

File ZDO-219
Proposed Comprehensive Plan Amendment
Draft Dated 2/3/10

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NATURAL RESOURCES AND ENERGY (1/5/09)

Citizen involvement is essential in the governmental process to promote the general health and welfare of the total community. New approaches must be developed by local government to effectively involve citizens in the planning and decision-making process. Positive accomplishments can be achieved.

The resources and natural systems of Clackamas County are the most enduring and tangible assets for its communities and their economies and environment.

River corridors, farm fields, marshes, scenic outlooks, wildflowers, spawning beds for salmon, deer and elk wintering areas, gravel quarries, magnificent stands of trees along Oatfield Ridge, or reservoirs of hot water beneath the slopes of Mt. Hood are all part of the wealth of Clackamas County's environment.

Natural resources and processes are interdependent, supplying benefits to the system of which they are a part. Plants are used by animals. Floodplains accommodate floods. Geologic processes produce areas of spectacular scenery. Skiers use the snow-covered slopes of Multnomah Mountain. Favorable soils and slopes result in savings for construction. Energy flows into the region from the sun, wind, and rain.

Clackamas County is an area of rapid growth, urbanization pressures, and diverse rural activities. As man exerts a greater influence on the environment, planning for future use of Clackamas County's land, water, and energy resources becomes increasingly important. The concern becomes one of insuring long-range values and a high quality of life. This can be accomplished by insuring that our resources are wisely managed, that different uses of land do not conflict, that energy for productivity is available in the quantities needed, and that there is a sufficient amount of high-quality water for the needs of the population as well as natural systems.

ISSUES

1. Use of rivers for recreation and public water supply
2. Effects of river corridor development

3. Competing land use demands in river corridors and impact of development on wetlands
4. Availability and quality of groundwater
5. Management Stewardship of agricultural resources
6. Stewardship Management of forest resources on small woodlot ownerships
7. Stewardship Management of urban forests
8. Competition of recreational demands in forest areas
9. Stewardship Management of mineral and aggregate supplies
10. Reuse of exhausted aggregate extraction sites
11. Stewardship Management of fish and wildlife habitat
12. Compatibility of structures and land uses in critical habitat areas; animal damage in agricultural/forest areas
13. Protection of scenic and unique natural areas on public and private lands
14. Housing density in hazard areas (e.g., steep slopes, active landslides, and floodplains)
15. Government liability if known hazard areas are allowed to develop, and damage to life or property occurs
16. Energy efficiency and alternative local sources (e.g., solar, geothermal)
17. Need for educational programs on energy conservation (e.g., weatherization, recycling, and efficient land use patterning).

SUMMARY OF FINDINGS AND CONCLUSIONS

1. On peak days and/or during summer months, sections of the Willamette River are overused in terms of recreational activities. The Clackamas and Sandy Rivers may be approaching recreational overuse in some sections. The Molalla has very low summer flows. Access points on the Tualatin River and lower Molalla River are few. The banks of the Tualatin are predominantly mud, relatively fragile, and cannot withstand much wave (wake) action. Regulatory programs include State Scenic Waterways on the Clackamas and Sandy Rivers, Federal Wild and Scenic Waterways Act, the Willamette River Greenway, state water quality standards, Water Resources Department policy and water rights, and Division of State Lands fill permits. Seven cities and the County share jurisdiction of the Willamette River.
2. All rivers either support or provide passage for anadromous fish, i.e. salmon and steelhead.
3. Existing land uses within each river corridor area are:

Land Use as Percentage of Total

<u>River Ag/Forest/OS</u>	<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>
Clackamas 90.2	6.5	0.1	3.2
Sandy 94.9	4.7	0.4	0.0
Molalla 97.0	2.0	0.0	1.0
Tualatin 85.9	13.9	0.2	0.0
Willamette 84.7	11.3	0.4	3.6

4. Quality of groundwater in Clackamas County is generally good, although some dissolved iron is found in well supplies. Groundwater monitoring activities show a gradual yearly decline in the water table; however, according to the Oregon Water Resources Department, there is no indication of a critical groundwater situation.
5. The County's agricultural production in 1987 had an estimated value of over \$150 million. This contributed a total of approximately \$500 million to the state's economy. The County's agricultural land base has decreased over 100,000 acres in the last 30 years. The potential for agricultural production is further reduced by rural parcelization patterns and inactive farm land owners.
6. Techniques for maintaining the County's agricultural base are (1) regulating land uses to insure that in prime agricultural lands, economic farm units are preserved; and (2) utilizing and expanding existing resources that provide tax relief, educational programs, technical assistance, cooperatives, etc., to encourage the economic viability of the County's farms.
7. Federal timber revenues to the County treasury averaged over \$9 million per year from 1984 to 1988. The forest industry is one of the largest industries in the state.
8. During the late 1980s (from 1984 to 1988) federal lands supplied 70 to 75 percent of Clackamas County's timber harvest volume, and the forest industry supplied about 15 to 20 percent. Small woodlot owners control approximately 20 percent of the Countywide commercial forest land, and supply 5 to 10 percent of the timber harvest.

9. ~~There is no County policy for~~Inside the Portland Metropolitan Urban Growth Boundary, street trees are required in certain areas and encouraged elsewhere~~or managing forest lands in the urban area.~~
10. Trees are the anchors of healthy urban ecosystems, and the tree canopy provides important ecosystem services to the community. Inside the Portland Metropolitan Urban Growth Boundary, preservation, maintenance, and enhancement~~restoration~~of the tree canopy are required or encouraged through regulation and public education.
110. The County could simplify management of its scattered forest holdings by exchanging them for forest lands in other parts of the County and using them for parks and/or open space. A County forest land inventory and management plan has been completed and is now being implemented.
121. Aggregate supplies are integral to general economic development in the County; however, supplies near the urban area are limited due to encroachment of urban land uses.
132. Fishing is a major recreational activity in the County, with many streams and rivers noted for their salmon and steelhead runs. Hunting is also a major activity, with deer, bear, elk, and other hunting having an important economic impact on Clackamas County.
143. Areas near rivers or streams are the most important wildlife habitat, harbor the greatest species diversity, and are critical to the survival of numerous species. Cool and well-oxygenated rivers sustain fish in the summer. Winter range is necessary to support big game during inclement months.
154. Scenic and natural areas are often quite fragile and easily obscured or degraded by inappropriate forms of development.
165. County population projections indicate an increase of 45 percent by the year 2010, substantially increasing development pressure and recreational use of the County's scenic and natural areas. The quality of these resources affects tourism, a major County industry.
176. Flooding and landslides are natural events posing hazards to existing structures and may be compounded by further development. There are approximately 330 acres of landslides and 935 acres of floodplain in northwest unincorporated urban Clackamas County.
187. Inappropriate hillside development can increase runoff, erosion, and public service costs. County road maintenance costs, for development on

hillsides with greater than 15 percent slope, are about four times as great as maintenance costs for development on 0 percent to 8 percent slope.

198. Practically all energy is imported to the County. Although little can be done to affect price or supply, efficient use of energy can be accomplished once it enters the County, and auxiliary sources (e.g. solar, wind, geothermal, etc.) can be developed.

2019. Nearly 40 percent of the County's energy consumption is wasted by inefficient insulation, improper ventilation, poorly designed appliances, etc. Energy loss due to inefficient land use patterns add to this total. Energy conservation strengthens the economy by preventing job loss during shortages, reducing demands on natural resources, and providing time to develop new or more efficient sources.

210. Solar and wind energy are both essentially unlimited in their supply and pose few environmental problems. If more actively promoted, they could become important auxiliary energy sources in Clackamas County. Solar energy can make an immediate contribution for heating and cooling individual buildings.

221. The Metropolitan Service District has established a solid waste transfer station and recycling center in Oregon City. It, and a similar station near Sandy, are collection points for solid waste before the nonrecycled material is trucked to the landfill.

232. Initial exploration near Mt. Hood indicates a potential for geothermal energy. Heat from the earth could be an important contributor to the total energy requirements of the Portland metropolitan area in the next 10 to 20 years.

Staff note: No changes are proposed to the Water Resources or Agriculture sections of Chapter 3.

FORESTS

The forest resources of Clackamas County, primarily Douglas Fir, Western Hemlock and other coniferous trees, have provided thousands of jobs for many decades both in Clackamas County and the surrounding region. Timber volume is temporarily declining in the County as the old growth stands are replaced by younger forests. Sound management practices and coordination are needed by all forest owners.

Increased demand for outdoor recreation from a growing County and regional population places renewed emphasis on the need for balanced use and management of forest resources.

~~Development pressures pose a challenge to retaining and enhancing a healthy urban forest canopy. Accommodating growth inside the Portland Metropolitan Urban Growth Boundary should be balanced with the preservation and planting of trees for their environmental, aesthetic, and economic benefits.~~

For additional consideration of forest lands, see the Land Use Chapter.

GOALS

- Conserve and protect forest lands.
- Provide continued employment in the forest products industry.
- Protect, maintain, and conserve open space, environmentally sensitive areas, wildlife habitat, scenic corridors, recreational uses, and urban buffers.
- Maintain and improve the quality of air, water and land resources.
- Create conditions that will maintain or further the growth of the wood products industry.
- Support principles and implementation of the Oregon Forest Practices Act.

POLICIES

- 1.0 Protect from conflicting land uses productive forest lands and related forested areas which are environmentally sensitive or otherwise require protection (watersheds, areas subject to erosion, landslides, etc.) (see Land Use Chapter). Recognize forest producing areas through appropriate zoning.
 - 1.1 ~~Ensure~~ Ensure that forest productivity data, based on cubic foot site classes, is current and revised periodically to reflect changes in commercial forest resources.
- 2.0 Encourage forest related industries, specifically firms doing secondary wood processing or those which use wood products now underutilized or considered waste--hardwoods, slash materials, etc.

- 3.0 Continue to support and coordinate programs of the Oregon State University Extension Service and the State Forestry Department to promote more intensive management of small woodlot forest lands, including the education and dissemination of information on timber management methods, special tax assessment incentives, and programs to aid in the marketing of small timber sales.
 - 3.1 Encourage ready availability of regeneration stock, greater opportunity for equipment-sharing co-ops, and joint timber harvest programs to assist smaller woodlot and timber tract owners.
- 4.0 Encourage coordinated management of major forest lands by cooperation with the U.S. Forest Service, the Bureau of Land Management, the Oregon State Board of Forestry, and the private industry sector.
- 5.0 Cooperate and coordinate with appropriate state and federal agencies to ~~ensure~~insure forest management practices that recognize the multiple resource values of forest lands. Impacts on environmentally sensitive areas such as slide and erosion hazard areas, sensitive fish and wildlife habitat, scenic corridors, unique natural and/or cultural features, etc, shall be minimized.
 - 5.1 Encourage forest owners to restrict the use of off-road vehicles to specified areas where environmental damage and conflicts with other forest uses will be minimized.
 - 5.2 Encourage public agencies to acquire through purchase, exchange, or easement, scenic areas now in private ownership in order to insure their preservation.
 - 5.3 Encourage strengthening of the [Oregon State](#) Forest Practices Act to include special consideration of scenic values in methods of harvesting, in addition to prompt clean up and regeneration (ref. State Forest Practices Act, Section 629-24-541(h), 1978) and ORS 527.710.
 - 5.4 Support visual management techniques on federal lands within the County, e.g., alternating smaller harvests along scenic corridors to reduce large-scale impacts. Develop incentives to increase the management of scenic/watershed resources on privately owned forest lands, e.g., tax incentives for modifying harvest techniques in designated scenic corridors.

- ~~6.0 — Initiate a tree conservation and planting program inside the Portland Metropolitan Urban Growth Boundary for the northwest urban area to preserve urban forest areas and promote tree landscapes.~~
- ~~6.1 — Initiate an inventory of the urban region to identify and map the location of existing forested areas, and, with the cooperation of community organizations and other interested groups, identify the location of tree specimens worthy of protection.~~
- ~~6.12 — Implement Develop tree conservation standards in conjunction with design review, grading, and subdivision ordinances to minimize and regulate removal of trees and vegetation on undeveloped lands within the urban area, but provide exemptions from these standards for:~~
- ~~Land specially assessed as forestland on the effective date of the regulations; and~~
- ~~Low Density Residential, Standard Lot Single Family, and Small Lot Single Family lots of record, if such lots are developed with single-family dwellings and are not divisible;~~
- ~~6.2 — Assume jurisdiction for the Oregon Forest Practices Act inside the Portland Metropolitan Urban Growth Boundary.~~
- ~~6.3 — Develop and implement a public education campaign on tree preservation, maintenance, and planting, and on the value of the urban tree canopy.~~
- ~~6.43 — Develop an urban street tree planting and maintenance program that focuses on specified arterials (e.g., boulevards) and designated neighborhoods. This should be done in cooperation with businesses and community groups.~~
- ~~6.4 — Establish a special review process for commercial timber harvesting within the urban area. Following receipt of a notification to harvest and/or operate motorized equipment by the State Department of Forestry, the County Department of Transportation and Development shall meet with representatives from State Forestry and OSU Extension Service. Visual and neighborhood impacts, alternative harvest plans, and revegetation techniques shall be addressed, and a recommendation made by the governing body and State Department of Forestry within fifteen (15) days.~~

- 6.0 Adopt and implement an updated Forest Management Plan for County-owned forest land, emphasizing consolidation/exchange of scattered County holdings to facilitate more intensive programs for timber management, park development and acquisition, and protection of any recognized watershed, recreation, or scenic values.

URBAN TREE CANOPY

Clackamas County is unique in Oregon, having both a large rural and growing urban environment. Natural growth of trees and the historical planting of trees by residents have produced significant innumerable environmental, social, economic, property value and aesthetic benefits to communities throughout the County. These benefits, particularly those related to environmental quality, are extraordinarily important during this time of significant global climate change. A healthy urban forest, especially one having mature trees, is essential to maintaining a healthy community and a vibrant functioning ecosystem. A balance between population growth and conservation of our important natural resources, for current and future generations, is necessary to protect the vital resource of our urban forest.

GOALS

Protect and restore ecosystem services provided by the County's urban forests. Inside the Urban Growth Boundary, achieve a net 1 % increase in tree canopy coverage each year.

POLICIES

Initiate a tree conservation and planting program inside the Portland Metropolitan Urban Growth Boundary to preserve urban forest areas and promote ecosystem health.

- 1.1 Implement tree conservation standards to minimize and regulate removal of trees
- 1.2 Assume jurisdiction for the Oregon Forest Practices Act inside the Portland Metropolitan Urban Growth Boundary.
- 1.3 Develop and implement a public education campaign on tree preservation, maintenance, and planting, and on the value of the urban tree canopy.

- 1.4 Develop an urban street tree planting and maintenance program that focuses on specified arterials (e.g., boulevards) and designated neighborhoods. This should be done in cooperation with businesses and community groups.
- 1.5 Establish an Urban Forestry Commission to assist the County Commissioners in matters of urban forest stewardship.

Staff note: No changes are proposed to the remaining sections of Chapter 3.