while he believes State Forestry is sincere in their attempts to enforce the Forest Practices Act, enforcement is inadequate because there is currently only one forest practices officer available for all of Tillamook County. (Note: State Forestry has been generally unsuccessful in their effort to obtain funding for additional forest practices officers from the State Legislature.)

Steel suggest four approaches to the watershed protection issue:

- (1) Attempt to amend the Forest Practices Act to provide better notification and protection for domestic water users;
- (2) Work out management agreements between water districts and forest land owners or managers in watersheds;
- (3) City or water district purchase of forest land within watershed;
- (4) Have the County address the watershed issue in their comprehensive plan.

There are some good reasons for seeking amendments to the Forest Practices Act from the regional forest practices committee. This Act is an established state law that is acknowledged by all forest land owners and operations, and there is an existing mechanism available for its enforcement. The problem of enforcement can be addressed by convincing the State Legislature that funds are needed for additional forest practices officers.

The management agreement approach has some merit, particularly with public agencies that own forest land within a watershed. Pacific City Water District and the U.S. Forest Service currently have a memorandum of understanding with regard to forest operations and other activities within Pacific City's watershed. Such agreements may be of less value with private parties, including timber corporations, because there is no assurance that the forest land in question will not be sold to another party.

City or water district purchase of forest land is limited by the cost of such an approach. In some cases, such as the Cities of Tillamook and Nehalem, watersheds are already owned by the affected cities.

County action through its comprehensive plan could be taken in conjunction with one or more of the above three approaches. Any such action would depend upon the results of efforts to amend the Forest Practices Act. Whatever the County does is likely to be controversial given the polarization that exists on this issued. Actual regulation of forest practices within a watershed would require that such land be zoned for primary uses other than the commercial growing and harvest of tree species - e.g. a Watershed management zone (see Findings/Policy 4.2). Forest operations could be made a conditional use subject to County regulations. Significant question exist regarding the nature of these regulations and how they would be enforced.

County planning staff did develop a draft of a Community Watershed Area Zone in 1979. The intent of this zone was stated as follows:

The purpose of the community watershed area zone is to provide for implementation of a working relationship among federal and state agencies, land owners, local governments and special districts having programs, land ownerships, or responsibilities within domestic watershed areas. It is intended that watershed area zoning be applied only to land areas from which surface runoff may affect downstream utilization by a state licensed public water system. Furthermore, it is intended that such zoning shall be applied by the county only at the request of special districts or cities which

demonstrate a need, desire and willingness to cooperate in planning for land use activities within its own community watershed. The overall purpose of the community watershed zoning classification is two-fold: first, to provide a means for notification of affected local jurisdictions concerning significant activities within watershed areas; second, to assure that acceptable commercial management activities are permitted, consistent with the adequate protection of water quality necessary for individual licensed water systems.≡

The proposed zone described permitted principle uses, conditional uses, and use standards. It did not include any provision for enforcement.

The time remaining in the County=s current comprehensive planning process does not allow for adequate consideration and adoption of a watershed management zone. It does permit recognition of the existence of the watershed management issue and a commitment to give it the attention that it deserves. A committee could be established by the County Commissioners and directed to provide specific recommendations on the watershed protection issue within a specified period of time. Such a committee should include representatives of public forest management agencies, private timber corporations, citizen advisory committees, and water districts. A local discussion of the issue could be useful in establishing a basis for understanding and cooperation between forest managers and water users within watersheds.

Policy

Tillamook County acknowledges that (1) certain forest management practices can introduce contaminants and/or create larger than normal turbidity levels in water systems; (2) after a point certain turbidity and contamination levels are not desirable from a public health standpoint; (3) certain chemicals at certain concentrations should not be introduced into water systems. The County encourages concerned parties to work with the Northwest Region Forest Practices Committee in the development of amendments to the Forest Practices Act that provide needed notification and protection for state-licensed water systems. The County also encourages communication and cooperation between forest and owners and managers and water users within watersheds in the form of written agreements or more informal arrangements. Finally, the County recognizes the need for further study of this issue, and therefore intends to establish a committee of forest managers, CAC members and affected water districts to make specific recommendations to the Board of County Commissioners by no later than one year from the adoption of this plan.

4.12 Fish and Wildlife Protection

Findings

Forest lands provide essential habitat for fish and wildlife which provide substantial recreational and economic benefits to the citizens of Tillamook County. Data gathered in 1975 indicates that sport fishing, hunting and trapping annually provides 576,366 days of recreation valued at \$13,323,840 in Tillamook County. Commercial fishing provides an additional \$1,387,600 in value, while non-consumptive use of wildlife species, such as photography, bird and animal viewing, etc., provides many additional days of recreation.

Tillamook County's land use classifications most compatible with fish and wildlife habitat are forestry and agriculture. The 620,541 acres that are included in the County's Forest Zone (F) will provide needed habitat for the County's fish and wildlife resources. Proper forest management practices will help assure that the County's waters are suitable for the spawning, rearing, and harvest of migratory fish, shellfish, resident trout and warmwater game fish. The Forest Practices Act (see findings 4.2) is intended to reduce adverse impacts to stream water quality and fish habitat.

Wildlife require the food, water, cover, and freedom from harassment that are provided by forest areas. Of particular importance are those sensitive big game areas that are essential to the survival of deer and elk during the critical winter periods. They include gentle south slopes found in forest openings created by fire and logging operations. Planning efforts must consider the impact of new home and commercial development on game and game habitat.

The County's Forest Zone (F) provides protection for fish and wildlife habitat by limiting outright uses to those that are essential for commercial forest management and fish and game management. All conditional uses are to be consistent with forest uses, including fish and wildlife habitat. Development within sensitive and peripheral big game range areas are to be clustered as much as possible in close proximity to existing roads. Responsibility for protection from wildlife damage is to be assumed by the owners or occupants of dwellings within the Forest zone. A minimum lot size requirement of 40 acres will help assure a density of development that is consistent with the maintenance of fish and wildlife habitat. Virtually no residential development is anticipated on the 575,000 acres in public and industrial ownership.

Policy

Tillamook County recognizes the substantial recreational and economic

benefits that fish and wildlife provide for the County's citizens. The County is committed to protecting fish and wildlife values on forest lands by requiring that development within the Forest Zone be compatible with these values.

APPENDIX A

FOREST LAND PRODUCTIVITY MAPPING

The Forest Lands Goal requires that in the process of designating forest lands, comprehensive plans shall include the determination and mapping of forest site classes according to the United States Forest Service manual >Forest Instruction for Integrated Forest Survey and Timber Management Inventories - Oregon, Washington and California, 1974' A. The lack of availability of this manual and its questionable relevance left this productivity mapping requirement in a state of confusion and controversy until LCDC adopted a policy paper in July, 1979 that requires a mapping of forest land by cubic foot site class (see Section 2). This was done at the urging of the Oregon State Forestry Department because such information enables the governing body to estimate the economic value of the land in timber production when a change of use is being considered.

The confusion and controversy over the forest lands productivity mapping requirement resulted in part from the number of different productivity measures that are used by the various federal and state agencies and private timber corporations, and the difficulties that are inherent in converting one measure into another. In an attempt to minimize future confusion, this appendix provides a brief description of the most common productivity measures, and the means by which other measures are converted into cubic foot site class. This provides an opportunity to elaborate upon the productivity mapping of Tillamook County's forest land that was described in Section 1.2.

The productive potential of forest land is usually measured in terms of tree height (site index) or tree volume (cubic foot site class). Site index is based on the total height of a freely growing tree of a particular species at a certain age (usually 100 years). This is usually expressed in terms of the average total height of the dominant trees in a particular stand. Site indexes are usually grouped into site quality classes, which are expressed in terms of Roman numerals I through V, with site class I being most productive. (Since this classification system was first described in a publication entitled Bulletin 201, it is often followed by a reference to this bulletin to distinguish it from the cubic foot measurement system.) Cubic foot site class, on the other hand, expresses productivity in terms of the amount of wood growth produced per acre per year. There are seven cubic foot site class groupings, which are identified by the Arabic numbers 1 through 7, with site 1 being most productive.

These two measures of forest land productivity are the basis for a variety of productivity classification systems. The classification systems used for Douglas fir in western Oregon are summarized in Table 1 below. This includes the Oregon State Department of Revenue

Forest Land classification system which places forest land into eight productivity groupings, FA, FB, FC, FD, FE, FG, and FX, with FA being most productive. The productivity mapping of all of Tillamook County=s private forest land was derived from this classification system.

TABLE 1

PRODUCTIVITY CLASSIFICATION SYSTEMS FOR DOUGLAS FIRS
(Below 2,500 feet in western Oregon)

(INSERT)

The chart in Table 1 shows the relationship between the two growth measures - - site index (height in feet at 100 years) and potential yield in cubic feet per acres - - and the three classification systems - - cubic foot site class, site class (Bulletin 201), and Department of Revenue Forest Land class. For example, this chart show that land on which Douglas fir would reach an average height of 160 feet in 100 years would produce approximately 164 cubic feet of wood growth per acre per year. Such land would receive a high 3 rating (3+) in the cubic foot site classification system, and a low II rating (II-) in the site class (Bulletin 201) rating system, and a AFC≅ rating in the Department of Revenue system.

Another view of the relationship between the three classification systems is provided by Table 2. This provides an easy way of translating the Department of Revenue=s classifications into cubic foot site class - - something that the county did on all of its private forest land. To simplify this translation, the County equated Revenue classes FE and FF with cubic foot site class 4, ignoring that these Revenue classes also correspond to a low 3 (3-) and High 5 (5+) cubic foot site class.

TABLE 2

RELATIONSHIP BETWEEN PRODUCTIVITY CLASSIFICATION SYSTEMS

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Department of Revenue Forest Land Class	Site Class (Bulletin 201)	Cubic Foot Site Class
FA FB	I+, I II+, II	1 - 2
FC FD	II- III+, III	3
FE FF	III- IV+, IV, IV-	4
FG	V	5
FX		6 - 7

**TABLE 3
TRANSLATION OF 50-YEAR SITE INDEX
INTO 100-YEAR SITE INDEX**

(INSERT TABLE)

Another important classification system is the one developed by the Weyerhaeuser Corporation which the State Forestry Department has use in the productivity mapping of the 308,000 acres of forest land that they manage in Tillamook County. This information has been compiled in a book of township maps entitled *A Soils Survey of Northwest Oregon Area: Tillamook County*, a copy of which has been provided to the County Planning Department by the State Forestry Department's Tillamook District Office. The maps in this book have been color-coded according to cubic foot site class for easy identification of the soil productivity of a particular area. The productivity mapping of private forest land by the Department of Revenue is also available in the Planning Department of township maps that are color-coded according to cubic foot site class.

The Weyerhaeuser system is based on tree height at 50 years of age rather than at the 100 years that is referenced by other systems. On Douglas fir-producing lands, 50-year site index information can be converted to 100-year site class by using the graph in Table 3. This is done by taking a horizontal reading from the point where the 50-year site index intersects the vertical 100-year site index line. For example, a 50-year site index of 120 translates into a 100 year site index of 172 - - which is to say that a Douglas fir that achieves a height of 120 feet at 50 years of age can be expected to reach 172 feet at 100 years. The 100-year site index information can then be translated into cubic foot site class by use of the information in Table 1.

The County has also used soils information contained in the Soil Conservation Service's Soil Survey of the Tillamook Area in the evaluation of the productivity of a particular parcel. The primary limitation of the soil survey is the fact that it covers only about one-fifth (136,000 acres) of the County land area, including about 86,000 acres of forest land. However, since this includes most private non-industrial forest land, it does provide productivity information on much of the forest land that is most likely to be subject to conversion to nonforest use.

The information in the Soil Survey of the Tillamook Area is supplemented by the so-called OR-1's which provide major soil interpretations for a soil series and its mapping units. This includes a Woodland Suitability section which includes information on productivity (site index), preferred species, and management problems. This information should be used in addition to the more generalized productivity mapping that is provided by the Department of Revenue system whenever consideration is being given to permitting the conversion of a forest parcel to a nonforest use.

all of the above soil survey information is available in the County Planning Department as are several interpretative publications, including AA Technique for Mapping Forest Land by Site Productivity which was prepared by the State Forestry Department.

APPENDIX B

(INSERT APPENDIX B, MORNING STAR GAZETTE)

APPENDIX C

NOVEMBER CAC MEETINGS AND AGENDAS

SOUTH COUNTY AREA:

Date: Wednesday, Nov. 1
Time: 7:30 p.m.
Place: Neskowin Fire Hall

1. Announcement of new members & election of officers
2. Election of representative to Estuary Council
3. Election of representative to Forestry Council
4. Discussion of local forestry issues and concerns
5. Presentation of generalized work program and planning framework

NORTH COUNTY AREA:

Date: Thursday, Nov. 2
Time: 7:30 p.m.
Place: Nehalem Fire Hall

1. Election of officers
2. Election of representative to Forestry Council
3. Discussion of local forestry issues and concerns
4. Presentation of generalized work program and planning framework
5. Brief review of urban growth policies for City of Wheeler and Nehalem area

- | | |
|---|---|
| <p>BEAVER AREA:</p> <p>Date: Thursday, Nov. 9</p> <p>Time: 7:30 p.m.</p> <p>Place: Beaver Grade School</p> | <ol style="list-style-type: none"> 1. Announcement of new members & election of officers 2. Discussion of new geographic boundary 3. Election of representative to Estuary Council 4. Election of representative to Forestry Council 5. Discussion of local forestry issues and concerns 6. Presentation of generalized work program and planning framework |
| <p>TILLAMOOK AREA:</p> <p>Date: Wednesday, Nov. 15</p> <p>Time: 7:30 p.m.</p> <p>Place: State Forestry Building</p> | <ol style="list-style-type: none"> 1. Announcement of new members & election of officers 2. Election of representative to Forestry Council 3. Discussion of local forestry issues and concerns 4. Presentation of generalized work program and planning framework |
| <p>NORTH CENTRAL AREA:</p> <p>Date: Wednesday, Nov. 29</p> <p>Time: 7:30 p.m.</p> <p>Place: Bay City City Hall</p> | <ol style="list-style-type: none"> 1. Announcement of new members & election of officers 2. Election of representative to Forestry Council 3. Discussion of local forestry issues & comments 4. Presentation of generalized work program and planning framework |

The Tillamook County Estuary Council will be meeting this month on Monday, November 6, at 7:30 p.m. in the EOC Room of the County Courthouse. Laurie Dull, Coastal Resource Planer will be presenting a progress report on coastal elements of the Comprehensive Plan and discussing the Estuary Council's role and involvement during the current year.

APPENDIX C

CAC's FORESTRY ISSUES & CONCERNS

The following is a consolidated list of the forestry issues and concerns that were raised by the County's five CAC's at their November and December meetings.

1. What are the effects of forest management practices on water quality in watersheds, streams shorelands and estuaries (includes impact on fisheries)? Adequacy of Forest Practices Act?
2. What are the effects of forest management practices on critical wildlife habitats? What is being done to identify and protect wildlife habitats on federal, state and private lands?
3. What are the effects of increased intensity of forest management (increased rate of timber production) on other forest values? Are our forests being converted to "homogenized" tree farms?
4. Can more be done to protect scenic values, including the use of scenic buffer strips?

5. Are recreational needs being adequately provided for on our public and private forest lands? Is there a need for more trails and campsites? Is there need for additional regulations and enforcement of motorbike use on forest roads and trails? What about designation of areas where motorbikes use is or isn't allowed?
6. What are the inherent conflicts between forest practices and residential use of adjacent lands (including herbicide use)? How can any such conflicts be resolved?
7. Is there adequate reforestation of public and private forest lands? What is the species mix? What is the future for cedar and alder?
8. Will private industrial forest land be available for residential development where location of such development is appropriate? (e.g. Concern has been expressed that Publisher's has been buying up land that could be used for farming and/or homesites.)
9. What is being done to coordinate timber management practices in the various public and private ownerships?
10. Are there ways to increase the processing of timber in Tillamook County? (Are we sending too many of our logs out of the County and out of the country?)

APPENDIX D

Millard Trout (Chairman)	State Forestry, Tillamook District Forester
Ed Oram	U. S. Forest Service, Hebo District Ranger
Everett Meier	BLM, Tillamook Area Manager
John Thiebes	Oregon Department of Fish and Wildlife
George McKibbin	Publishers Paper Co., Division Forester
Don Landon	Crown Zellerbach Corp., Production Manager
Russell McKinley	Boise-Cascade
John Massie	County Extension Service
Bob Pedersen	Soil Conservation Service
Archie Pye	Soil and Water Conservation District Board
Russell Curnutt	American Shingle Co. (Garibaldi)
Gerald Sorensen	Contract Logger (Nehalem)
Damon Ogle	Non-industrial Timber Owner (Neskowin)
Marvin Noble	Alder Processor (Hebo)
Ted Pankowski	North County CAC
Herb Sargent	North Central CAC

Violet VermilyeaCentral Area CAC
 Leonard WhitmoreSouth Central CAC
 Dick LawrenceSouth County CAC

APPENDIX E

FORESTRY ADVISORY COUNCIL MINUTES - January 30, 1979

Those attending were:

Millard Trout	Oregon State Department of Forestry
Ed Oram	U.S. Forest Service
Everett Meier	Bureau of Land Management
John Thiebes	Oregon Department of Fish and Wildlife
Bob Pedersen	Soil Conservation Service
Don Landon	Crown Zellerbach Corp.
George McKibben	Publishers Paper Co.
Russ McKinley	Boise Cascade Corp.
Ted Pankowski	North County CAC
Herb Sargent	North Central CAC
Leonard Whitmore	Beaver Area CAC
Dick Lawrence	South County CAC
Damon Ogle	Neskowin
Gerald Sorensen	Nehalem
Kenneth Lane	Beaver Area CAC
Vic Affolter	County Resource Planning Team

PURPOSE The purpose of the meeting was a discussion of the consolidated list of forestry issues and concerns that were raised by the County=s five CAC=s.

WATER QUALITY A primary topic of discussion was the effect of forest practices on water quality. Reference was made to the technical articles on this topic that were provided by the Forestry Sciences Laboratory at Oregon State University.

Vic Affolter provided FAC members with a 40-page excerpt of the final draft of the U.S. Department of Agriculture=s Tillamook Bay Drainage Basin Erosion and Sediment Study. This recently completed study was done in response to the severe sedimentation problem in Tillamook Bay. It identifies the sources of sedimentation throughout the Tillamook Bay Drainage Basin and proposes methods of reducing them. The major cause of sediment is the erosion that occurs from such sources as channel banks, land slides, roads, old burned areas, and clearcuts. Eighty-five percent (51,600 tons) of the sediment that

enters Tillamook Bay is said to originate in the forested upper watershed which comprises about 90% of the total land area of the basin.

A 30% reduction in sediment (about 18,200 tons) would require installation expenditure of about 2.5 million dollars. Average annual costs would be about \$171,000. Annual benefits would be about \$273,000, leaving a net benefit of \$102,000. At the 30% level the appropriate control measures would be stream stabilization; tree planting on landslides, clearcuts and burns; and by closing and stabilizing some roads on forested lands (see p. 1-4 of study).

The Council proceeded to discuss some of the material contained in the study.

Millard Trout observed that the study had been criticized by George Brown at OSU because its basic data was not collected over a long enough period.

John Thiebes pointed out that the study reveals that 90% of the landslides that occur in the basin are man-caused, and that it was the concern of the Department of Fish and Wildlife that logging roads are causing the highest percentage of their problem with siltation in the streambeds. This has the highest impact on fisheries, both in the bay and in the streams where the fish spawn.

EFFECT OF LOGGING ROADS

Affolter noted that there was a consensus in the articles provided by OSU that roads are a significantly greater source of erosion than are clearcuts. There is disagreement on the effect of clearcuts, with some researchers concluding that they are a significant source of erosion and sedimentation, and others (notably Brown at OSU) claiming that their significance tends to be either negligible or hard to determine.

With regard to road closures, Ed Oram noted that the U.S. Forest Service does close roads to vehicle traffic if they aren't to be used within a certain time. They also patrol roads during periods of heavy rainfall to look for plugged culverts and other possible sources of erosion.

Trout stated that State Forestry is able to patrol roads built since 1960, but that the older roads in the burn are in such bad condition that it is too dangerous to have patrols on them during a storm. He state that AThe old roads back in the burn were built to whatever standard the logger thought was necessary. A tremendous number

of log culverts are all rotting out. The canyons are filled with debris left from fires, and they are going to keep blowing out whenever we get a bad storm.

Trout said that State Forestry maintains about 700 miles of road on this district for fire protection and management activities such as pre-commercial thinning, site preparation work, etc. There have been budget limitations on the State's road maintenance program. They have an additional \$500,000 in next years budget for road maintenance. He said that many of their roads need replacement rock, and that log bridged and culverts need to be replaced. This could require expenditures of around 3.2 million dollars over the next 5-7 years. Trout pointed out that over the past 10-15 years there has been no timber harvesting in the burn to support any road maintenance, and that as trees planted after the burns mature and are harvested, this situation will improve.

Everett Meier pointed out that unlike State Forestry, BLM currently has mature timber on their land to pay for road maintenance.

Trout said that a primary problem is the many cat roads that were built to salvage timber from areas that had been previously burned and/or logged.

(Discussion by Trout and Meier on difficulty of closing roads in a way that will prevent 4-wheel drive vehicles and motorcycles from using them).

Affolter pointed to the study's conclusion that at least 30% level of sediment reduction a \$100,000 net annual benefit is realized. This is going to get some peoples attention, and the County may eventually decide on a particular sediment reduction goal.

We could have some of the U.S. Forest and Soil Conservation Service people who worked on the survey come over and hold a special workshop so that questions could be raised about the study's methods and conclusions to help determine if the County should take any action on it. (This couldn't happen until sometime in March or April when published copies of the final draft are available.)

In response to the question of whether this would be soon enough to help the Forestry Advisory Council, Affolter noted that the overall planning process will continue into the summer and if we don't consider this study in the context of forestry, it will likely be considered

in some other context such as estuary planning, or water quality. This is clearly an example of a situation where past or present activities on public and private upland forested areas affect our downstream rivers and bays. This issue was brought before the FAC to give those who are familiar with forest practices an opportunity to comment on the study's methods and conclusions.

Ted Pankowski raised the question of who experiences the particular costs and benefits. Affolter responded that this information was not available in his final draft copy, but that it may be available in the final published revision.

Don Landon asked where the money would come from to do what was necessary to obtain the net benefits. Affolter responded that it is possible that the material in this report could provide some leverage for obtaining some grant support or state funding for some measures that couldn't be done in the past because those who decided the budget weren't fully aware of the net benefits that could be derived from specific erosion and sediment reduction measures.

Thiebes pointed out that the study indicates that there are potential beneficiaries that are not included in the \$100,000 net annual benefit calculation, including the commercial seafoods industry, sports fishing and hunting, the recreation tourist industry, and municipal and industrial water quality.

Pankowski observed that as far as he is aware this is the only document that provides any handles at all on what you're going to do about Tillamook Bay, and it does raise what seem to be some really important options that the people of Tillamook County have to decide with regard to what their goal is for the Bay. It doesn't make sense to me that if we have damage occurring on public lands upstream, that the cost should be passed on to other members of the public downstream in the form of degradation of the bay and the reduction of fisheries and whatever. At the same time, if the damage is occurring on private lands up there, it seems like a question of equity. I can't run my business in such a way that it is going to crud up a public stream. I raise this because I think it will take more answers and more time to look at this, but I'd like to see this group come back and perhaps take a stab at some recommendation - or at least raise them as issues for the people of this County to take a look at.

Affolter said that somewhere within the planning process we're going to want to come back to this study because it's the most detailed

information we have on these issues. We will find out when we can set up a workshop with the people who conducted the study. A majority of those present indicated that they would be interested in participating in such a workshop if it were set up in March or April. Affolter noted that although the FAC was scheduled to conclude its activities with the February 15 meeting, he would continue to keep them informed on what was happening with regard to forestry planning so that they would have the option of continuing their involvement.

MOTORCYCLES Leonard Whitmore mentioned that power line right-of-ways were a serious source of erosion, particularly since motorcycles use these right-of-ways and cut deep tracks. These tracks cross many small creeks and cause problems whenever it rains.

Trout observed that they have a similar problem with motorcycles on the upper Trask. The power companies want to keep their right-of-way roads open so that they can service their lines.

Meier agreed that this is a very serious problem and that when Bonneville power has their public meetings, someone ought to complain about it. Currently there is no control. BPA is not building their roads at previously agreed locations and standards.

Affolter observed that several of the CAC=s had indicated their concern about the need for additional regulations and enforcement of motorbike use on forest roads and trails, and in designated areas where motorbikes are or aren=t allowed.

Trout stated that the primary problem is enforcement and that they haven=t had the manpower and money to do that. Meier pointed out that no one in his office has any enforcement power, so they have to call the FBI agent out of Astoria. Oram said the Forest Service is a little better off in that they have some people who are designated to write citations in the field. Oram felt that in his district, 4-wheel drive vehicles were a bigger problem than motorbikes. All agreed that whatever the regulations, enforcement was a very difficult problem because of the many miles of remote roads and trails.

WATERSHEDS Affolter added that several of the CAC=s including people from the Pacific City area had expressed a concern over the way forest practices were affecting the quality of their drinking water. Oram commented that the U.S. Forest Service had presented the Pacific City Water Board with a memorandum of understanding spelling out what forest management practices are going to be in that Pacific City

watershed. McKibben said that Publishers also owned land around that watershed. Affolter said that before the February 15 meeting of the FAC he would try to get more specific information from those who operate the water systems. McKibben, Landon and Trout observed that when municipalities own their watersheds they log them as a source of revenue, but that they tend to be critical when others who own timber in their watershed do the same thing.

WILDLIFE HABITAT

The Council turned to a discussion of the effects of forest management on critical wildlife habitats - What is being done to identify and protect wildlife habitats on federal, state and private lands?

Affolter observed that much of what Fish and Wildlife was asking for in their Habitat Protection Plan was consistent with managing the land for forest use. He asked Thiebes to identify areas of possible conflict between forest management practices and wildlife protection.

Thiebes responded that in a lot of areas we are looking at a feast or famine situation where you have gigantic clearcuts. You're looking at that area for producing big game animals for a period of maybe 10 to 15 years, and then after that there is no food for them . . . The trees grow up and shade out all the available forage under them. We're looking at a boom and bust in the hunting situation in those areas, especially in our key point winter ranges which are on gentle south-facing slopes . . . Again on clearcuts snag removal is a problem. I realize that people have a problem with safety requirements on that.

Thiebes refers to Fish and Wildlife's *Cover Guidelines* which states that there should be big game cover within 10 chains of any point in a clearcut. This means that there need be no length limitations on a clearcut as long as it is no more than 20 chains wide.

Thiebes adds that a lot of areas have an over access situation where there are too many roads, and harassment of wildlife even during their winter critical time. Thiebes said that in the future, they will probably be asking for more road closures in key winter range areas. In winter range that is thoroughly criss-crossed by roads, it is hard for big game to get enough feed to survive. The hunting industry in Tillamook County does provide a considerable income to the County.

Ed Oram noted the U.S. Forest Service's current land use plan has put 6,000 acres into old growth rotation with a primary objective being

the protection of the bald eagle and the spotted owl. Oram says that they have identified potential nest sites in old growth all over their district.

Thiebes observes that Fish and Wildlife has fairly good input into state and federal agencies in reviewing their timber sales and other forest management activities, but that they have virtually no review of the activities of private industry. However, they do get with them occasionally on things like the bald eagle and herons.

Meier said that when BLM identifies a nesting site for a pair of spotted owls on the upper Nestucca, they have to take the surrounding 300 acres out of their timber base, and at least 50% of the timber in the surrounding 900 acres has to be at least 30 years or older. This comes from a BLM-U.S. Forest Service-State agreement to identify and protect 400 pairs of nesting spotted owls throughout Oregon. Affolter noted that in terms of the County plan there might be more interest in how wildlife is protected on private lands. He asked Millard Trout if the Forest Practices Act provided for any such protection.

Trout responded that this isn't really addressed in the Forest Practices Act, but that it is State Forestry's policy to contact a representative of Fish and Wildlife whenever private foresters identify critical wildlife habitats on their land. Basically State Forestry can make recommendations with regard to wildlife habitats on private lands, but they have no enforcement power.

Affolter noted that attention to fish and wildlife habitat was required by both the Forestry Goal (#4) and the Natural Resources Goal (#5) of the Statewide Goals and Guidelines, and that the planner (Jeff Christensen) who is responsible for the Resources Goal is currently working with the CAC's on the issue of protecting fish and wildlife habitat.

CLASS II STREAM PROTECTION

Pankowski raised the issue of protection of Class II streams and their effect on Class I streams (Class II streams are the headwater streams or minor drainages that are generally not used by fish for spawning or rearing, but which do influence water quality or quantity downstream in Class I waters). Trout responded that buffer strips are not required for Class II streams, and that material that gets into a Class II stream need not be removed until the logging operation is completed. (With class I streams it must be removed as an on-going process during the harvesting operations.) Trout stated that mechanical damage done to the stream bank while removing material can often do more

harm than is done by leaving material in the stream.

BUFFER STRIPS Pankowski said that he was more concerned about the possible damage done by cutting all the way down to the stream bank. Thieves pointed out that sedimentation increases as you cut closer to the stream bank.

Trout responded that leaving buffer strips can result in a serious problem with blowdown. Blowdown of large trees, especially hemlock, can cause serious damage to the stream bank.

Affolter called attention to question #3 which asks about the effects of increased intensity of forest management (increased rate of timber production) on other forest values. He said that there seemed to be some concern among CAC members that while timber production is pretty well taken care of by both public agencies and private corporations other forest values aren't given as much attention. This is reflected in the list of forestry issues and concerns raised by the CACs. This question also included concern about whether our forests were being converted to homogenized tree farms.

REDWOODS Pankowski raised the question of growing redwoods in Tillamook County. Trout and others responded that generally they couldn't survive the amount of frost that occurs in the area. (This was followed by a discussion of the few redwoods that had survived in the area.)

CEDAR The question was raised about the future of cedar. Landon responded that it was too slow growing to be raised commercially, and that it has no real future in the County, except for some limited natural reproduction. Oram said that the U.S. Forest Service is planting some cedar in selected locations. and that they are getting some volunteer cedar. (A continued discussion of cedar by Trout, Oram, Landon and McKibben was mostly unintelligible on the tape.)

Thiebes pointed out that a forest monoculture (growing all one species in an area) can have an adverse effect on wildlife. McKibben asked if it made any difference to big game if a well stocked stand of conifer was mixed or not, suggesting that the density of the stand may be more important than the species mix.

SCENIC VALUES The Council then turned to question #4 which asked what can be done to protect scenic values, including buffer strips. Affolter asked if anything was known about the economic trade-offs between the maintenance of scenic buffer strips and what is given up in terms of

timber harvest.

Everett Meier said that 10 years ago BLM established 400-foot buffers along the upper Nestucca and along other state and County roads and it affected allowable cut by about 3%. He said that he was surprised that there wasn't a bigger effect than that. He pointed out there is 23 miles of road on the upper Nestucca and that 400 feet on each side adds up to a lot of land. Meier added that their Avisual resource management program will further reduce the allowable cut as clearcuts won't be seen on BLM land from certain well-traveled roads.

The question was raised (by Ken Lane?) as to how people could expect private landowners to leave their money standing in trees for someone else to look at - that land is theirs to use - to grow trees, to harvest them, and replant them.

Millard Trout said that they have three types of land that State Forestry won't be cutting on. these include areas called Scenic Conservancies which occupy about 2% of their land, some of it along the Wilson River. They also won't harvest areas where there are adverse physical conditions such as steepness or excessively shallow soil. And, they have something called Scenic Production land where they try to minimize the impact of harvesting.

Bob Pedersen asked if the State highway Department had thought about buying scenic easements. Trout responded that the cost involved has generally prevented this.

FUTURE TIMBER SUPPLY

Pankowski said he realized that people can get carried away on subjective aesthetic considerations, but that he is hearing more and more in his community that the timber resource may be exploited to the extent that we'll lose our forest base - Whether we're really going to provide a productive base for the future, or whether we're just going to cut and get out.

Millard Trout replied that the Buetter report indicates that this part of Oregon is in the best shape of any place in the state with respect to future timber supply.

Pankowski responded that Aforestry generally has to do a better job of explaining to the public that the world is not coming to an end

because we are clearcutting trees. He said that people are concerned that we might replicate the destruction of the timber base that has occurred in other parts of the county.

Trout responded by pointing out the success of the replanting of the Tillamook Burn. In the late 40's the experts were saying that it had burned so badly that it would take 50 years to get a crop of trees back on it. Six years later the trees were taller than my head on the same ground. . . We're growing trees a lot faster than we're cutting them. We have a future out in front of us with the growing stock we have now. . . We're going to be cutting in Tillamook County off State Forest Land by the year 2020 approximately 4 times the annual cut we have now on State lands. . . and that will continue forever. . . I didn't see any great problems with logging systems and logging techniques that we've got now - the road building standards we have in the Forest Practices Act - of ever going back to the things that occurred on that ground between 1940 and 1960. . . The most favorable picture in the whole state is Northwest Oregon as far as future timber supply.

McKibben added that Aa lot of people didn't give a damn whether its going to grow back. They've come here, bought their two acres, and they expect surrounding land owners to provide them with a view of mature timber.

CONFLICTING USES: FORESTRY VS. AGRICULTURE AND HOMESITES

Affolter pointed out that some CAC members expressed concern about Publishers buying up land that could have otherwise been used for farming and/or homesites (question #8 on CAC list). Publishers has been very aggressive in buying up marginal lands and converting them to timber production. Some people are very supportive of this increase in our timber base; others are critical of the loss of potential farm land or homesites. (Note: The Statewide Planning Goals and Guidelines specifically states that forest uses should be permitted on potential agricultural land.)

Ken Lane stated that Publishers is buying up that land because they are looking to the future, and that if he had the money he'd be doing the same thing.

Millard Trout said that Aif I were Publishers and there was a piece of private ground sitting out there that could possibly split up into a number of lots that could affect my management operations from the standpoint of timber harvest or herbicide use - with the pressures that are being brought to date - I would probably be willing to gamble more

money than that land is actually worth to protect my operation on the land around it. Trout went on to say that the type of farmland that Publishers is buying up is generally not productive farm units, and that growing trees is the most profitable way of using this land.

McKibben added that he didn't know of any area that Publishers has bought that is predominantly farmland. They have bought large parcels of brush land that includes 20 acres of farmland. He said that I guess that part of why we're here is to try to decide if some of these lands can be used for other values.

Affolter pointed out that our Small Farm and Woodlot category would apply to some of this sort of marginal land. This would allow people to have either a small scale farm and/or engage in timber production. He added that from the standpoint of forestry there seemed to be general agreement that Publishers was doing a good thing. But that there seemed to be some criticism from the standpoint of their reducing the supply of land that is available for homesites. Throughout this County we have to make sure there is enough land available for the homesites that need to be developed, and this will have to come out of marginal forest and/or marginal agricultural land.

When Publishers buys up land and puts it into forest, that's land that is no longer available for homesites, and that means you have to turn to other land for development.

FOREST MANAGEMENT PRACTICES VS. RESIDENTIAL USES

Dick Lawrence observed that there is the additional concern of the effect that forest management practices will have on nearby residence.

Trout responded that people who have moved into the rural areas to experience a forest environment often want a fixed forest environment.

Meier noted that BLM is managing some scattered acreages up in Columbia County near the bedrooms of Portland, and it's next to impossible because of the people who are moving out there and the restrictions that their criticisms impose on forest management practices.

Oram observed that there are hard core people on both sides of the fence (with regard to scenic values). I think that foresters have traditionally set back with their facts and figures and argued that this is high site timber land . . . and it's going to look beautiful in a few

years. But I don't think we've done an adequate job of selling this to some of the people who are middle-of-the-road who would support us if they had all of the facts. The answer to question #4 (Can more be done to protect scenic values?) is yes - you can do more, but its got to cost, and are we willing to bear that cost. Oram added that he thought that question was generated because people don't know what the state and federal agencies are doing with regard to visual resource management.

PUBLIC INFORMATION

A discussion followed about how hard it is to inform people of what is actually happening on forest land, with Meier mentioning the efforts that BLM has been making over the past year.

ROLE OF CAC=S Lawrence responded that perhaps the CAC=s could continue to be viable as part of the public involvement and information process beyond the completion of the comprehensive plan.

Pankowski stated there is a great need for a better understanding among residents of how the forest economy works in this County.

CONFLICTS BETWEEN FOREST PRACTICES AND RESIDENTIAL USE

Affolter stated that one of the critical issues that we must deal with is raised by question #6 - AWhat are the inherent conflicts between forest practices and residential use of adjacent lands? How can such conflicts be resolved? This is something that anyone who manages timber is concerned about, as are people who are affected by the management of timber. There are conflicts between timber management and residential uses. Within the planning process we are trying to alleviate or avoid those conflicts as much as possible. One of the things we=re talking about is the Small Farm and Woodlot category which could serve as a buffer between the more intensively managed forested areas and the more intensively developed rural residential areas. . . . Anything else that can be thought of by members of this group - whether you=re involved with managing timber or whether you=re experiencing the effects of that management - would be very helpful. This might be something that we could focus on at our next meeting (Feb. 15)

Affolter added that we face a similar problem with regard to agriculture. As more people with urban backgrounds move into this area, there will likely be an increased percentage of people who are critical of certain farm and forest management practices. Therefore, farmers and foresters will have to be increasingly concerned about

what's happening on adjacent ownerships and the increased possibility of resulting conflicts.

Affolter asked how people felt about that night's meeting. He observed that it is somewhat frustrating to talk about things that are so subjective and laden with values. These are very important issues though, in terms of the concerns of the people of this County. If there was a way we could get a little more specific handle on some of this, it would certainly help us.

Ed Oram stated that there were volumes written on each of these issues and that he is frustrated by the fact that there may be no practical way to get the answers back to the CAC's.

Affolter replied that there are some things that we can accomplish in terms of the land use planning process. We can establish our land use designations in such a way that we can alleviate some of the conflicts between adjacent uses. We can come up with policies that address some of these concerns.

Herb Sargent said he thought we needed to get a list of the positive things that the timber companies were doing to protect our land and water resources.

NEED FOR COORDINATION

Pankowski said that he sees very little hostility toward the big companies. One of the reasons being that no one really knows who owns the land . . . !! What people are concerned about is how the County is going to look in the next 20 years - we don't have anything comparable to a master plan for a forest because there are so many interests involved . . . there isn't anything comparable to a multiple use plan for the County as a whole . . . This can't be done for LCDC in one year.

Affolter noted the question of coordinating timber management also came up in the CAC's (question #9). It applies to the management of a particular watershed and to timber management in the County as a whole. The state in its Forestry Program for Oregon addressed this issue, and said that there must be some coordinating of timber harvesting among different ownerships.

Russ McKinley stated that the extensive clearcutting on Highway 53 may be an example of the need for different ownerships to get together, but there are problems with collusion under antitrust

provisions. I'm not sure you want the companies and all the agencies and everyone else getting together. Our capitalist system is designed for independent private competitive forces.≡

Pankowski asked if it might not be possible to identify on a map when timber is going to be cut over the next 20 or so years so that people won't be surprised when it happens in their area.

The meeting concluded with further mention of the need to get more specific in the February 15 meeting, and the need to give further consideration to the potential conflicts between forest practices and residential use of adjacent lands.

APPENDIX F

