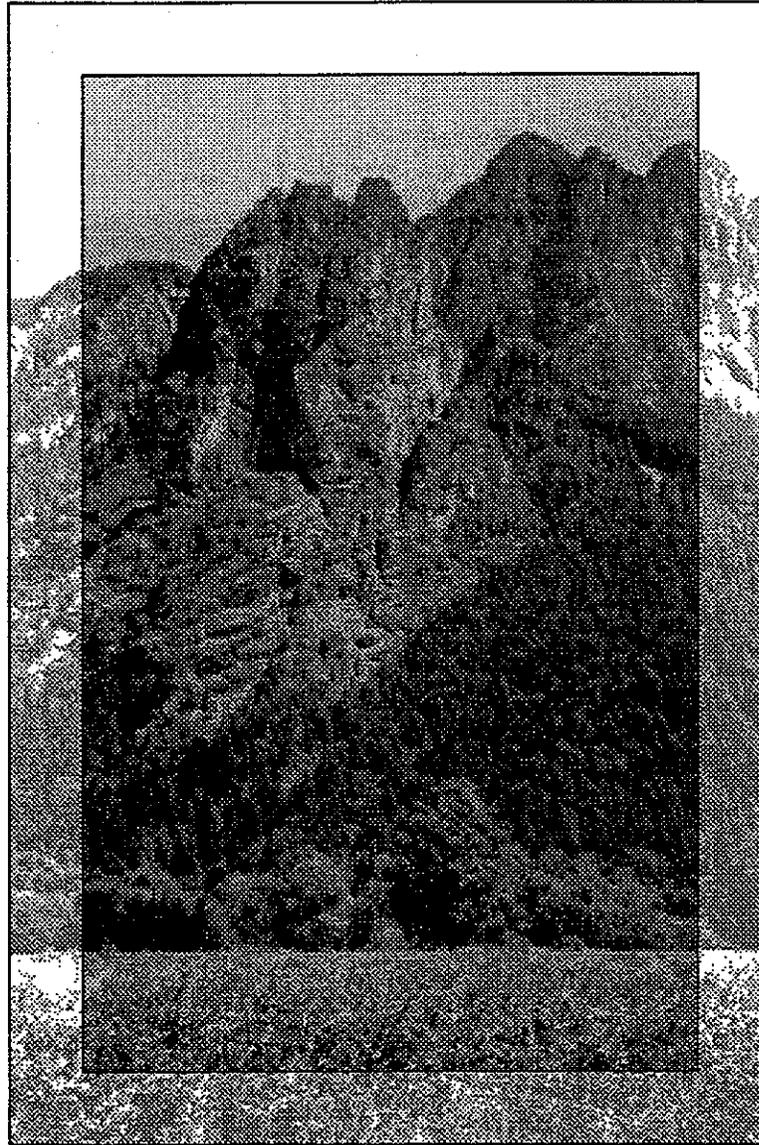


# A Strategy to Preserve Rural Forests



## Chapter Six





# Chapter 6

## A Strategy To Preserve Forests and Forestry

### Introduction

The 1994 King County Comprehensive Plan identified approximately 61,000 acres of land as productive rural forest. The County decision makers recognized the value of these lands for forestry, habitat, and the multitude of their associated functions from water recharge to recreation. These lands are scattered across the rural landscape of King County and demand an approach different from those lands in the Forest Production District (defined in the Comprehensive Plan). The pressures on these productive rural forest lands are greater and the practice of large-scale forestry more difficult than for lands in the Forest Production District, while the benefits of retaining them in forest and for forestry are significantly more immediate.

The approach used to generate the incentive strategies for the Rural Forest Study Areas is similar to the process used to generate the farming strategies presented in Chapter 5. This approach included: stakeholder interviews; surveys of the rural forest landowners; comment at several lively public meetings; regular discussions with a very engaged, diverse advisory committee, the Forest Committee; and research into companion programs around the continent.

The objectives for the forest strategies also are similar to the objectives articulated for the county's farmland:

1. Conserving the rural forest land base so that it retains its public and private benefits.
2. Facilitating the business or activity of appropriately-scaled forestry for the long term.

These two objectives work in parallel. It is critical that we retain the rural forest land base because of its overwhelming productivity and the wide variety of forest-associated benefits. While retaining the land base is necessary, retention by itself is not sufficient. It is imperative that the County be an active partner in maintaining forestry as a vital industry in the rural area. The County must work to ensure that citizens enjoy the continued opportunity to secure their livelihoods in the rural area. The strategies presume that during 1996 the County will finalize the rural forest district borders, accounting for unique environmental or community constraints or opportunities for individual districts.

Not surprisingly, many of the obstacles to the preservation of rural forests and the practice of forestry in King County are similar to those faced by the county's farmers. Both livelihoods rely on good soils, the region's exceptional climate, and talented, resourceful Northwesterners. There are also, however, fundamental differences between farming and forestry which require a separate set of incentive strategies for forests and forestry with different priorities for the implementation of the strategies. A sampling of these differences is worth enumerating:

- **County Commitment** - To its credit, the County's involvement in the preservation of farms and farming dates back nearly 20 years. Its involvement in the preservation of our rural forests is of more recent vintage. Consequently, the County is still developing the necessary base of knowledge, ability to reach key parties, and capacity to facilitate consensus among different interests.
- **Harvest and Rotation** - Growth of a farm crop is measured in months and a forest crop in decades. The perspective of the farmer and the forest landowner is on different scales and the various difficulties of working a landscape on the urban fringe take on different magnitudes.
- **Land Requirements** - Depending on the type of farming practiced on a parcel, farms in this county can vary from a few acres to several hundred or more. Forest operations typically are an order of magnitude greater in our rural area. They can range from 20 acres for a woodlot to upwards of 1,000 acres for an industrial timber operation.
- **Nature of Marketing** - Forestry can vary immensely in the size of the operation, types of trees and other crops and harvest rates. The new forms of direct marketing that are so promising for the farmer on the urban fringe, however, such as subscription farming and farmers markets are not yet available to the forester, except perhaps for a few forest specialty crops such as wild mushrooms.
- **Type of Owners** - There are a great number of non-industrial forest landowners, but overall there is a greater corporate ownership of the county's rural forest lands than of rural farm lands.

The strategies presented in this chapter are fashioned to be effective for the special characteristics of King County's rural forest lands. As they are adopted and implemented, the County and its citizens can look forward to a future with healthy forests nearby and a vital rural forest industry.

## **Description of the Rural Forest Study Districts**

Of the 61,070 acres of land in the rural forest districts, 31,756 acres (52 percent) are held by six property owners. King County and the State own 14,046 acres (23 percent). The remaining 15,217 acres (about 25 percent) are in small forest land ownerships.

About 50 percent of the rural forest lands currently are zoned RA-5 and about 29 percent of this land is held in parcels 20 acres or less. About 42 percent of the rural forest land is zoned RA-10, with 20 percent in parcels 20 acres or less. The remaining rural forest land is zoned R-2.5.

The rural forest lands are distributed across the rural area with about 27 percent of the rural forest land contained in parcels which abut the Forest Production District. About 21 percent of the rural forest land is within parcels that abut the urban growth area (UGA) line.

Detailed graphical descriptions of the rural forest districts are presented in Appendix A.

## **The Obstacles to Rural Forestry and Forests**

At the outset of the project, the consultant team completed a literature search and a survey of companion programs in other states. This work provided an initial array of the major obstacles to forest conservation and forestry. The pressures on forests and the barriers to forestry on our urban fringe, however, are different from those in Alaska, Arkansas, Montana, or New Hampshire. This research was a starting point which has been refined by the people who best know the difficulties of working the forest lands on King County's urban fringe. The consultant team presented this initial work to the Forest Committee, stakeholders, and surveyed landowners.

Table 6-1 presents the principal obstacles that interfere with successful forestry and conservation of forests in the rural forest districts:

**Table 6-1**  
**Barriers to Conserving Forest Lands and Encouraging Forestry**  
 (Identified Through Research and Outreach)

Barriers	Commentary
<i>Level Of Importance: Critical</i>	
<ul style="list-style-type: none"> <li>• <b>Pressure to Convert/ Low Rate of Return</b></li> </ul>	There is significantly greater financial return from conversion compared to remaining in forestry.
<ul style="list-style-type: none"> <li>• <b>Increased Urbanization</b></li> </ul>	Urbanization increases management and capital costs; increases interference from neighbors; increases threat of regulation and additional taxes.
<ul style="list-style-type: none"> <li>• <b>Uncertainty of Future Regulation</b></li> </ul>	People are uncertain of their future harvest or conversion options because of the potential for regulatory and tax changes. As a result, they log, subdivide or sell their land for immediate benefits.
<ul style="list-style-type: none"> <li>• <b>Current Regulation</b></li> </ul>	Regulations are, in some cases, excessively restrictive. They are misperceived or misapplied, applied by too many regulators, and, in some cases, particularly problematic (e.g., the platted-after-1960 rule).
<i>Level Of Importance: Severe</i>	
<ul style="list-style-type: none"> <li>• <b>Tax Laws</b></li> </ul>	There are too many federal, state, and local taxes: inheritance, property, capital gains, and other harvest taxes.
<ul style="list-style-type: none"> <li>• <b>Lack of Education, Technical Assistance and Outreach</b></li> </ul>	Landowners need information about opportunities, requirements, management and stewardship techniques, available professional support, and environmental values. Other needs include better preparing foresters to advise landowners, and educating the public, agency staff, and policy makers on the value of working forests.
<ul style="list-style-type: none"> <li>• <b>Long-term Commitment</b></li> </ul>	Long rotations required to produce this cash crop cause cash-flow problems, high expenses, high taxes, and concern about future regulation and tax law.
<ul style="list-style-type: none"> <li>• <b>Optimal Management Units</b></li> </ul>	Rural forest lands frequently are not configured to promote efficient forestry.
<i>Level Of Importance: Moderate</i>	
<ul style="list-style-type: none"> <li>• <b>Lack of Markets</b></li> </ul>	There is a need to enhance alternative product markets.
<ul style="list-style-type: none"> <li>• <b>Lack of Forestry Infrastructure</b></li> </ul>	There is a need to attract loggers, foresters, mills, and the necessary infrastructure to support the practice of forestry in the rural area.

Based on rankings provided by the Forest Committee and a review of landowner surveys, the obstacles are grouped into three levels of importance: critical, severe, and moderate. The levels of importance depend on conditions directly affecting the county's rural lands and the nature of forestry practiced there. These obstacles likely would differ for forest lands not located on the urban fringe or for forest lands located in some other region of the country. In developing strategies for forests and forestry, the consultant team paid close attention to the nature of the obstacles and their level of importance in order to

develop the strategies best suited to protect the county's rural lands as working landscapes. This report focuses principally on overcoming those obstacles that are either critical or severe.

Within the three levels of importance, concern with particular obstacles varied depending on the type of forest landowner. **Four types of landowners hold the majority of the county's rural forest lands:**

- **"Life-style" Forestry:** Private ownership of smaller, frequently residential parcels (typically less than 20 acres). Major objectives are quality of life, habitat, and other non-market related values. Subordinate activities may include the limited harvest of forest products.
- **"Farm" Forestry:** Private non-industrial ownership of smaller to intermediate size parcels (an ownership typically is 20 to several hundred acres with one to several parcels). Major objectives are timber production and possibly the harvest of other forest products. Secondary objectives may include quality of life, habitat, and other non-market related values.
- **"Investment" Forestry:** Private ownership of smaller to intermediate size parcels (typically 20 to several hundred acres). The primary objective is eventual sale of the property for the highest and best use. Secondary objectives may include timber production for sale.
- **"Commercial" Forestry:** Private or institutional ownership of larger acreages (typically operations are 1,000 acres or more with possibly noncontiguous holdings). The primary objective is timber production for sale. Secondary objectives may include quality of life, habitat, and other non-market related values.

The incentive strategies were developed in a manner that would best respond to the concerns and interests of these four types of landowners.

## Development of Incentive Strategies

The following recommended strategies have been carefully designed to address the obstacles which confront King County's Rural Forest Districts. Secondly, they have been crafted to advance the two goals of conserving rural forests and facilitating the business of forestry. Finally, they have been targeted to appeal to the various landowners in the rural area.

**The consultant team began the development of these strategies with a survey of programs across the continent. Appendix H contains a summary of the nationwide incentives survey.** This survey was the starting point for working with the advisory committee, stakeholders, and landowners to develop strategies specifically tailored for King County's Rural Forest Districts.

The strategies presented in this chapter best reflect the opinions of all three groups. However, consensus was not always possible with such a large and diverse number of participants. The strategies presented here are built on and amplify the foundation provided by the many participants in this project. A draft

copy of this report was sent to all Forest Advisory Committee members. Numerous helpful comments on the draft report were written or telephoned in to the consultant team from committee members and several stakeholders; many have been incorporated into this final report. All written comments received also have been included in Appendix Q. In the last analysis, however, this report and its recommendations are the responsibility of the consultant team.

**The following schematic illustrates how the overall set of strategies will work as an integrated program to conserve the county's rural forest land and encourage the practice of forestry. The program's associated components are designed to create a solid foundation for the permanent retention of King County's rural forest land.**

# Rural Forest Preservation Incentive Program

**Ongoing monitoring**  
*To ensure:*

- *land base is preserved*
- *forestry remains vital*
- *incentive program is effective*

**Landscape Pilot Project**  
with County, State and  
Federal Participation  
*To provide regulatory certainty*



**Use of \$3 Million**

- *Acquisition: \$2.5 million*
- *Programs: \$0.5 million*

**Forestry Incentives**  
*To encourage the sound practice*  
*of forestry over the long term*

**Land Use Incentives**  
*To preserve / conserve land base*  
*(Coordinate: 4-to-1, Quality Rural*  
*Environment, Farm & Forest,*  
*Waterways 2000, Future Funding)*

**Rural Forest Commission**  
*Final design of program elements*  
*reviewed by new commission*

## **Strategy 2 a) Right-To-Forest Law**

### ***Strategy Type: District-wide***

Because of the proximity to residences, rural forest lands are subjected to stresses and problems which are avoided on most of the Forest Production District's remote lands. Rural neighbors frequently complain, or even bring nuisance claims, to stop activities which are acceptable and appropriate forest practices. Many rural forest operators report that this interference is one of their greatest operating difficulties. They spend an excessive amount of time and resources resolving issues with neighbors and responding to the complaints received by various governmental agencies.

A well-drafted Right-To-Forest Law in King County can help to remedy this problem. This law should be drafted to amplify state provisions that provide protection from nuisance lawsuits brought against reasonable, professionally accepted forest practices (RCW 7.48.305). It should address two major issues:

- It should require a seller to notify potential property buyers that the property for sale is adjacent to a forest property within a rural forest district. This notice could be included in a Purchase and Sale agreement. The notice would be drafted to encourage respect for property rights and an understanding of forest practices.
- The law should be drafted to dismiss nuisance claims filed to stop accepted forestry practices. (The term "accepted forest practice" will need to be carefully defined in the ordinance.)

### **Next Steps**

Snohomish County already has developed a thorough and well crafted Right To Forest Law which could serve as the basis for King County legislation. (See Appendix K for the Snohomish provision, the provision that appears in real estate purchase and sale agreements in Snohomish, and a summary of other right-to-forest provisions from around the nation.)

### **Cost**

The cost would be basically the staff cost to draft the provision.

### **Advisory Committee Review**

There was consensus from the advisory committee that the County should consider this strategy.

## **Strategy 2 b) Signage and Neighbor Notification** ***Strategy Type: Targeted and District-wide***

The County should consider implementing an additional program to protect rural forest lands from encroaching urbanization. It should implement a mailing program repeated every three or so years to landowners surrounding rural forest districts and actually provide signage around lands on which there is a Forestry Commitment Agreement. The signage and mailings should be carefully designed and written to encourage respect for property rights and an understanding of forest practices.

### **Next Steps**

- Staff should be assigned to design and draft the signage and mailings.
- Snohomish County is implementing a mailing program which should be reviewed.
- The drafts should be reviewed by focus groups of rural residents to ensure these tools are effective.

### **Cost**

- The cost for design, drafting and focus groups will be primarily staff time.
- Mailing could be as much as \$0.25 per notification for list handling, printing, and postage. Assuming that 7,000 adjacent landowners are notified, the total cost likely will be upwards of \$1,700 for every bulk information mailing.
- Signage will depend on the quality of the materials. A good quality three-foot sign, with two color printing, will cost approximately \$30. If 1,000 participants request signs, the total cost would be \$30,000.

### **Advisory Committee Review**

There was consensus from the advisory committee that the County should consider this strategy.

## **Strategy 2 c) County Staff Education** ***Strategy Type: District-wide***

Many participants in this project reported the impression that forestry is not a use favored by the County for its rural lands. Ideally, rural forest landowners should conversely report that they consider King County a strong and consistent partner for forestry appropriate to these lands.

The recognition of the benefits of retaining forestry in Rural Forest Districts rather than conversion to other uses should be manifest in all County staff

interactions with the rural forest lands and landowners. County staff with regulatory authority, management responsibility or stewardship activity in the rural forest lands would benefit from a series of training sessions on the benefits of rural forests and the practice of forestry.

### **Next Steps**

- The County should develop these training seminars in concert with its environmental educational staff, private consulting foresters and rural forest landowners.
- Offer the training seminars to staff at the Department of Development and Environmental Services (DDES) and Washington Department of Natural Resources (State DNR).

### **Cost**

The cost would consist of the staff cost to develop and attend the seminars. Consulting foresters and rural forest landowners already have volunteered to assist in this strategy.

### **Advisory Committee Review**

There was consensus from the advisory committee that the County should consider this strategy.

## **Strategy 2 d) Public Education**

### ***Strategy Type: District-wide***

Forestry often can be a noisy and visually unappealing activity. A manicured, new subdivision can appear more benign than a recent timber cut, when, in fact, the reverse more often is the case. The public consequently is unsympathetic to the practice of forestry in our rural areas.

Moreover, forest lands often appear to be un-owned, inviting trespass, vandalism, and other interference that is very expensive for the landowner to address. (See Strategy 3 below.)

A public education program including public service announcements (PSAs) and targeted media outreach to rural residents can help moderate this problem and improve the public's understanding and respect for rural forestry.

### **Next Steps**

One of the County's media liaison staff could be appointed responsibility for this project and should meet with landowners and responsive media to craft an appropriate outreach strategy.

### **Cost**

Out-of-pocket cost should be minimal if an effective program can be developed relying on PSAs and placement of feature articles. The principal cost would be staff time devoted to the project.

### **Advisory Committee Review**

There was consensus from the advisory committee that the County should consider this strategy.

### **Strategy 3: Encourage public respect for forest lands** *Strategy Type: District-wide*

Public confusion about private ownership of forest land increasingly presents management problems for rural forest landowners. The resulting problems threaten the health and safety of the entire King County community. Yet landowners feel they have been left alone to address timber and specialty product thefts, trespass, vandalism, and dumping, not to mention the illegal and often careless use of firearms. Landowners report that the County fails to respond to or prosecute reported infractions.

The County needs to increase patrols in the rural area, make the apprehension and prosecution of offenders a priority, and raise the fines for illegal dumping. This might include the provision of a "bounty" as an incentive for watchful rural neighbors to aid in the identification of offenders. Issues related to trespass and timber and specialty product theft could further be addressed under the Right-to-Forest Law (see the summaries for Arkansas and Colorado included in Appendix K.)

### **Next Steps**

- Strengthen working relationships between county resource agencies and law enforcement agencies such as the Sheriff's Office and the Prosecuting Attorney's Office to raise awareness of the growing number of incidents in the rural area.
- Enlist participation of rural residents through "neighborhood watch" programs.

### **Cost**

King County will incur additional expense through the provision of patrol services, acquisition of appropriate vehicles, and prosecution of offenders. With better agency coordination and the cooperation of rural residents, the County may be able to raise the level of service without a proportional increase in costs.

### **Advisory Committee Review**

There was consensus from the advisory committee that the County should consider this strategy.

## **II. Obstacle: Uncertainty about the breadth and scope of future regulations encourages timber harvests and conversions which otherwise might not occur**

### **Strategies**

#### **Strategy 4: Guarantee regulatory certainty for lands on which there is a Forestry Commitment Agreement**

##### ***Strategy Type: Targeted***

Many rural forest landowners prematurely harvest to avoid potential future federal, state, and county regulations, including restrictions from the Endangered Species Act. For instance, if Puget Sound coho salmon stocks are listed, it could affect rural forest landowners. Such premature harvests frequently lead to conversion out of long-term forestry. This obstacle can be overcome with a Forest Commitment Agreement that is attractive to rural forest landowners.

### **Next Steps**

See discussion in Strategy 1 above on the development of the Forestry Commitment Agreement.

### **Cost**

See discussion above.

### **Advisory Committee Review**

There was consensus from the advisory committee that the County should consider this strategy. The committee also strongly voiced the opinion that it would be critical to secure the involvement of state, tribal, and federal governments in the design and drafting of the agreement. In order to be meaningful, the agreement required the concurrence of these parties, not just the County and the landowner. In addition the committee emphasized that the agreement should be offered in conjunction with the overall incentives program. There was no consensus on the duration of a proposed Forestry Commitment Agreement. The Committee considered periods ranging in length from 5 to 80 years.

### **III. Obstacle: Existing regulations prevent landowners from efficiently engaging in forest practices**

#### **Strategies**

##### **Strategy 5: Modify existing regulation to ease the burden of forestry without compromising environmental or public health safeguards**

###### ***Strategy Type: Targeted and District-wide***

Some stakeholders believe that regulations are redundant and inconsistent, particularly for shorelines where King County regulations supersede State DNR regulations. Three major regulatory issues were identified during this project.

First, some landowners indicated that it is inconsistent to have a forest practice permit approved by the state for properties that include shorelines, but have King County invoke more stringent regulations over the same shorelines. Specific to shorelines, King County's wildlife protection regulations are generally more substantive than comparable State DNR regulations. Therefore, when King County invokes its shoreline jurisdiction as provided for in the Shoreline Management Act (SMA), wildlife protection regulations are more stringent. King County, however, has granted and indicated it will continue to grant shoreline permit relief, in the forest production district at a minimum, to those landowners who address wildlife issues through an acceptable landscape planning process such as Watershed Analysis provided for in the Washington Forest Practices Act, or any other planning process that provides appropriate protection for shoreline wildlife. Assuming that a Forest Commitment Agreement provides appropriate protection for shoreline wildlife, King County also should consider granting this permit relief on lands on which one has been signed.

Second, implementation and application of regulations can be inconsistent due to inadequate training or coordination within and between agencies, as discussed elsewhere in this report. This can result in inconsistencies in implementation and application, rather than inconsistencies in the law.

Third, any lands platted after 1960 are presumed likely to convert. For this reason, owners are required to file a Class IV(G) forest practices permit request for any activity covered by the Forest Practices Act. Class IV(G) permits are more complex, time consuming, and expensive than Class II or III permits. Any property which is logged under a Class II or III permit has placed on it a six-year moratorium before it may be converted. (However, presently this moratorium can be avoided in King County if a site meets the requirements of the County's

Sensitive Areas Ordinance or with the appropriate inspections and restorations when required). Often a landowner required to file a Class IV(G) does not replant, but pursues conversion, a choice the landowner otherwise would not have made if given the option to file a different class of permit.

There should be an exemption provided where the landowner is prepared to commit to reforest a property and stay in forestry for at least six years. King County should request the newly formed statewide Land Use Committee (LUC) to address this issue and prepare a recommendation for the 1996 legislative session.

## Next Steps

Draft the letter requesting the state LUC to correct the "post 1960" issue. Continue to update the information on the Growth Management Hotline to provide the most current information on the permitting requirements for timber harvest.

## Cost

- The costs of the first two recommendations are subsumed in recommendations already discussed.
- The cost of correcting the "post 1960" issue will be the staff time to draft the motion to request action by the state LUC.

## Advisory Committee Review

A majority of the the advisory committee recommended that the County consider this strategy. Several members felt that while there may be inconsistencies in how the State DNR and King County classify and protect water courses, that the SMA should always be enforced independently.

## **Strategy 6: Establish a Friend of the Forest Program**

### *Strategy Type: Targeted and District-wide*

The number of burdensome or misdirected regulations are not great when the problem is objectively examined. However, the existing regulations are technically complex and require involvement with several jurisdictions. In order to operate efficiently in this regulatory environment, a forest landowner must have a sophisticated understanding of governmental systems. Many landowners of smaller properties, however, are part-time farm foresters without the time or resources to become knowledgeable of the regulatory and permitting requirements, or the available governmental assistance.

A forest advocate program could provide invaluable assistance to these smaller farm foresters. This service ultimately could be focused on the requirements of those landowners who sign a Forestry Commitment Agreement, though in the initial years it could be provided district-wide. This Friend of the Forest program would:

- Assist landowners to complete permit processes at the local, state and federal levels.
- Assist landowners in obtaining the maximum benefits from available preferential tax programs.
- Replicate the State DNR Stewardship Program in the rural areas of our County where it no longer is provided.
- Provide landowners with information about grants and governmental assistance available to them.
- Provide information on available professional foresters and loggers and encourage non-industrial forest landowners to obtain professional forestry assistance.
- Provide lead support for the elements of the Right to Forest Program discussed above.
- Provide information on available technical assistance, such as from the Washington State University Cooperative Extension Service.
- Provide available data and GIS information targeted to landowners interested and in need of such assistance.

### Next Steps

This program could be implemented in a manner similar to the Farmbudsman program (See Chapter 5, Strategy 15).

### Cost

Costs will be similar to the Farmbudsman program.

### Advisory Committee Review

There was consensus from the advisory committee that the County should consider this strategy. The committee cautions that it must be an effective, on-the-ground program. One suggestion for avoiding bureaucracy was to hire consultants to perform the role with yearly performance standards, such as number of landowners assisted or enrolled in a Forestry Commitment Agreement. Another suggestion was the creation of a service similar to the King County Tax Advisory Office.

## **Strategy 7: Establish a Rural Forest Commission**

### *Strategy Type: District-wide*

This standing commission would be responsible to ensure that King County rules and regulations support forestry in the rural area. It could be modeled after

the Agricultural Commission. The Rural Forest Commission would have the following responsibilities:

- Review staff development of the strategies described herein, prior to County Council consideration.
- Review the Forestry Commitment Agreement, as it is developed in the State DNR Pilot Project.
- Review and refine the Rural Forest District boundaries, as appropriate.
- Review potential acquisitions of development rights on rural forest lands.
- Review and provide advice to the County on the implementation and operation of these strategies.
- Advise the County on:
  - Existing and proposed legislation and regulations affecting rural forestry and rural forests,
  - Land use issues as they impact rural forestry and forests, and
  - Ways to maintain, enhance and promote forestry and forest products in the region.

The term of the commission initially could be limited to the implementation and the first three years of these strategies' operation. In addition to the many critical responsibilities listed above, the Rural Forest Commission would provide a forum to establish common ground between the great number of stakeholders on the issues which will continue to confront rural forest operations. The County has established a tradition dating back to the 1970s of bringing parties together on farm issues. This County role has greatly improved the prospect for agriculture in the region. This role could be replicated for local forest issues, with commensurate benefits.

### **Next Steps**

- Draft the necessary authorizing legislation.
- Appoint the membership of the Rural Forest Commission.

### **Cost**

The principal cost for the commission would be to provide it the necessary staff support to be effective. This staff support likely could be supplied by the Friend of the Forest Program.

## Advisory Committee Review

There was consensus from the advisory committee that the County should consider this strategy.

## **IV. Obstacle: The burden of estate and other taxes can make forestry unprofitable**

### Strategies

#### **Strategy 8: Provide information on methods to reduce the estate tax and support pending legislation to modify the federal estate tax**

##### *Strategy Type: District-wide*

The transfer of forest land to heirs often can result in a significant tax liability because the Internal Revenue Service (IRS) considers standing timber the highest and best use of the land in the evaluation of an estate. This liability can force suboptimal cutting of timber and even the conversion of property that otherwise would remain in forest. Fortunately, several opportunities currently exist to minimize the impact of inheritance tax on the intergenerational transfer of rural forest land. These include:

- Application of a conservation easement to forest land, defining the future uses and rate of harvest. (Care should be taken that this alternative be used only by forest landowners willing to permanently restrict the future use of their property.)
- Creation of a dynasty trust or other appropriate trust mechanism (see Appendix L).
- Provide ownership interest in forest lands to potential heirs in the form of annual gifts.

Two other prospective alternatives also should be pursued. First, legislation pending in Congress would modify the estate tax treatment of the intergenerational transfer of family businesses. It likely warrants the support of our local federal representatives. Care should be taken to ensure that the language does not disqualify farm forestry businesses. Second, there is the

potential for the Forestry Commitment Agreement to reduce the impact of estate taxes on rural forest lands in the program.

### **Next Steps**

- The existing alternatives should be incorporated into a readable brochure that could be distributed in the Friend of the Forest Program.
- The pending federal legislation should be reviewed by the County and, if appropriate, the County Council could pass a resolution requesting the area's federal representatives to support the relevant provisions of the bill.
- The Forestry Commitment Agreement should be drafted in a manner that maximizes its potential effect on estate taxes. After it is drafted, a letter ruling should be requested from the IRS to determine the actual effect of the agreement on estate taxes.

### **Cost**

- The cost of the brochure will be in the range of several thousand dollars.
- The cost to support federal legislation will be the staff time to analyze the bill and draft the motion.
- The cost of drafting the Forestry Commitment Agreement is included in Strategy 1.

### **Advisory Committee Review**

There was consensus from the advisory committee that the County should consider this strategy.

## **Strategy 9: Maximize the benefits of the Current Use Taxation (CUT) program**

This strategy consists of three elements: (1) reducing the tax on property on which a Forestry Commitment Agreement has been signed, (2) extending outreach, and (3) equalizing the benefits of the open space and forest tax programs.

### **Strategy 9 a) Reduce the tax levied on properties on which Forestry Commitment Agreements have been signed** *Strategy Type: Targeted*

There are two preferential taxation programs available to forest landowners: the timber tax for landowners with more than 20 acres in forestry, and the forestry open space tax for landowners with less than 20 acres. Each program has different minimum terms and methods of assessing back taxes for withdrawal or

for penalties if withdrawal is prior to the minimum term. Both offer significant tax savings, with the average per-acre-cost somewhere in the range of \$2.00 to \$2.50 per year.

A further reduction in property taxes, even though modest, will be an inducement to enter into the long term Forestry Commitment Agreement. Such a timber tax reduction likely would need to be local option in order to avoid an issue with timber dependent counties. The program also could modestly increase the taxes on lands that are not in either program that are located in those rural junior taxing districts with a substantial amount of land in forest or timber tax.

### **Next Steps**

- For those junior taxing districts with a preponderance of land enrolled in CUT programs, the following first needs to be considered. It is important to confirm that lands not enrolled in either program will be only moderately affected from a further reduction of the timber and forest tax for properties entering into a Forestry Commitment Agreement.
- If appropriate, request the legislature to modify these programs to allow further reduction in the tax rate.

### **Cost**

The cost to the County initially would be the staff time necessary to evaluate the financial impact of this provision. If the County pursued the reduction, it should not realize a revenue drop from the lost taxes since the revenues are effectively shifted to properties that develop.

### **Advisory Committee Review**

There was consensus from the advisory committee that the County should consider this strategy.

## **Strategy 9 b) Extend outreach for the Current Use Forest Tax**

### ***Strategy Type: District-wide***

The forest and timber tax programs are well-received, with a substantial participation rate among the county's major rural landowners. The participation rate drops significantly among owners of smaller acreages, particularly those with less than 20 acres. While a percentage of these landowners likely do not wish to restrict future options for their lands, a large percentage could be expected to take advantage of the program with an appropriate introduction.

Both the Office of Open Space and the Assessors' Office currently publicize the programs. This outreach could be supplemented by the Friend of the Forest Program. The Friend of the Forest Program will develop an on-the-ground relationship with our rural forest landowners that will help to spread the word on these programs.

In addition, the County could consider requesting legislative modification of these programs to allow the tax rate to be even further reduced for those properties that sign a Forestry Commitment Agreement. Additionally, the County should design an appealing mail program targeted directly to the owners of smaller properties in rural forest districts.

### **Next Steps**

- The County should design an appealing direct mail program to notify small forest landowners of the CUT forest tax program.
- It should also explore the potential of partnering with nonprofit groups to help to expand the outreach on the CUT programs.

### **Cost**

The cost of this project would include:

- staff time to administer the program,
- drafting and design cost of the direct mail, and
- printing and postage which could amount to about \$0.25 per individual mailed.

### **Advisory Committee Review**

There was consensus from the advisory committee that the County should consider this strategy.

## **Strategy 9 c) Make potential benefits to CUT open space lands equal to that of the CUT forest tax program**

### ***Strategy Type: District-wide***

Land designated as forest land typically can receive a greater tax reduction than CUT open space lands. This discrepancy rewards landowners who have entered the CUT forest land program over the CUT open space program. On occasion, however, the public's interest may be better served by lands entering the CUT open space program. The tax structure should not encourage participation in the forest land program over the open space program for properties which would qualify for either.

### **Next step**

The County should review the public benefit rating system (PBRs) system and adjust it as necessary so that it provides an equivalent tax reduction for a parcel which also could qualify for the CUT forest program.

### **Cost**

The cost of this recommendation would be the staff time to address the discrepancy between the two programs.

## Advisory Committee Review

This recommendation for an administrative adjustment of the CUT program was not considered by the advisory committee.

## **Strategy 10: Offset or exempt the local share of the timber excise tax**

### *Strategy Type: Targeted*

King County levies a state-authorized 4 percent excise tax on the stumpage value of private timber at the time it is harvested in lieu of receiving property tax receipts on growing timber. (The total estate tax, including both the state and local share is 5 percent.) The excise tax can be a significant expense for lands in forestry. For instance, after a small landowner subtracts all allowable deductions, good site land with 80-year-old trees currently could result in an excise tax fee in the range of \$950 per acre. A reduction or offset of the excise tax would be a material incentive in exchange for entering into a Forestry Commitment Agreement.

The local excise tax revenue is allocated to all taxing districts within the county according to a complicated formula. The share of the revenue directly received by King County government is allocated to a variety of funds in the county, with the current expense fund receiving about one-third of the revenues yearly. The revenue received by the County from the excise tax historically ranges from about \$300,000 to \$500,000.

## Next Steps

- The County should explore the fiscal impact of either:
- off-setting this tax for the forest landowner with a Forestry Commitment Agreement; or,
- requesting a legislative exemption for those properties with Forestry Commitment Agreements.
- The County should pursue the necessary legislative amendments to state law to allow this offset or reduction in the excise tax. This provision likely would need to be a local option in order to avoid an issue with timber dependent counties.

## Cost

A first-order estimate of the cost to the County of this program is \$40,000 to \$65,000. (This estimate was arrived at as follows: Since 25 percent of timber production in the county is from the Rural Forest area, it is assumed that this area produces a corresponding amount of the excise tax revenues. For this calculation, it also was assumed that, ultimately, 50 percent of eligible lands would enroll in a Forestry Commitment Agreement.)

## Advisory Committee Review

There was consensus from the advisory committee that the County should consider this strategy.

## **V. Obstacle: Lack of education and technical assistance to help farm foresters with problems unique to the rural area reduce profitability of forestry**

### Strategies

#### **Strategy 11: Conduct and compile research beneficial to local farm foresters**

##### *Strategy Type: District-wide*

Access to "state-of-the-art" university and commercial research on management and harvesting techniques for smaller timber operations is essential if the non-industrial forest landowner is to operate with maximum efficiency and remain competitive.

Grants for research of specific interest to farm foresters should be made to the County Cooperative Extension Service or local universities with the results being shared in the local forestry community. A review of available research results should be completed, with a resource pamphlet printed and distributed.

### Next Steps

- Request the University of Washington's Forestry Department to supervise, in cooperation with the Friend of the Forest Program and the State DNR, a graduate internship to compile current research in a readable summary database.
- This database should be updated annually, with a focus on research results that will enhance on-the-ground operations in the county's rural area. It should be distributed as a simple copied-and-stapled publication.
- If necessary, an additional internship position should be established to synthesize the most useful technical information into readable how-to

summaries. This information should be prepared in cooperation with other information services to prevent duplication of work.

- The Friend of the Forest Program should maintain a complete compendium of available publications and ordering sources.
- The Friend of the Forest Program should work closely with researchers and other information providers to identify areas where additional research or information could enhance the productivity and economic viability of the county's rural forest lands.

## Cost

- The County should allocate \$6,000 per year to the graduate internship program.
- Using simple word processing and copying techniques, a production and supply budget of no more than \$800 should be sufficient.
- If it is appropriate for the Friend of the Forest Program to distribute this information, postal costs should fall within that program's general budget.
- The County should allocate a minimum of \$20,000 in grant funding per year to support technical research to enhance the productivity of smaller farm forests in the Rural Forest Districts.

## Advisory Committee Review

There was consensus from the advisory committee that the County should consider this strategy.

## **Strategy 12: Provide technical training programs**

### *Strategy Type: Targeted*

For landowners who enroll in the Forestry Commitment Agreement, free or modestly priced technical training can be offered which serves to:

- Increase awareness of investment opportunities among owners not currently managing their land to its optimum capacity. This includes promoting diversification of management operations through the cultivation, harvest, and marketing of specialty forest products. This is a means to educate landowners on opportunities to participate in value-added manufacturing programs, and available assistance programs.
- Provide information of the various appropriate practices and tools.
- Respond directly to specific landowner needs. Six areas have been identified in studies as the most commonly experienced and least addressed problems

for farm foresters. These are: insects, severe weather damage, fire, disease, animal damage, and timber trespass.

Programs should be designed specifically to meet the following forest landowner market segments:

<p><b>Land Type</b></p> <ul style="list-style-type: none"> <li>• Recently Cut Woodlots</li> <li>• Sensitive Sites</li> <li>• Mixed Aged Stands</li> <li>• Mature Stands</li> </ul>	<p><b>Educational Need</b></p> <p>Reforestation decisions: species selection, site preparation, planting</p> <p>Protection, erosion control, nonconsumptive development</p> <p>Pre-commercial thinning, silviculture, alternative markets</p> <p>Timber marketing, harvesting protection</p>
<p><b>Ownership Type</b></p> <ul style="list-style-type: none"> <li>• Retired Status</li> <li>• Absentee Owners</li> <li>• High Income</li> </ul>	<p><b>Educational Need</b></p> <p>How-to information to utilize availability of timber</p> <p>Contracting forestry services</p> <p>Timber/estate tax management</p>

## Next Steps

The County, in conjunction with professional consulting foresters, other resource agencies and associations, should consider a pilot program modeled on similar programs in Montana and Oregon. These programs offer classroom and field instruction. Tailored to the individual, the programs result in owner-developed forest management plans.

## Cost

This will be an expensive program. There will be costs for instructor time, teaching materials, and facility expenses. It may be possible to cover some of these costs with in-kind contributions and a modest course fee. This program likely should be implemented through the Friend of the Forest Program.

## Advisory Committee Review

There was consensus from the advisory committee that the County should consider this strategy.

## **VI. Obstacle: Cash flow or emergency needs can interfere with or even preclude a landowner from practicing long rotations**

### **Strategies**

#### **Strategy 13: Establish a Rural Forest Resource and Reclamation Fund**

##### *Strategy Type: Targeted*

Landowners currently can borrow against the value of their mature timber through banks and other commercial lenders. However, high interest rates and short loan terms discourage landowners from undertaking loans or encourage them to cut trees prematurely, to repay the loan. Banks also are leery of lending against the value of immature timber. These conditions encourage conversion, premature harvests and act against the growth of older-age trees.

The Stewardship Incentives Program (SIP) and Forestry Incentives Program (FIP) are federal programs, administered at the state level. They were established to address these issues. Unfortunately, both programs have suffered severe cut-backs and future funding is uncertain. In addition, the programs are based on several assumptions which are not applicable in Washington State. These assumptions are that forestry is most effective when: (1) practiced in short rotations (which favors the direction of funding to southern states), (2) forests are managed in a nonregulatory environment, (3) forest lands are of low value, and (4) landowners have few other economic options for their land.

The County should supplement the commercial and federal loans now available, in order to support the practice of forestry in the rural areas of King County. This could be accomplished through the establishment of a revolving loan fund, similar to Oregon's statewide Forest Resource Trust program. The loan program could be a material incentive made available to rural forest district landowners who have entered into a Forestry Commitment Agreement. Among other benefits, the program would provide the County a means to support reforestation and promote the use of professional forestry consultants without resorting to subsidies. The program would have two components: reclamation of underproductive lands; and emergency needs, forest enhancement, and equipment acquisitions.

### **Strategy 13 a) Reclamation of Underproductive Lands**

This program would be available for underproductive lands within the Rural Forest Districts, which are committed to long-term forestry and are free from "no tree-cutting encumbrances" and reforestation requirements. Any individual, group, association, or corporate landowner not regularly engaged in manufacturing forest products would be eligible. Public lands would not be eligible.

The program could provide up to \$100,000 every two years per landowner, not to exceed 75 percent of the sum of the fair market value of the land, trees and timber, plus the amount of the funds awarded by the County loan program. The funds would be secured by a first mortgage and could pay up to 100 percent of:

- Project plan development and implementation by consultants,
- Tree planting including site preparation, moisture conservation, and tree protection, and
- Release of trees from vegetative competition.

In exchange, the landowner would be obliged to establish a free-to-grow forest stand and pay the Fund a specified percent of profits at harvest-time.

### **Strategy 13 b) Emergency Needs, Forest Enhancement and Equipment Acquisitions**

This program also could increase liquidity and support longer rotations. Landowners would be allowed to apply for loans to meet nonforestry-related emergency needs, as well as for reforestation, enhancement of current timber stands, or acquisition of equipment. The program would give priority to landowners who demonstrate emergency need or the lack of significant capital gains from their timber business. A conservative loan-to-value ratio could be established (e.g. 60 percent to 70 percent of the timber value). The loan funder could take a security interest in the timber collateral. The landowner could repay at any time, with or without harvest.

### **Next Steps**

The Rural Forest Commission should review Oregon's Forest Resource Trust Program. The Commission should determine whether this is best administered by a governmental or nonprofit agency, and make a recommendation to the County Council accordingly.

### **Cost**

- The program will have administrative costs to establish. Modeling the program after existing programs should alleviate some time and expense.
- Capitalizing the program would be expensive and would require support.

## Advisory Committee Review

There was consensus from the advisory committee that the County should consider this strategy. The committee noted that reforestation of overgrown lands is extremely expensive; so providing financial support to clean up these lands potentially could be a powerful incentive.

## **VII. Obstacle: Many rural forest lands are not in optimal management units, which increases the cost and difficulty of practicing forestry**

## Strategies

### Strategy 14: Access and Boundary Adjustment Support

#### *Strategy Type: Targeted and District-wide*

Manageable units depend on location, size, topography, forest crop, surrounding land uses, and other relevant factors. Problems for management are various and largely site-dependent. Two general issues identified by stakeholders are addressed below.

#### Strategy 14 a) Access Support

Obtaining access across private or public land in order to harvest timber can be a major issue. The cost of creating the access, the potential liability and resistance from easement granting property owners, such as homeowner associations hoping to prevent the harvest of timber, frequently are burdensome enough to prompt conversion. The Friend of the Forest Program (see Strategy 6 above) should include personnel prepared to assist landowners with Forestry Commitment Agreements in the resolution of access disputes.

#### Strategy 14 b) Boundary Adjustment

Facilitate lot line adjustments, land trades, exchanges or sales with adjacent landowners. Stakeholders report that King County currently limits the available alternatives to address difficulties related to access, harvest, and management. For instance, land trades reportedly are not possible unless the trade involves whole tax lots. County limitations occasionally force landowners into inefficient, ecologically damaging, and unnecessarily complex harvest plans.

County policies should support the consolidation of forest land into better management units. Landowners need the option to adjust property lines away from nearby residences or to follow the centerline of streams, ridge tops, and other natural topographic or geologic features.

### **Next Steps**

The necessary training to resolve access issues between landowners should be provided to the proposed Friend of the Forest Program. Staff time will be required for re-drafting regulations to simplify boundary adjustments.

### **Cost**

- Access issues and dispute resolution are part of the Friend of the Forest Program.
- Additional staff time will need to be dedicated to re-drafting regulations pertinent to boundary adjustments.

### **Advisory Committee Review**

There was consensus from the advisory committee that the County should consider this strategy.

## **Strategies To Preserve the Forest Land Base in King County's Rural Area**

Even with a strong program to encourage the business of forestry, some of our rural forest lands will be threatened with conversion to other uses. Below are incentives that will compliment those discussed above and will help to preserve this vital resource base. These incentives initially should be provided district-wide. The Rural Forest Commission in consultation with the Friend of the Forest Program should later determine if any incentives warrant targeting.

These incentives build on the direction provided by King County Comprehensive Plan Policy R-108. This policy states that "all incentive programs created by the county and related to zoning will be available to benefit landowners in the districts based on the zoning of their properties as of the effective date of this Plan." Accordingly, these programs are designed to provide landowners with economic benefits equal to or moderately superior to what they could realize under existing zoning.

## **VIII. Obstacle: Smaller return from forestry compared to conversion**

The significantly smaller return from forestry compared to conversion for residential use in the rural area creates a major economic disincentive for long-term forestry. This economic disparity creates a pressure to convert.

### **Strategies**

#### **Strategy 15: Create a Forest Conservation Incentive Program that will allow a landowner to realize a property's residential value without converting**

The value of rural land for residential use in King County is in the range of \$5,000 to \$10,000 per acre, and upwards, depending on a property's amenities and location. Property sold strictly for forestry purposes is valued in the range of \$1,000 to \$2,000 per acre, depending on productivity and location. Of course, all properties are unique and for every generalization there are scores of exceptions. But, clearly there is an order of magnitude in the difference between property values for residential development and for forestry management. The conversion of King County's rural forest lands often is a result of this difference in value.

The following program potentially may save many thousand acres of King County's rural forest lands. The program relies on clustering and density transfers which have significant advantages for the preservation of large areas of land-banked open space and working forest. The program will be available to rural forest landowners who otherwise would convert their property and develop traditional subdivisions. It is designed to enable them to realize their conversion value while, at the same time, permanently preserving most of their forest land. In the past, preservation efforts were often designed in a way that conflicted with market trends. This program, however, would use market-responsive incentives to ensure that forest land is preserved.

The program would have four major components: (1) a Clustered Homestead Program; (2) a Transferable Development Right Program, (3) an integrated approach; and (4) annual monitoring.

#### **Strategy 15 a) Clustered Homestead Program**

A landowner seeking to convert a property would be encouraged by this program element to develop clustered homesteads and reserve a substantial area of the site for working forest and open space. After clustering, the working forest land should be allowed to remain in single ownership under a conservation easement or other property restriction. The conservation easement would allow for the

continued use of the property for forestry at an appropriate intensity. The easement could be co-owned by both the County and the owners of clustered homesteads. Co-ownership could help to secure the permanence of the land set aside for working forest. Either the County or the owners of the clustered homesteads could enforce the rights of the easement and neither could extinguish the rights without the concurrence of the other.

If clustering programs are not designed correctly, these programs also bring with them the risk of changing the character of nearby established communities and interfering with the resource use itself. For instance, Clark County experimented with and has abandoned a clustering program that allowed a sizable density bonus (in the range of 300 percent) in its forest production district and agricultural production district. The Clark County program provides valuable lessons:

- Such a program with a rural level of densities does not make sense in resource zones. Accordingly, this recommendation is limited to forest lands in the rural area.
- A program to preserve the land base requires the companion incentives for encouraging forestry in the rural area to be energetically pursued. For instance, the Right-to-Forest Program should be established at the outset of this clustering program.
- Site and design issues are critical. The homesteads need to be configured away from the resource operation.
- Density bonuses, if they are applied, should depend on the characteristics of the site and awarded only to the extent necessary to encourage clustering over a traditional subdivision. (Bonuses are a controversial measure and will be further addressed below.)
- The program should require an easement on the property reserved so that it can never be used for anything more intensive than an appropriate level of forestry.

### **Next Steps**

A program should be prepared for Council consideration by the spring of 1996. The program should be designed to follow certain principles for design and implementation in order to maximize its advantages and minimize its risks. These principles are as follows:

1. Respect the rural character of the rural forest districts by:
  - Encouraging clustered development to reflect the rural character of the Rural Forest District.

- Ensuring that the scale of the developed area is in keeping with the rural area.

(NOTE: Both of the above are a focus of the Quality Rural Environment project.)

- Setting the average clustered lot size to a range of one-half to one acre, excluding the land conserved for open space or working forestry.

2. Ease regulatory and infrastructure requirements for clustered homesteads.

As the program is developed, the County should obtain the advice and comment of landowners, developers, tribes, and existing rural residents on the infrastructure and other permitting conditions currently required for clustering that can be modified in order to encourage development of clustered homesteads. This review should avoid the proposal regulatory changes which threaten the environmental integrity of our rural areas. Issues for consideration include: the eight-lot clustered-grouping limitation, cluster application surcharges, additional water and sewage infrastructure requirements, surface water drainage, and fire flow requirements.

3. Create an appropriate economic incentive for clustered homesteads.

After the rural character, the infrastructure, and the regulatory reform requirements for clustering have been thoroughly evaluated, the County should obtain a comprehensive economic comparison of clustered development and traditional subdivisions at the underlying zoning.

Several initial studies were undertaken of the need for density credits to encourage clustering. Not surprisingly at this stage, the reports were mixed. The most detailed, however, suggest that a modest density bonus would be necessary to secure the desired clustering (see Appendix M). The bonus density should be awarded only to ensure that a property could realize a modest increase in return for clustering, say 10 to 15 percent, over a traditional subdivision. This is a critical element of the program. By basing any necessary bonus directly on the expected financial returns of a traditional subdivision, the program would not encourage conversion. But rather, the program should tip the balance towards clustering when a landowner otherwise would choose to convert to a traditional subdivisions.

The economic analysis should consider the development and regulatory costs for a traditional subdivision and a clustered development as well as the expected market response to the smaller clustered homesteads. The ongoing value of the set-aside area for timber in a clustered development also should be included in the analysis at the expected return, based on an appropriate timber management regime. If the analysis demonstrates that there is not sufficient economic incentive for clustering after a streamlining of regulatory and infrastructure requirements, the program should develop a method to award sufficient additional density so that there is a sufficient economic incentive to cluster. In no event, however, should the incentive allow an average density increase for the clustered homesteads and conserved properties greater than an

appropriate rural density maximum, such as one home per 2<sup>1</sup>/<sub>2</sub> acres or even some lesser average density. (Appendix N contains a sample clustering program based on an economic analysis).

The economic analysis of clustering versus traditional subdivision on a property provides the underpinning for this program. The utmost care should be taken to ensure its independence. For instance on environmentally constrained properties, such as steep slopes, the economic analysis of a property should recognize where clustering would allow a landowner to realize residential development under existing density limitations that would not be possible with a traditional subdivision (such as discussed in Appendix N.) In such a case, bonus density would not be warranted and should not be awarded. This scenario underscores how critical it is to ensure the economic analysis is independent and accurate in order that the landowner, neighbors, and other stakeholders accept its results.

### **Strategy 15 b) Transferable Development Right Program**

The Transferable Development Right (TDR) program element should be developed and used in conjunction with the Clustered Homestead program element. The TDR will be an important option that a landowner could select, in order to retain property as rural forest instead of converting it to a traditional subdivision. This type of program brings advantages and disadvantages similar to a clustering program. Its major difference is that all development is shifted off-site. After transferring the density from the property to be conserved, this working forest land should be allowed to remain in single ownership under a conservation easement or other property restriction. The conservation easement would allow for the continued use of the property for forestry at an appropriate intensity. The easement could be co-owned by both the County and the owners of the transferred homesteads.

TDR programs fail where there is insufficient economic incentive to transfer the rights and where the receiving sites are in or surrounded by established neighborhoods that reject the added density. Both of these issues can be addressed in a TDR program designed for select rural forest district lands.

### **Next Steps**

A program should be prepared for County Council consideration by the spring of 1996. The program should be designed to:

- Ensure that the receiving sites are economically attractive for added density and can environmentally support residential development.
- There is great likelihood that a TDR program must allow appropriate density transfers in the rural area to ensure that there is an economic reason to move them. The County Comprehensive Plan currently allows the transfer of development rights from rural lands to urban lands. This shift is preferred if a program could be designed that would work. There appears to be little economic incentive currently, however, for a landowner to shift density to the urban zone because of the dense zoning already established within it.

Consequently, two potential rural receiving sites especially warrant inspection:

- 4-to-1 Program lands. (Lands greater than 20 acres abutting the UGA and line which owners opt to enter into the program.) This receiving site option possibly should be targeted to those rural forest properties with critical habitat or other exceptional characteristics that merit preservation as open space, rather than working landscape. (See Appendix O for an analysis of this potential.)
- Rural properties abutting the UGA line which are not eligible for or do not pursue entry into the 4-to-1 program.
- Respect the rural character of the Rural Forest Districts
- Set the average lot size to a range of one-half to two acres, for any development rights transferred to 4-to-1 lands.
- The trade of open space between a 4-to-1 project to the Rural Forest Districts should be limited to no more than one of the units of open space.
- Set the average lot size to a range of one-half to two acres, for any development rights transferred to lands abutting the UGA Line which are not within the 4-to-1 Program.
- Create an appropriate economic incentive for transferring development rights

After the rural character requirements have been thoroughly evaluated, the County should obtain a comprehensive economic comparison of TDR-based development and traditional subdivisions at the underlying zoning. The economic analysis should consider development costs, including regulatory expenses, along with the expected market response to the resulting, smaller lots. The ongoing value of the set-aside area for timber production also should be included in the analysis, at the expected return, based on an appropriate timber management regime.

If the analysis demonstrates that there is not an appropriate economic incentive for transferring development credits, the program should develop a method to award sufficient additional density so that there is a sufficient economic incentive to undertake such transfers. In no event, however, should the incentive allow an average density increase between the "sending" and "receiving" property greater than an appropriate rural density maximum, such as one home per 2 1/2 acres or even some lesser average density. The experience of TDR programs in other jurisdictions is that they sometimes are slow to start. A carefully crafted TDR bank, such as what was ultimately put into place in the Pine Barrens New Jersey program, has been found to expedite the use of TDRs. The County also should consider a program to purchase and "bank" development rights for later use.

### **Strategy 15 c) Develop an Integrated Approach**

The programs for clustered homesteads and transferable development rights should be coordinated so that maximum land is preserved with minimal resulting density in the rural forest districts. One potential scenario is that the following priority for application of these programs would be set:

- The TDR program would first be applied with all density shifted to an appropriate receiving site.
- The clustering homestead program would be the next option to be applied with all bonus density transferred to an appropriate receiving site.
- The lowest priority would be to site the clustered homesteads and bonus density on site.

#### **Next Steps**

- Explore the legal mechanism possible to secure an integrated application of these land conservation options.
- Develop the application priority so that it maximizes the conservation of the rural forest land base with the minimal location of actual density within the districts.

### **Strategy 15 d) Annual Monitoring**

This program has been carefully designed to maximize the amount of acreage that would be permanently conserved for rural forestry. However, because of the extreme public interest in this resource base, nothing should be left to chance. A monitoring program should be developed and presented for County Council consideration concurrent with the above programs by the spring 1996.

The program could be an element of the County's benchmark monitoring to carefully track the results of the above programs on a yearly basis. If the programs are not succeeding, then a re-zone at 1 home per 20 acres should be immediately considered. A standard monitoring baseline should be established, such as the conservation of 75 percent or 80 percent of all parcels 20 acres or larger.

Monitoring of forest management activities and regulations should also occur, to ensure that timber management in the rural area remains economically feasible. If the baseline objective is not met for a pre-established period, such as two concurrent years, then re-zoning in conjunction with appropriate changes in the program should occur.

#### **Next Steps**

Design the monitoring program so that it tracks all parcels automatically from a readily available county information base, such as the Situs files. The monitoring should provide a monthly analyses of the status of the rural forest

properties that were equal to or over 20 acres in size at the time of the designation of the rural forest districts.

### **Cost of the Forest Conservation Incentive Program**

- The initial cost to the County would be the staff time necessary to develop this overall program, estimated to be in the range of \$50,000.
- There could then be costs realized for every clustered development or transfer of development rights.
- The individual economic analysis should range from \$1,000 to \$3,000 and the required legal documentation in the \$1,000 range. According to County staff, we should not expect a great deal of subdivision activity in the Rural Forest District and the cost of the required analysis and legal documentation would be relatively low. In an average year, as many as five formal plats and 15, or so, short plats could be filed.

### **Advisory Committee Review**

There was consensus by the committee that the County should consider the clustering program elements, with the exception of the potential for density credits. There was debate among committee members regarding the potential for density credits in the rural area. While the majority of the committee believed that density credits merited further study and consideration as outlined above, a minority of the committee believed density credits should not be a possibility.

There was consensus from the committee that the County should consider the transfer of development right transfers in the rural area, if it were not possible to create a program with transfer to the urban area which holds market potential. While a majority of the committee accepted the potential for receiving sites along the UGA line depending on environmental and community safeguards, a minority of the committee felt that this approach was too threatening to the rural character of these properties.

The committee did not address three items discussed above: ownership of the Conservation easements, the notion of a TDR bank, and the development of an integrated approach to the clustered homestead and TDR programs. These items were developed with County staff or stakeholders after the committee finished its work.

Necessary amendments to the Comprehensive Plan policies and County-wide policies: After further study and consideration, should the County decide to implement density bonuses or development right transfers, several inconsistent policies will need to be amended in the Comprehensive Plan and County-wide policies. The policies that would need to be amended for the transfer of development rights program include: R-217, I-204 and County-wide Policies LU-8 and LU-14.

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## **Strategy 16: Create a pilot program to identify immediately and to preserve critical rural forest lands and to target a reserve of properties ultimately meriting preservation**

Some rural forest lands merit outright preservation from development and a subset of such lands should not be harvested. The best way to preserve such land is through the acquisition of the requisite property interests, such as development rights or conservation easements. These lands can include:

- **Properties critical to major fish runs** - A County goal in its Waterways 2000 program is to save precious and perilously threatened wild fish runs. Rural forest properties critical to our fisheries should be considered for preservation, those which contain an important stretch of spawning gravel, a critical steep slope, or the headwaters of a stream.
- **Important habitat lands** - Nesting sites, foraging habitat and wildlife corridors are among those sites crucial to our wildlife that should be considered for preservation within this program.
- **Passive recreational opportunities** - The passive recreation provided could be a solitary evening stroll along a stream; a pleasant site to drop a fish line or a place to picnic with the family or take in the view.
- **Critical scenic resources** - Some of the rural forest lands contribute to view corridors or lands which themselves act as important visual focal points.
- **Important buffer properties** - Key properties which serve to buffer the APD or FPD could be acquired to permanently protect these resource areas.

A pilot program should be established to evaluate potential rural forest lands for acquisition. The pilot program should identify up to \$2.5 million of initial acquisitions along with a substantial portfolio of additional target properties to be acquired with the funding sources discussed below. The pilot should be designed to ensure that:

- Acquisitions are identified after a thorough analysis of all available county information.
- Acquisitions are cost effective. (Acquisitions of conservation easements and development rights should be emphasized.)
- Acquisitions are coordinated with other projects in the affected watershed basin or landscape.

- Acquisitions are selected with the input of neighboring communities, tribes, other jurisdictions and stakeholders.
- Acquisitions help to buffer or create optimal timber management units.
- Acquisition should leverage available resources. (Leveraging could include using these funds in conjunction with other available funding such as Waterways 2000. Using this funding to capitalize a TDR bank, see TDR section above, is another potential means of leveraging these limited resources.)

### **Next Steps**

The County should design a pilot acquisition program similar to its successful Waterways 2000 program for the identification and acquisition of properties. The program should include the involvement of the Rural Forest Commission. The pilot project should:

- Refine the above acquisition eligibility list (e.g., see Appendix P).
- Define appropriate acquisition criteria (e.g., see Appendix P).
- Identify target areas with existing county geographic information system (GIS) and other information.
- Use public/community processes to review potential acquisitions. Include affected stakeholders (such as tribes and nearby landowners) in the process (similar to Waterways 2000).
- Prioritize and conduct negotiations (similar to Waterways 2000).
- Consider using funding to capitalize a TDR bank that would purchase the development rights to lands identified in the steps outlined above. These development rights would then be sold to appropriate development sites, as defined in the prior TDR section, and the proceeds could be used to purchase development rights to additional lands

### **Costs and funding sources and other acquisition resources**

Over the years, from the Farmland Preservation program to the recent Waterways 2000 program, the County has developed substantial experience with land acquisition programs. The County should be able quickly to design this program and implement it. The Open Space Section of KCDNR is well-equipped to negotiate and execute the acquisitions identified by the program.

### **Advisory Committee Review**

There was consensus from the advisory committee that the County should consider this strategy. It did not consider the potential for a TDR bank. This

potential was developed with County staff and nonprofit organization stakeholders after the committee finished its work.

### **Strategy 17: Develop the funding sources and programs necessary to preserve the reserve of rural forest properties identified by the preservation pilot program as meriting acquisition**

Once the program is implemented and the additional reserve of rural forest lands which merit preservation is targeted, the following programs can be considered to support the necessary acquisitions: (1) future voter-approved land acquisition, (2) land exchanges, (3) biosolids, and (4) mitigation banking. These programs are described below.

#### **Strategy 17 a) Future Voter-Approved Land Acquisition Funding**

The County has launched a number of successful land acquisition programs funded with voter approved bonds. The list of rural forest lands targeted by the pilot program would be available to provide strong candidates for the next County bond program.

#### **Next Steps**

The County reserve of rural lands which merit protection should be presented at, or developed in conjunction with, the next voter-approved bond measure.

#### **Strategy 17 b) Land Exchanges**

Land exchanges are common within the Forest Production District as a method to consolidate ownership and management of forest parcels. Recently, public agencies have encouraged this practice as a means of improving the stewardship of forest resources within Washington. This method has also been used to preserve forest lands within the Mountains to Sound Greenway.

King County has the potential to engage in land exchanges to preserve rural forest areas by exchanging parcels it already owns within the Forest Production District. These parcels, called County Trust lands, are currently managed for timber harvest by the State DNR, with the County receiving a portion of the revenue.

Land exchanges may prove to be useful as an incentive for private landowners who perceive that it is no longer possible to practice traditional commercial forestry on a parcel or parcels within the rural forest districts. Interviews with some landowners suggest that they are finding it increasingly difficult to harvest timber because of conflicts created by nearby residential development. They point to increased traffic, complaints by neighbors about logging operations, and a higher incidence of vandalism as problems created by development.

Ironically the response of some forest owners to this phenomenon has been to convert their own rural lands to residential development. To slow this trend, the County could offer to trade County Trust parcels within the Forest Production District for forest parcels within the rural area. This would allow the private landowners who exchange parcels to continue timber harvest at sites well buffered from residential development, while helping the County to preserve forest districts within the rural area.

The management of rural parcels acquired by the County through land exchanges would present both a challenge and an opportunity. Working cooperatively, the County and State DNR could institute new management practices on those parcels that are more sensitive to the realities of the rural area. These practices might involve "new forestry" techniques of the kind being tested by public and private foresters within the Cedar River Watershed, the Mountains to Sound Greenway, and elsewhere throughout the state. Under this scenario, the type of forestry practiced in the rural area would be somewhat different than was practiced in the past, but the County could continue to derive revenue from timber harvest, keep rural lands in forestry, and perhaps demonstrate that "new forestry" can coexist with nearby rural communities.

Map A-4 in Appendix A shows the location of the current County Trust lands.

### **Next Steps**

In order to use land exchange as a tool for preserving forest lands in the rural area, the County must:

- Secure Executive and County Council approval of the concept.
- Secure State DNR support of the concept.
- Develop a detailed inventory of the County Trust lands within the Forest Production Zone and estimate the value of each parcel.
- Determine which parcels will be made available for exchange.
- Develop priorities to determine which parcels will be sought.
- Develop an agreement with State DNR regarding management practices to be applied in the rural forest districts.
- Approach landowners and negotiate agreements.
- Complete the exchanges.
- Initiate and monitor new management practices.

### Strategy 17 c) Biosolids

The County Division of Metropolitan Services (Metro) recently developed an ingenious agreement with the State DNR and the Mountains to Sound Greenway Trust that literally converts sewage into protected forest lands. Under the agreement, State DNR will make available forest parcels for King County to apply "biosolids" as fertilizer. (Biosolids are composed of the substance that remains after secondary treatment of wastewater.) In return, Metro will provide the State DNR with additional parcels to be added to its inventory of public lands within the Mountains to Sound Greenway. As added benefits, the agreement cuts the County's cost for transporting biosolids, and provides State lands with a highly potent fertilizer that has the potential to significantly increase yields in the public forest.

The agreement provides for a tri-party committee to designate the parcels to be acquired through this process. Parcels within the Rural Forest Districts that are within the Mountains to Sound Greenway are eligible, so it may be possible to use biosolids funding as a mechanism to preserve some critical parcels.

### Next Steps

- Secure County Executive and County Council approval of recommendations regarding designation of Rural Forest Districts within the Mountains to Sound Greenway landscape.
- Provide a map of the Rural Forest District parcels to each member of the Biosolids Land Selection Committee, together with notes on priorities.
- Follow-up through the County Executive's Office as required.

### Strategy 17 d) Mitigation Banking

"Compensatory mitigation banking" is a generic term applied to a variety of mechanisms that share the common idea of allowing a landowner to "bank" mitigation credits in a manner that provides equal or greater resource value to those lost to development. The concept is attractive when the potential for on-site mitigation is limited or nonexistent. In its purest form, mitigation banking provides a vehicle for property owners or developers to use the same amount of resources (and less time and energy) to achieve a better result for the environment.

The following description of the establishment and use of mitigation banking credits is excerpted from a 1988 report (U.S. Fish and Wildlife Service Report #88(41)):

*A developer undertakes measures to create, restore, or preserve fish and wildlife habitat in advance of an anticipated need for mitigation for projected construction impacts. The benefits attributable to these measures are quantified, and the developer receives mitigation credits from the appropriate regulatory and/or planning agencies. These credits are placed in a*

*mitigation bank account from which withdrawals can be made. When the developer proposes a project involving unavoidable losses of fish and wildlife resources, the losses (debits) are quantified using the same method that was used to determine credits, and a withdrawal equal to the amount is deducted (credited from the bank). This can be repeated as long as mitigation credits remain available in the bank.*

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Entities besides developers could sponsor mitigation banks. Expanding public facilities (schools, treatment plants, roadways, pipelines, etc.) also may impact forest and aquatic resources. In these instances, agencies such as public works and transportation departments may wish to create mitigation banks.

Although it is a relatively new technique, several examples of mitigation banking are already underway in the Puget Sound area:

- The Washington Department of Transportation (DOT) is pursuing a banking program to mitigate ongoing construction projects.
- The firm of Beringer and Ebert is developing a private bank site (the Beringer Berry Farm in the City of Everett).
- The City of Renton has developed a wetlands mitigation bank to provide a means of compensating for the loss of less significant wetland parcels to commercial development.
- The Mill Creek Special Area Management Plan is a comprehensive, interjurisdictional resource management plan based on the concept of mitigation banking. The plan involves the Muckleshoot Indian Tribe, King County, the City of Auburn, and the City of Kent.

Notwithstanding the general appeal of the concept, however, mitigation banking has proven to be difficult to implement. Experience in other states suggests that many mitigation banking strategies have failed to preserve or create resources of equal or greater value than those they were intended to replace. In many instances public agencies have relied on contractual commitments, but those commitments have gone unfulfilled. In other instances, developers have honestly attempted to fulfill their promises, but the resource created has proved to be less valuable than had been predicted.

In spite of these difficulties, the Washington State Department of Ecology views the concept as sufficiently promising to justify a vigorous effort to develop a mitigation banking program for shorelines.

The Farm and Forest consultant team believes King County should investigate the concept of mitigation banking as a potential incentive to preserve rural forest districts which have important habitat for fish and/or wildlife. There are two potential strategies that the County might employ to overcome some of the practical difficulties that have been experienced within other jurisdictions:

prequalifying resource lands and using the County's inventory of open space lands as currency.

Prequalify resource lands: The County could develop an inventory of lands it wishes to see preserved and restored and it would document their resource value. Credits for preserving these lands would become the currency in the mitigation bank. When a landowner or developer comes forward needing to provide mitigation, the County would be ready to identify lands that, if preserved and restored, would fully compensate for the development being contemplated. The landowner could then take action to preserve and restore the resource through a variety of mechanisms:

- Acquiring the parcel and granting a conservation easement;
- Donating the parcel to a land conservancy;
- Purchasing development rights and transferring them to the County or a conservancy; or
- Providing an agreed-upon sum to the County or a conservancy to be dedicated to the restoration and stewardship of the resource.

By "pre-qualifying" lands, the County could assure that the resources provided as mitigation would equal or exceed those that were lost to development, and enable the County to target lands of real significance for preservation. The major shortcoming of this alternative is that the lands identified within the bank will still be privately held and may be sold or developed before they are preserved as mitigation.

Use the County's inventory of open space lands as currency: Another approach would be for the County to identify the resource value of lands that are already within the County's inventory and place "credits" for preserving those lands within the bank. Developers and landowners seeking to satisfy mitigation requirements could then purchase those credits for full value, giving the County new revenue with which to pursue the preservation and restoration of additional resource lands or development rights. This approach has the advantages of the previous concept, but works with County-owned lands as the currency rather than lands the County does not control.

There are, of course, serious difficulties with mitigation banking that would need to be explored carefully prior to implementation of the concept. Of paramount importance is the need to construct the program to ensure that mitigation banking does not become a substitute for appropriate environmental protection measures on-site. Nor should it be used in a way that transfers the benefits associated with mitigation inequitably from one area of the county to another.

Nevertheless, mitigation banking holds sufficient promise to warrant further investigation. It is important to note that public agencies, as well as private developers, are subject to mitigation requirements, and the amounts required for mitigation are often very large. In those cases, a mitigation bank could serve several purposes. It would:

- facilitate the identification of acceptable and appropriate mitigation measures;
- target the resources to ensure the preservation of the most significant resources; and
- save public agencies (and the private sector) time and money in meeting their responsibilities.

To illustrate the potential of this concept, imagine that a major public utility is being forced by environmental regulations to come to terms with the environmental impact of a dam it constructed many years ago. Removal of the dam is not perceived as viable option and the potential for restoring fish runs to their historic levels is limited. In the current environment, the utility would likely struggle for years to identify potentially viable mitigation strategies and secure the approval of the many agencies, tribes, and public constituencies with legitimate interest in the issue. In the course of that struggle, the utility may find itself in an increasingly adversarial relationship with the stakeholders, with all sides expending time and money in the argument. While all of this is taking place, other critical aquatic resources in the county are being steadily eroded by development.

A mitigation bank—if properly organized—could provide a partial solution to this problem. The County would identify resource lands, calculate their resource value, and place preservation “credits” for these lands within the bank. The public utility in this example could then purchase credits to make up the difference between what can be accomplished on-site and what constitutes full mitigation. In our example, the utility could go to the bank for aquatic resources that, if preserved, would compensate for the increment of the dam’s impact that cannot be restored if the dam remains.

As a means of assuring that all (or at least a healthy majority) of the stakeholders would support the County’s actions, a mitigation bank could be structured to include representatives of the major stakeholders on its board of directors. This would have the added benefit of creating a forum for discussing major mitigation issues to replace the haphazard, case-by-case approach that currently exists.

The creation of a mitigation bank will be a complex task, but the good work of many County employees has already created much of the data necessary for this purpose. Although currently fragmented, these data could be assembled by the new County Department of Natural Resources as one of its first steps in a unified organization.

### **Next Steps**

- Secure County Executive and County Council approval of this concept.
- Develop the scope for a detailed study of mitigation banking as it might be used to preserve rural forest areas.

- Identify an oversight committee of County officials and key stakeholders to guide the study.
- Conduct the study (either in-house or by using consultants).
- Submit recommendations to the County Executive and Council.

*Note: For additional information on mitigation banking, see Shoreline Environmental Mitigation Banking Study, in the Bibliography of this report.*

### **Advisory Committee Review**

The programs presented under Strategy 17 are mechanisms to implement the committee approved-acquisition strategy. Other than mitigation banking, the committee did not review the potential funding sources and acquisition programs outlined in this section. There was consensus from the advisory committee that the County should consider mitigation banking.

### **Strategy 18: Create a pilot program to increase the potential rate of return on critical rural forest lands by the acquisition of licenses for special resource and environmental purposes**

Rural forest lands will be less likely to convert where there are additional opportunities to realize value from them while they remain undeveloped. A program to purchase license rights for certain activities compatible with forestry would increase the earning potential of properties with the required features.

Lands should be identified through the pilot program that likely will merit a higher degree of preservation than possible through regulation, but either are not cost-effective acquisitions or which the landowner is unwilling to sell. Progressive County agencies, notably Surface Water Management Division, already are experimenting with the acquisition of licenses to enable the agency to conduct restoration work. A new program could build on this existing knowledge base. It should include an opportunity for owners to propose lands for the program.

The program should be designed as a companion to the acquisition program with purchases of licenses to allow the additional protection, temporary preservation, or active stewardship. Such lands could include:

- **Habitat Management license** - Acquire a term license for landowners with significant habitat which needs to be preserved or stewarded above the regulatory requirements.
- **Aquifer Recharge Areas** - Allow landowners to create and license to the County aquifer recharge areas through a variety of techniques. For example, regional storm water detention systems

or flood control systems could be located on suitable porous soils capable of allowing a high rate of aquifer recharge.

- Stream, wetland, and habitat restoration license - Acquire a license to allow the County to restore critical properties that were degraded prior to the current ownership.

### **Next Steps**

- Secure County Executive and County Council approval for a review of the feasibility of this concept.
- Review feasibility and if the program has sufficient merit, develop the program in conjunction with the acquisition program.
- Solicit properties.
- Negotiate licenses.

### **Cost**

- The program will require staff time to develop and administer.
- License costs will be based on their appraised value. Funding for the licenses can be supplied from the funding sources and programs identified above and the resource land revenue sources.

### **Advisory Committee Review**

There was consensus from the advisory committee that the County should consider this strategy.

## **Strategy 19: Create a link program to assist rural forest landowners to sell their lands to other parties interested in forestry and include a mentoring program for new forest landowners**

*A number of participants in the summer 1995 public meetings were either parties looking for woodlots and small acreages for tree farms or new forest landowners looking for technical assistance. The proposal for a forest link and mentoring program was enthusiastically supported by these attendees. The program could be modeled to be identical to, or a component of, the farm link and mentoring program.*

Recruitment and retention of new foresters is another approach to ensure the future of forestry in the Rural Forest Area. The goal of a "mentoring" program is to educate newcomers on the value of their standing timber, provide them with technical information and assistance, and raise their awareness about resources

available to them. This program also will strengthen the sense of community among foresters.

### **Next Steps**

See the farm link and mentoring sections (Chapter 5, Strategies 3 and 12).

### **Cost**

See the farm link and mentoring section. It may be possible to "piggyback" the mentoring program with others of a similar nature offered through the Society of American Foresters, the Cooperative Extension Service, and other resource agencies.

### **Advisory Committee Review**

There was consensus from the advisory committee that the County should consider this strategy.

## **Strategy 20: Improve the value of forest lands by designating compatible nonforest uses for locations exclusively on rural forest lands.**

A technique that should be used to increase the value of forest lands is to limit certain high value private uses to the Rural Forest Districts. Such uses, of course, would need to be compatible with forestry and retain the resource. To create value for the rural forest landowners, King County would need to allow these uses within the Rural Forestry Incentive Program exclusively, and prohibited in all other zones. Such targeted uses could include such structures as antennas, etc.

### **Next Steps**

- Secure County Executive and Council approval for a review of the feasibility of the concept.
- Review the land use code to identify potential uses that would be compatible with rural forestry and appropriate for exclusive location on rural forest lands.
- Draft necessary amending legislation.

### **Cost**

The cost of this strategy would be the staff time necessary to review and propose targeting the appropriate land uses and drafting of the legislation.

## Advisory Committee Review

There was consensus from the advisory committee that the County should consider this strategy.

## Conclusion

As the County's role as a regional government assumes ever-increasing prominence, the preservation of resources and landscapes of statewide merit is an appropriate and important function. The strategies for the County's rural forest lands described in this report will conserve the county's precious resource base and enable forestry to flourish for years to come. The cost of these strategies is not insignificant, but the resource base at stake merits such investment. The proposed funding program is located under Chapter 7, "Implementation."

There is intense competition for scarce public dollars, but the strategies presented in this report attempt to minimize the burden on the County's funding. The implementation schedule (see the chart in Chapter 7) was developed in order to stagger the expenses to the County from this program. This schedule reflects the severity of the obstacles the strategies are designed to overcome, the time and expense needed to implement the strategies, and the likely impact of the strategies.

