

**The Funding Conundrum –
the Snoqualmie/Skykomish Watershed, King County**

By: Kelly McCaffrey

June 10, 2004

A degree project submitted in partial fulfillment of the requirements for the degree
of

Master of Public Administration

University of Washington
Daniel J. Evans School of Public Affairs

2004

Approved by:

Advisor name

Acknowledgements:

Thank you for the breadth of information you provided, for your patience and candor, and for all the good work that you do for our forests.

Conservation Finance authors McQueen and McMahon
Environmental Finance Center, Boise State University
Ken Konigsmark
Peter Stein
Phil Pearl
Mark Sollitto
Benj Wadsworth
Sandra Kilroy

Produced for:

*Sandra Kilroy, Snoqualmie Watershed Coordinator,
King County, Water and Land Resources Division*

Funding Conundrum: The Snoqualmie/Skykomish Watershed, King County

Forward

- Cover
- Acknowledgements
- Index

Executive Summary.....	6
1. Introduction.....	9
2. Forest Pressures in the Snoqualmie Basin.....	12
2.1. Current Condition	
2.2. Classifications	
2.3. Land use trends and changes	
2.3.1. Ownership Patterns	
2.3.2. Land Values Spur Changes	
2.3.3. Population Changes	
2.3.4. Development	
2.3.5. Sustainable Forestry	
2.4. Alternatives to change	
2.5. Concluding Remarks	
3. Current Financial Resources.....	18
3.1. Local Watershed Funding Sources	
3.1.1. Conservation Futures Tax	
3.1.2. General Fund (Harvest Excise Tax)	
3.1.3. Impact Fees	
3.1.4. Interlocal Agreements	
3.1.5. King Conservation District Assessment	
3.1.6. Real Estate Excise Tax	
3.1.7. River Improvement Fees	
3.1.8. Salmon Recovery Funding Board	
3.1.9. Surface Water Management Fees	
3.1.10 Rural Drainage Fees	
3.1.11. Transfer Development Rights	
3.1.12. Wastewater Biosolids Program	
3.1.13. Other	
3.1.14. Funds Expended and Acquisitions: 1970-1999	
3.2. Ongoing Discussions of Funding Options	
3.2.1. Tri-City RNA funding analysis (2000)	
3.2.2. Department of Ecology Watershed Plan Implementation Committee	
3.3. Note on Overlap	
3.4. Concluding Remarks	
4. King County.....	33
4.1. Legal limits	
4.1.1. Authority	
4.1.2. Taxes & Fees	
4.2. Taxing Climate	
4.2.1. Systemic Issues	
4.2.2. Public Receptivity	
4.2.3. Land Use	
4.3. Comprehensive Planning	
4.3.1. Annexation	
4.3.1.1. Transfer Development Rights	
4.3.1.2. Budgeting	
4.3.2. Critical Areas Ordinance	
4.3. Economy	
4.4. Demographics	

4.5. Concluding Remarks	
5. Snoqualmie/Skykomish Wastershed: A Bio.....	40
5.1. Snoqualmie/Skykomish wastershed background	
5.1.1. Watershed Planning Act	
5.1.2. Salmon Recovery Planning Act	
5.1.3. Governance	
5.2. Financial Priorities	
5.3. Challenges facing Snoqualmie/Skykomish funding	
5.4.1. Competition for funding	
5.4.2. Development Pressure & Pricing	
5.4.3. Acquisition & Easements	
5.4. Concluding Remarks	
6. Methods and Limitations.....	45
6.1. Information search	
6.1.1. World Wide Web	
6.1.2. Personal Interviews	
6.1.3. Written	
6.2. Identification process	
6.3. Limitations	
6.4. Concluding Remarks	
7. Public Finance.....	50
7.1. Introduction	
7.2. Categories of Revenue	
7.2.1. Taxes	
7.2.2. Fees/Charges	
7.2.3. Revenue Recapture	
7.2.4. Market/Voluntary	
7.2.5. Statutory	
7.3. Categories of Finance	
7.3.1. Bonds	
7.3.2. Loans	
7.4. Finance Sharing	
7.5. Funding Limitations	
7.5.1. Cash Flow Challenges	
7.5.2. Competition and Vulnerability	
7.5.3. Diversified Funding Portfolio	
7.5.4. Resource Complexities	
7.5.5. Legal Constraints	
7.5.6. Operational Needs	
7.5.7. Proprietary Information	
7.5.8. Incentives and Balance	
7.6. Concluding remarks	
8. Criteria & Sorting.....	65
8.1. Context for financing watersheds	
8.1.1. Guiding principles for Washington	
8.1.2. Recipients in the Snoqualmie/Skykomish wastershed	
8.1.3. Nexus	
8.1.4. Eco Goods and Services	
8.2. Criteria categories	
8.2.1. Urban to rural transfer	
8.2.2. Revenue potential	
8.2.3. Authority	
8.2.4. Administrative adjustment	
8.2.5. Startup cost	
8.2.6. Political (public) reception	
8.2.7. Equity	

8.2.8. Source character	
8.3. Sorting criteria	
9. Potential mechanisms.....	72
9.1. Threshold recap	
9.2. Mechanisms meeting threshold	
9.2.1. Local Sales Tax	
9.2.2. Real Property Taxes (Ad Valorem)	
9.2.3. Real Estate Excise (transfer) Tax	
9.2.4. Administration Fee	
9.2.5. Local Watershed Protection Fees	
9.2.6. Special Assessment Fees	
9.2.7. License Plates	
9.2.8. Timber Management	
9.2.9. Transfer Development Rights Program	
9.3. Financial tools	
9.4. Complete list of 37 mechanisms and matrix	
10. Conclusion & Recommendations.....	84
10.1. Further Research	
10.1.1. Partners	
10.1.2. Policy Analysis	
10.1.3. Referencing Past Experience	
10.1.4. Changes in State Taxes	
10.2. Phase II: Financial Mechanisms	
10.3. Strategy	
11. References.....	88

Appendices:

- A. 37 Mechanisms
- B. State
- C. Salmon Specific Grants
- D. Tax incentives
- E. Search Engines
- F. Districting
- G. Sample Questions
- H. Interviews
- I. List of Bonds
- J. List of Loans
- K. License Plates
- L. Options for Phase II of Mechanism Search

EXECUTIVE SUMMARY

The purpose of this report was to provide King County’s Water & Land Resources Division and the Snoqualmie Watershed Forum with a collection of financial mechanisms they could utilize, in the short and long-term, to protect *forested* watersheds in *forested* areas of the Snoqualmie/Skykomish watershed. Mechanisms were recognized in two parts – revenue sources and the tools or strategies to harness them. This report focused heavily on the former.

Financial mechanisms were defined as “Any type of revenue stream, revenue recapture (mechanism for savings), financing partnership, or financing structure that can leverage the prevention of forest conversion (to development) or that can fund restoration activities on managed landscapes (i.e. working forest lands) in the Snoqualmie/Skykomish.”

The impetus for protecting forests of the Snoqualmie/Skykomish are that Chinook and Bull Trout were protected under the Endangered Species Act (ESA) and they inhabit the watershed, the forests within the watershed provide multiple ecological benefits to the community and county at-large, the Snoqualmie/Skykomish is facing intense pressure to develop and subdivide which is expected to harm and disrupt forest habitat and provision of eco-goods and services, and King County is committed to prevent or minimize the diminution of endangered species.

Multiple land use trends and changes emit strong pressure to develop and subdivide, including changing ownership patterns, land use value increases, aging demographics, development trends and trends in the forest products industry. Rules, regulations, or disincentives to prevent poor management practices can also have the perverted outcome of advancing liquidation. The purchase of conservation easements and forestlands in-fee will provide the most assured outcome for preserved forest goods and services. Incentives or assistance to manage with sustainable forestry are additional options to decelerate the loss. Financial mechanisms to administer these purchases must acknowledge these parameters so as not to strengthen the perversion or accelerate it.

King County has already established multiple mechanisms for generating revenue for watersheds, including tax-based, fee-based, incentive-based, and market-based mechanisms. Watershed planners at the State and King County level are currently looking at and analyzing additional financial options. This report augmented that process by exploring how mechanisms have been utilized in regions outside King County, that could potentially be applied within, and which are applicable to Snoqualmie/Skykomish.

Challenges to choosing the revenue source and using it, within King County, revolve largely around legality, the current taxing climate (public receptivity), ongoing comprehensive planning, the economy, and the County’s demographic. These factors influenced the sorting and criteria-based mechanism selection process. The Snoqualmie Watershed Forum must work within this King County context in order to use countywide resources to protect one of multiple watersheds within the county.

The Snoqualmie/Skykomish watershed still has a relatively intact forest ecosystem from which multiple ecological benefits can be studied and potentially quantified for nexus oriented financial mechanisms. Because of the watershed's condition and demographic, in relation to King County's more populated watersheds, nexus-oriented financial mechanisms and mechanisms that incorporate education and awareness components were considered a priority to help the Snoqualmie/Skykomish compete for funding. Mechanisms that allow for the purchase of development rights, or purchase of conservation easements, were emphasized because (1) they are an efficient use of scarce resources, (2) a shorter time horizon is needed in raising needed revenues, (3) time is critical and prices will only increase, and (4) a local timber economy can still exist within in the watershed.

As threats to watersheds and scarcity of their benefits increase, so do efforts to seek innovative financial mechanisms for their protection. Though these efforts will increase the competition for that funding, they will also increase the options available, potentially raise awareness of watershed needs, and potentially result in a higher willingness to pay for watershed protection. Time spent in seeking mechanisms used by other entities was mutually exclusive with time spent identifying specific criteria and analyzing those mechanisms against that criterion. Multiple challenges existed to identifying financial mechanisms including clarification of legal authority, political inertia, and strategically "concealed" options, due to competition for funds. The identification of mechanisms involved personally interviewing professionals in the field of watershed management and conservation, reviewing government and non-profit reports on strategy and recommendations, reviewing current mechanisms utilized by King County and benefiting the Snoqualmie/Skykomish, and reviewing the constraints on those mechanisms.

Identified financial mechanisms were organized into revenue categories: taxes, fees and charges, revenue recapture, markets and charity, and statute and planning. In future deliberations for choosing and initiating revenue mechanisms, entities must share responsibilities. In other words, sharing the responsibility of raising and prioritizing revenue sources across multiple entities are more likely to lead to successful revenue initiatives. Multiple limitations exist within each revenue category and some limitations exist within multiple categories. Some of these include: cash flow challenges, competition and vulnerability, diversity in funding portfolio, legal constraints, follow-up operational needs, and the balancing of incentives.

Following identification, a sorting process was used to narrow over 40 mechanisms to 37 most relevant to the Snoqualmie/Skykomish and King County. To do this, a set of criterion was used: a broad revenue base (urban and rural sourcing), the potential for significant revenues, and a local level of administrative authority (i.e. ability to utilize mechanism at the local level without authorization at the state level). Each of the 37 mechanisms included in this report met at least one of those three "threshold" criterion. The 37 mechanisms were then narrowed to 8 mechanisms – each of them meeting all three of the "threshold" criterion. Six additional criterion were used to characterize the mechanisms; these six could be used as additional or replacement "threshold" criterion in further analyses or in developing implementation strategies.

The eight mechanisms identified as having met all three "threshold" criteria are described in Chapter 8. They are: local sales tax, real property taxes (ad valorem), real estate excise (transfer) tax, administration fees, local watershed protection fees, special assessment fees, license plates,

timber management, and transfers of development rights. The complete set of 37 mechanisms identified are described in Appendix A and analyzed against all 8 criteria in Chapter 9, Table 4. Some of these mechanisms have already been established in King County, but not necessarily to their full potential.

It is recommended that a more intensive policy analysis be conducted on 5-10 preferred mechanisms meeting threshold criteria to assess projected performance of each. Criteria to further analyze mechanisms should include: cost effectiveness, effects of comprehensive planning, equitability, and legality. Once a source, or a set of sources, is decided upon (Phase I), the appropriate tool with which to harness those revenues must be chosen (Phase II). Examining the threats and opportunities faced by entities that have already utilized those preferred mechanisms should also be considered. Finally, a complete strategy for employing Phase I and Phase II mechanisms must be developed in order to achieve success in accessing, securing, and maintaining revenues.



1. INTRODUCTION

The purpose of this report is to provide King County’s Water & Land Resources Division and the Snoqualmie Watershed Forum with a collection of financial mechanisms they can utilize, in the short and long-term, to protect *forested* watersheds in *forested* areas of the Snoqualmie/Skykomish watershed.

In this report, “protecting” forested watersheds in the Snoqualmie/Skykomish Watershed means promoting healthy forest ecosystems for multiple environmental, economic and social benefits. These are “working landscapes” where agriculture, forestry, and other natural resource-based activities are to be conducted in harmony with the environment, especially threatened salmonid species that inhabit the watersheds’ mainstem river and tributaries. This requires management and use of the watershed that values and takes into account all goods and services the watershed provides - managing for the ecological, social and economic integrity of the watershed for current and future stakeholders. Throughout the course of this report, the Snoqualmie/Skykomish Watershed will be referred to more simply as the Snoqualmie/Skykomish.

Financial Mechanisms

What is a “financial mechanism”? For the purposes of this report, a financial mechanism is:

Any type of revenue stream, revenue recapture (mechanism for savings), financing partnership, or financing structure that can leverage the prevention of forest conversion (to development) or that can fund restoration activities on managed landscapes (i.e. working forest lands) in the Snoqualmie/Skykomish.

Mechanisms involve two parts – revenue sources and the tools or strategies to harness them. This report focused heavily on revenue sources, with somewhat less emphasis on how to harness them.

Several mechanisms identified are in widespread use across the United States with varying levels of success, others are in their infancy stages. Some would require State Legislature approval to implement, others would require the establishment of partnerships with private organizations or other agencies, and still others would require initial investment in order to implement, administer, and see returns. This variation is in large part due to agency financial capacity, organizational mandate issues, land use patterns, historical context, and economic and political climate.

Regardless of these differences, innovation in financing watershed protection is highly sought after, and yet, traditional mechanisms such as taxes or general fund allocations are by far the most common. This is the case for a number of reasons, varying from economic conditions, to changing public attitudes about watersheds, to administrative ease (or cost) with which innovative mechanisms can be employed.

There is no panacea or silver bullet to finding dollars for watershed protection. If there were, the literature would be thin, the watersheds healthy, and government oversight unnecessary. Chapter 3 will detail current financial mechanisms accessible to watershed planners and the context in which they are utilized.

Watershed Need

The Snoqualmie/Skykomish is a watershed containing farmland, suburban residential housing, minimal industry, and active private forestry on both large and small lots (5-100 acre parcels). It is home to some of the “healthiest salmon habitat remaining in King County and supports wild populations of Chinook, coho, chum, and pink salmon, as well as steelhead, cutthroat and rainbow trout and bull trout,” according to Sandra Kilroy, Snoqualmie/Skykomish planner for King County. The nexus between this watershed’s current composition and its habitat for salmon, is that:

- (1) The Snoqualmie/Skykomish is facing intense pressure to develop and subdivide,
- (2) This development is expected to harm salmon habitat,
- (3) As of 1999, Chinook and bull trout were protected under the Endangered Species Act (ESA),
- (4) King County is obligated to prevent or minimize their diminution.

Chapter 2 reviews the current threats facing salmon habitat within King County’s Snoqualmie/Skykomish.

Minimizing further degradation to salmon habitat, and/or restoring salmon habitat, takes planning, scientific expertise, oversight, community coordination, creativity, communication, research – the vast majority of which must be funded. Not only must the operations side of this charge be funded, but the capital side must be funded as well – purchasing conservation easements, purchasing land in fee, paying for all transaction costs in land acquisitions, and purchasing restoration equipment. All of these “watershed protection activities”¹ face stiff competition for funds. Add to this a watershed that has a relatively small tax base and one can see how watershed planners are faced with a tough environment for financing decisions. Thus, identifying additional options the county could potentially to fund some of the last remaining healthy salmon habitat is a high priority and is the purpose of this report. Chapter 5 will provide more details on the history, limitations, competition and parameters encountered in identifying financial mechanisms for Snoqualmie/Skykomish.

Mechanism Identification

Innovation was a priority in identifying financial mechanisms that could apply to the Snoqualmie/Skykomish. With this scope, the following types of mechanisms were sought:

- (1) Financial mechanisms employed for *watershed* protection activities in other regions within the United States – by county, state, or private organization,
- (2) Financial mechanisms employed for *forest* protection activities in other regions within the United States – by county, state, or private organization,

¹ “Watershed protection activities” in this report are broadly considered as establishing conservation easements, purchasing development rights, protecting land from purchase in-fee, restoration efforts, and stewardship planning.

- (3) Financial mechanisms identified in white papers, academic theory, or private organizational hypothesis, as having potential, though not necessarily in use,
- (4) Financial mechanisms that may not have been tried on watersheds, but may be applicable nevertheless.

Mechanisms and examples were collected from Washington to Florida, California to Maine. Most assistance in information gathering came from non-profit organizations, though direct communication with county employees from natural resource departments was persistently sought. Two resources proved invaluable over the course of this project: (1) McQueen and McMahon's book Land Conservation Financing published by Island Press (copyright Conservation Fund) and (2) the Environmental Finance Center's 1999 Guidebook to Environmental Financing.

Though "innovation" was a priority in identifying mechanisms, there were obvious recurrent trends among counties and states nationwide favoring the more common place sales tax and property tax increases for financing watersheds, open space, parks, and environmental protection. In addition, the East Coast has employed numerous measures to fund quickly diminishing natural areas because their development and fragmentation pressures are different. For instance, it is rare to find 200 acres of forest that isn't already subdivided into 20 or 5 acre parcels. Despite this difference, it is not irrelevant to the West Coast because it is experience that King County can learn from, especially as development pressures strengthen. Chapters 6, 7, and 8 detail the crux of this report - the optional financial mechanisms that King County and the Snoqualmie Watershed Forum should explore in more detail.

Potential

Though no "silver bullet" was identified for funding watershed restoration and protection in the Snoqualmie/Skykomish of King County, numerous mechanisms exist that King County has either avoided, not considered, or simply not thought of. In addition, though traditional mechanisms may seem politically unpalatable, even a record-breaking tax package for environmental protection can pass in a blundering economy – and has (e.g. California in 1999 and 2000) (LTA 2003) This is just an example of the value that the public places on the environment, especially watersheds, for attributes such as water quality, clean air, and visual aesthetics. There is accessible funding potential and King County has the opportunity to seek it out. This report will augment that process by infusing the "box" within which planners for the Snoqualmie/Skykomish can think.

2. FOREST PRESSURES in the SNOQUALMIE BASIN

In order to appreciate and identify appropriate financial mechanisms for this report, one must understand the *what and why* of threats to forested lands in the Snoqualmie/Skykomish watershed.

2.1. Current Condition

The Snoqualmie/Skykomish covers 937 square miles in the northeast corner of KC and makes up approximately 50% of the Snohomish Basin. About half of the watershed that remains forested is publicly owned by the U.S. Forest Service. Non-federal forest lands within the watershed make up the headwaters to the Tolt River, the Griffin Creek, the Tokul Creek, North Fork Snoqualmie, and the Raging River, as well as the lower stems of the Middle Fork Snoqualmie and the South Fork Snoqualmie River.

No major metropolitan cities exist within the watershed's official boundaries, though the watershed does serve as the drinking water source for citizens within the watershed and those inside and outside its boundaries (including the City of Seattle and Everett). The watershed serves as habitat for wild, native populations of Chinook, coho, chum, and pink salmon, as well as steelhead, cutthroat and rainbow trout and bull trout .

The following negative and positive aspects, as described by KC-WLRD, describe the watershed's condition in respect to restoring and protecting Snoqualmie/Skykomish salmon habitat:

Negative →

- Impacted by flood control practices, road building, development, agriculture and forest practices.
- Levees and roads have cut off access to side channels and tributaries that provide critical rearing and spawning habitat.
- Approximately 60% of the banks of the Snoqualmie and Snohomish Rivers have no riparian vegetation other than grass or have a riparian buffer that is only one tree wide.
- In the Snohomish basin as a whole, almost 30% of the floodplain tributaries have been channelized.

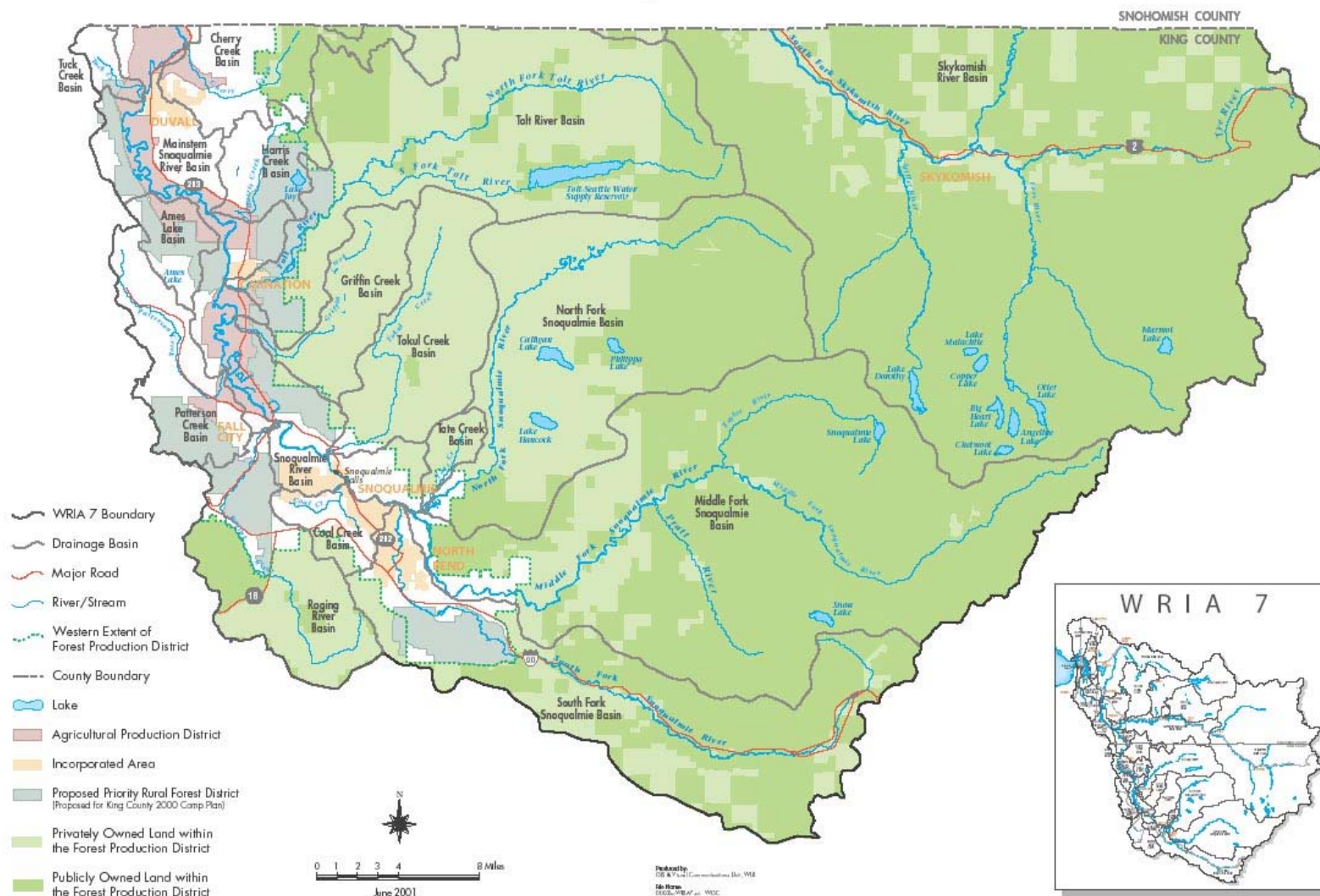
Positive →

- Habitat in Snoqualmie/Skykomish is some of the best remaining habitat for salmon and bull trout in the Puget Sound region, especially in King County.
- Over 4500 acres of farm land has been protected from development through the Farmland Preservation Program
(Kilroy 2004) (Wadsworth 2004) (KCDNR 2004)

See Figure 1 for an overview of the Snoqualmie/Skykomish watershed.

Figure 1

WRIA 7 SNOHOMISH - SNOQUALMIE: KING COUNTY PORTION



(KCDNR 2004)

2.2. Classifications

This report focuses on the *private* forest lands within the King County portion of the Snoqualmie/Skykomish watershed. These are classified into three major categories consistent with current zoning: forest production, urban areas, and rural areas. Forest Production Districts (FPD) are zoned specifically to promote use of the land as forest for the long term. “Urban” areas are those within the urban growth boundary, designated for absorbing growth under the Growth Management Plan and King County’s Comprehensive Plan. “Rural” is used loosely because rural also indicates lands within the forest production district. However, rural areas can further be considered as rural city annexation areas and rural remainder (Sollitto 2004). Lands that are forested and part of the “rural remainder” are largely classified in the Comprehensive Plan as somewhere between RA-5 to RA-10, otherwise known as the “Rural Forest District” (RFD), though many exist in tracts larger than 10. The Forest Production District (F-80) is often referred to as “rural,” though it actually has it’s own classification within the Comprehensive Plan (KCDDDES 2004) (Wadsworth 2004) (Sollitto 2004). The fragmentation or subdivision of forested acreage is part of the problem to watershed health and is a major concern over the long term for the FPD² and the RFD.

Rural Forest District - Rural annexation areas and rural remainder areas do not neatly fit into an ownership category. The Rural Forest District (RFD) was designed as a special district geared towards encouraging ownership patterns conducive to forestry - larger parcels (20-100 acres). It is not a zone. The RFD is highly vulnerable to development pressures and increasing fair-market values for land. Most of the 32,300 acres is comprised of lower elevation areas of the watershed and abuts rural annexation areas (“do not cite source”).

Forest Production District - The Forest Production District (FPD) is a zoned district where "lands shall remain in large parcels in ownership patterns consistent with forestry, and zoning is at 80 acres per development unit," (King County, 2000). Of the 800,000 FPD acres throughout the county, Snoqualmie and Skykomish Watersheds share approximately 494,000 acres (over 62%) - 325,000 in the Snoqualmie and 169,000 in the Skykomish.

2.3. Land use trends and changes

The forest lands encompassing Snoqualmie/Skykomish have many social and economic benefits in addition to those that are ecological. These include timber jobs and timber products, recreation opportunities, and scenic home sites within commuting distance to Redmond, Bellevue, or Issaquah.

2.3.1. Ownership Patterns

Management and goals for RFD lands is mixed. Some owners manage for timber on a large-scale, some manage on a small-scale, some are restoring their forest land, some don’t know how to manage or restore forest land, and still others are just interested in residing in a scenic setting. Privately owned forestlands in the FPD are primarily managed for timber.

² Though the Comprehensive Plan somewhat secures FPD’s from being subdivided, it is widely understood that plans can change over time – and so do demands on forests.

King County tracks specific acreage by ownership amongst county, state, federal, and private owners. The Hancock Insurance and Financial Services is the largest single private landowner of contiguous forested acreage in the Snoqualmie/Skykomish.

2.3.2. Land Values Spur Changes

Rising land values in the RFD and FPD are increasing opportunity costs to forest landowners and enticing alternative uses of Snoqualmie/Skykomish forestlands. Even landowners with 80-acre parcels are selling their property to cash in on real estate windfalls. Changes caused by dispersed development and forest fragmentation revolve around increased infrastructure costs to the county and ecological costs to the watershed itself. Lands adjacent to recent developments (e.g. Snoqualmie Ridge), to growing communities (e.g. Duvall, Snoqualmie, North Bend), and to transportation corridors (I-90 and Hwy 18) face the greatest development pressures (and hence the highest prices for land). Lands in more remote basins such as Griffin Creek or the Tolt face less pressure (KCORPP 1999) In addition, as Bellevue, Issaquah, and Redmond continue to grow and house employment, these areas increasingly are considered as reasonable commuting distances from residence – furthering the pressure for change.

Some pressures are tempered by King County’s Public Benefit Rating System (PBRs) – a property tax incentive system that assesses lands based on their actual use rather than at their fair-market value. This can save landowners a considerable amount on annual property tax. However, the incentive of profits on the fair-market value of one’s land remains strong and may outweigh those of the PBRs.

2.3.3. Population Changes

The Puget Sound Regional Council (PSRC) predicts that the population in the Snoqualmie Valley will grow from its current estimated level of approximately 40,000 to over 70,000 residents by 2020, an average increase of roughly 4.5% per year and consistent with past trends as can be seen below (PSRC 1997). In addition, the county’s population is aging, accounting for 22.7% in the county as of 2000, rising from 17.9% in 1990 (PSRC 2002). This raises concerns regarding transfer of ownership of land to younger generations, subsequent management decisions on that land, and capital gains taxes that new owners may want to offset with profits from subdividing or choosing development over forest.

2.3.4. Development

Comprehensive Planning and growth management requirements have undoubtedly reined in rampant development in sensitive areas. In King County, 95.3% of population growth occurred within the urban growth boundary from 1995 to 2000 (PSRC 2002), but the devil is in the details. From 1990 to 1998, total new housing units in the unincorporated areas outnumbered those in the incorporated area by almost 400 units (2150 to 1757) and median housing prices increased dramatically (KCORPP 1999).³ In addition, following the economic boom in the Puget Sound region, many individuals had the means and desire for secluded, forested estates or “dream homes.” Additional indicators of development and threats of forest conversion in the RFD and FPD are available, though not detailed in this report.

³ This seeming contradiction in reporting could be attributable to excess, vacant units within the urban growth boundary, or that population growth does not necessarily correlate one to one with new housing development, or that second homes are being built within the unincorporated areas.

2.3.5. Sustainable Forestry

For development pressures to naturally wane, the Snoqualmie/Skykomish lands must have a competing use that landowners can profit from. Were forestry and timber management on these lands to garner competitive incomes or profits for landowners, the challenge before King County would be less threatening.

Major factors in the decreasing competitiveness of Pacific Northwest forestry include the following:

- Competition on the global timber market
- Labor costs and restrictions relative to other regions
- Productivity of Pacific Northwest forest lands relative to other regions
- Environmental constraints relative to other regions

What sustains these driving factors and how they manifest is complex and layered. The following is a simplified list of facts and trends that help interpret them:

- Globalization of and technological developments in the wood products industry creates intense competition for harvesting wood (Marchak 1995),
- Fiber farms in South American and South Pacific regions are more biologically productive (faster short-term growth of wood-fiber) than Northwest regions (Franklin 2003),
- South America has highly competitive labor (wages, worker safety laws, employee benefit requirements, etc.) (Haynes 2002; Franklin 2003),
- Environmental regulations, though protecting ecosystem attributes, result in opportunity cost for foresters, not equally indicative of competitor regions (Haynes 2002)
- Net Present Value economic models dominate *large* scale private forest management goals – commanding short-term cycles – for greater return on investment, especially in corporate timber firms (Garcia 2003),
- Small Forest Landowners, such as those within the Rural Forest District, face greater management challenges than that of corporations, due to scale (Lippke 2001).

Though King County cannot necessarily alleviate any or all of these factors, it must be aware of them as it considers alternative means of profit for landowners in the watershed – effecting funding options.

2.4. Alternatives to Change

To fulfill local and state requirements and priorities, alternatives to forest conversion and subdivision must be sought. These mainly consist of managing the forest in forest uses (vs. converting forests to non-forest uses). This includes the harvesting of timber, the management for water quality and the wildlife (e.g. salmon) habitat. For this to happen, there must be financial tools available to implement watershed protection activities. These tools include funding for landowner incentives, funding for stewardship and restoration, the purchase of conservation easements, the purchase of lands in-fee, and other strategies, such as the Transfer Development Rights Program. Ideally, Snoqualmie/Skykomish planners would like to see sustainable forest management intermixed with conserved sensitive areas, on remaining forestlands.

Alternatives to make change happen, utilizing new funds, include the following:

- (1) The *public compensates* landowners for their opportunity cost of not developing their property (assuming the monetary benefits to them are far greater as developed land vs. forested land)
- (2) The *public pays for the preservation* of forests (in working and non-working landscapes) through direct purchase of conservation easements or acquisition in fee
- (3) The public *restricts new development* or constrains new development patterns.

This report will not specifically target any of these alternatives, though it will follow certain financial priorities (see Section 5.2).

2.5. Conclusions from Chapter 2

- Threats to forestlands persist within *the* Snoqualmie/Skykomish.
- Rules, regulations, or disincentives to prevent poor management practices can have the perverted outcome of advancing liquidation.
- The purchase of easements and forestlands in-fee will provide the most assured outcome for preserved forest goods and services; incentives or assistance to manage with sustainable forestry are additional options to decelerate the loss.
- Financial mechanisms to administer these purchases must acknowledge these parameters so as not to strengthen the perversion or accelerate it.

3. CURRENT FINANCIAL RESOURCES

The financial resources currently utilized by the watershed planning units within King County vary in amount, but generally emerge from the same revenue categories (see Chapter 7 for categories).

3.1. Overview

An immense amount of work has gone into compiling lists of current financial resources available to watershed planners for forestland protection. Care was taken to not repeat, in large part, these efforts; references and appendices demonstrating past productivity in this regard are included for background and overview.

- A **watershed funding chronology** provided by the Department of Ecology: <http://www.ecy.wa.gov/pubs/0306010.pdf>
- **State resources**, such as the State's Trust Land Transfer Program or the Centennial Clean Water Fund, are borrowed from the Department of Ecology's Watershed Implementation Planning Committee and listed in Appendix B.
- **Federal resources**, such as the Federal Forest Legacy Program or the Land and Water Conservation Fund, are borrowed from the Interagency on Committee for Outdoor Recreation and the Washington Biodiversity Conservation Committee⁴ and listed in Appendix C.
- **Tax incentives**, including King County's Public Benefit Rating System, are shown in Appendix D.
- **Search engines** specifically applicable to Washington State watersheds are shown in Appendix E to remain apprised of the latest options newly and/or no longer available.

These charts demonstrate the time and effort that local, state, and federal entities have given to identify financial resources to protect natural lands, including watersheds in Washington. Compilations of existing access points to available dollars are ongoing and numerous non-government grants are continually coming on line (and going off-line). Communities regionally, nationally, and internationally are all struggling with the issue of financing protection of watersheds and their ecological services. Not only does this demonstrate the commitment to serve the need, it also demonstrates the potential competition that the Snoqualmie/Skykomish faces in seeking Federal and State funding (see Section 7.5.2. for more details).

3.2. Local watershed funding sources

The following review of financial mechanisms utilized by King County for environmental work, but not necessarily watershed and salmon habitat specific. Those that *are* used for watersheds and salmon habitat are not all used for funding forest restoration, stewardship and/or acquisition activities within the Snoqualmie/Skykomish. However, recognizing what environmental revenue sources are *already* being employed by King County, which are being used for watersheds, and which are being used for the Snoqualmie/Skykomish, is important in distinguishing "new" financial mechanisms or mechanisms that can be shifted to render additional resources - the purpose of this report.

⁴ Combining all charts and eliminating overlap was not attempted for this report.

The following is a list of current environmental revenue sources that King County currently administers, utilizes, or has access to:

- 3.1.1. Conservation Futures Tax
- 3.1.2. General Fund (Harvest Excise Tax)
- 3.1.3. Impact Fees
- 3.1.4. Interlocal Agreements
- 3.1.5. King Conservation District Assessment
- 3.1.6. Real Estate Excise Tax
- 3.1.7. River Improvement Fees
- 3.1.8. Salmon Recovery Funding Board
- 3.1.9. Surface Water Management Fees
- 3.1.10. Rural Drainage Fees
- 3.1.11. Transfer Development Rights
- 3.1.12. Wastewater Biosolids Program
- 3.1.13. Other

This list does not include matching funds that King County has used, such as USFS Forest Legacy funds or Land and Water Conservation Funds.

3.1.1. Conservation Futures Tax

Conservation Futures Tax (CFT) levy funds are authorized by RCW 84.34.230 and are collected from **property taxes** levied throughout King County. A portion of the CFT collected is allocated to projects directly from the County Council. The rest is directed by the Conservation Futures Citizens Committee, which makes an annual recommendation of project funding allocations to King County based on an internal competitive review process of project applications (submitted by watershed planners) and site visits. Revenues may also be placed in a Conservation Futures Fund for jurisdictions or nonprofit nature conservancy corporations to acquire open space land or development rights (RCW 84.34.220). The CFT property tax is a 0.0625% assessment on land-based property (e.g. on a property with an assessed valuation of \$100,000 the land owner would pay \$6.25).

Matching funds, of equal or greater value, are required from the applicant jurisdiction. Matching funds may be cash, land trade, or value of land purchased adjacent to proposed acquisition. Acquisitions may be fee simple or less than fee acquisitions. Many cities have issued bonds and used these relatively stable revenues as the source to pay debt service against those bonds. King County is bonded against it using about half of its revenue stream. The CFT is the main source of self-generated land acquisition funds for the Snoqualmie/Skykomish (Tieman 2004).

Lands that qualify as “open space” must contribute to natural resources, streams, water supply, public land network, historic sites, visual quality, or as certain agricultural conservation lands (RCW 84.34.020). King County has additional criteria to prioritize the use of its CFT funds, including salmonid habitat and threat of its loss (KCC 26.12).

In 2003/2004, the Conservation Futures Citizens Committee decided to allocate \$9,358,000, from a total of \$11,302,500, with approximately 3.36% for forested acreage within *the*

Snoqualmie/Skykomish⁵. Per capita, the rural areas have received more CFT dollars than urban areas. Identifying specifically how many acres CFT dollars have acquired often involves double counting (because of the matching component). However, since 1980, it is estimated that CFT dollars have probably helped purchase over 20,000 acres collectively– not all of which is forestland (KCPBRS 1998) (Tieman 2004).

In addition, King County recently committed to using CFT revenues to purchase conservation easements on what was formerly known as the “Snoqualmie Tree Farm” in the heart of the Snoqualmie/Skykomish and currently owned by Hancock Insurance and Financial Services. This forest contains 100,008 acres and surrounds the city of Seattle Tolt watershed including over 8000 acres of riparian habitat. Revenues worth \$15,600,000 for the matching purchase will come from the County’s open space non-bond fund sub-fund provided that “permanent financing for the acquisition of the Snoqualmie Forest Conservation Easement project described will be provided through the issuance of limited tax general obligation bonds backed by conservation futures tax levy funds. These bonds are anticipated for issuance in the fall of 2006. Interim financing will be supplied through a combination of an interfund loan, pursuant to terms approved by the King County executive finance committee, and bond anticipation notes as approved by the King County council that will be repaid from the proceeds of the bonds,” (KCC 2003). There are no guarantees that Hancock will sell easements at the amount King County has set aside for.

3.1.2. General Fund

King County has substantial revenues as part of the General Fund. However, KC general funds are not currently used for any watershed-wide protection activities. Some watershed planners believe it is highly unlikely that these will ever be used in the near or distant future for watersheds. For multiple years the county has faced general fund budget reductions in the millions of dollars. General Fund dollars go primarily for criminal justice and other basic services (Kilroy 2004).

However, the County does collect **harvest excise tax** proceeds from timber operations within the County (RCW 84.33.051). Currently, most are sent to the General Fund to pay for property tax levies on capital projects and to school districts. Though harvest tax revenues aren’t currently directed towards the forestry or watershed program, there exists an obvious “direct connection” and is “very logical and politically sensitive,” (Konigsmark 2004).

Currently, harvest tax receipts are officially distributed as follows:

Receipts of both the state and county taxes are deposited in the timber tax distribution account within the state treasury. At the end of February, May, August, and November, the Department notifies the State Treasurer to distribute the tax receipts, less the Department's collection costs, to counties and the state general fund. The county receipts are further distributed to local taxing districts by the county treasurers according to a formula in RCW 84.33.081, which reflects the assessed value of forestland in the respective districts. Funds go first to districts that have approved special property tax levies for capital purposes. Next, school districts receive funds in relation to their special levy rates. Finally, all local taxing districts share in the distribution of any remaining funds in the county timber tax account (RCW 84.33).

⁵ Cedar Falls Tree Farm (\$64,5000) and Stoessel Creek (\$250,000).

3.1.3. Impact Fees

King County is authorized to charge **development impact fees** on new development in unincorporated areas to help pay for public facilities that serve new development and for mitigation of development (RCW 82.02.020; chapter 43.21C RCW). It may also impose impact fees on residential and commercial development activity to help pay for parks, open space, and recreation facilities, and road improvements. Revenues must be spent within six years of collection and as specified in an adopted capital facilities plan (RCW 84.02.050-.090). (MSRC 2001). The King County Department of Development and Environmental Services (KCDDDES) collects revenues from permitting fees and impact fees. Permit fees go to covering KCDDDES costs and do not go into the county general fund (Reinert 2004).

However, some people see these fees as burdensome. As one conservationist commented, “Developers face a 6-yr moratorium on permit applications for remodels, once they are allowed to harvest,” and then they face a permitting “bill rate of \$125/hr!!.... The bureaucratic process is less likely to succeed and more likely to cause inefficiencies,” (anonymous, 2004). Regardless of the legitimacy of these claims, the perception remains and thus additional transparency and explanation of nexus may be needed prior to any consideration of raising impact fees as a revenue mechanism.

3.1.4. Interlocal Agreements

King County is engaged in an interlocal agreement with the cities of North Bend, Snoqualmie, Duvall, and Carnation. The Interlocal agreement establishes the Snoqualmie Watershed Forum and involves a cost-share arrangement for staffing watershed planning and restoration

3.1.5. King County Conservation District Assessment (KCD)

KCD Assessment is a county-wide **charge of \$5 per parcel** that funds the activities of the King Conservation District as well as projects through watershed forums in King County. State law mandates that the assessment is uniform, so its parcel size is irrelevant. However, it may be possible for the county to issue the uniform fee per acre; but currently it is per parcel:

“An annual assessment rate shall be stated as either uniform annual per acre amount, or an annual flat rate per parcel plus a uniform annual rate per acre amount, for each classification of land. The maximum annual per acre special assessment rate shall not exceed ten cents per acre. The maximum annual per parcel rate shall not exceed five dollars,” (RCW 89.08.400.3)

The fee is charged on both incorporated and unincorporated areas that are part of the district. Most cities, but not all, are participating. To date, the Snoqualmie Watershed Forum has allocated nearly \$2 million for 32 watershed projects. As described by King County:

Agencies in the Snoqualmie Watershed are eligible to apply. The highest priority for Snoqualmie Watershed KCD funding is projects and programs that are in or consistent with the early priorities for Chinook and bull trout recovery as well as water quality and flood hazard reduction.... Projects must also be consistent with state law authorizing Conservation Districts (RCW 89.08) and "Regional Funding Principles" adopted by the King County Regional Water Quality Committee. (KCDNR 2004)

Principles include some elements specifically relative to *forested* acreage within the watershed.

3.1.6. REET

Washington's real estate **excise tax**⁶ (REET) is levied on all real estate sales measured by the full selling price, including the amount of any liens, mortgages, and other debts given to secure the purchase⁷ (RCW 82.45)(KCC 4.32). The state imposes a 1.28 percent tax, and cities and counties are authorized to levy additional amounts. The taxes levied under this chapter are the obligation of the seller. The legislative authority of any county or any city may impose an excise tax on each sale of real property in the unincorporated areas of the county for the county tax and in the corporate limits of the city for the city tax at a rate not exceeding one-quarter of one percent of the selling price (RCW 82.46.010).

REET is segregated into two levels: REET 1 and REET 2. The Municipal Research and Service Center of Washington describes this tax, as it pertains to King County, as follows:

REET 1 → Those counties with populations greater than 5,000 and those planning under the GMA have different restrictions on the use of the resulting revenues. The funds can only be used for capital projects identified in the capital facilities plan element of a comprehensive plan and housing relocation assistance. *RCW 82.46.010(2)*.

[This includes the following projects: domestic water systems; storm and sanitary sewer systems; parks; recreational facilities; trails]

REET 2 → The legislative authority of any county that plans under the GMA may impose an additional excise tax on each sale of real property at a rate not exceeding 0.25 percent of the selling price.

Certain caveats apply to this supplementary REET tax (2), including the requirement that revenues generated by the tax imposed by this section shall be deposited in a separate account and revenues are solely for financing capital projects specified in a capital facilities plan element of a comprehensive plan (RCW 82.45-82.46).

In addition, MSRC describes two other options available to King County for REET revenues:

- (1) *One Half Percent Real Estate Excise Tax in lieu of Optional Sales Tax*. The legislative authority of a county may impose an additional tax on the sale of real estate, to be paid by the seller, at a rate not to exceed 0.5 percent of the selling price. The revenue from this tax may be used for any general government purpose. This tax is in lieu of the optional second half 0.5 percent sales and use tax that a county or city may impose. A county may levy this tax only in the unincorporated area. *RCW 82.46.010(3)*. This tax is subject to a referendum procedure set out in RCW 82.46.021. No counties have levied this tax option to date.

⁶ An "excise tax" is essentially a sales tax and will be discussed in Section 7.2.1.

⁷ "Real estate" or "real property" means any interest, estate, or beneficial interest in land or anything affixed to land, including the ownership interest or beneficial interest in any entity which itself owns land or anything affixed to land. The term includes used mobile homes, used park model trailers, used floating homes, and improvements constructed upon leased land (RCW 82.45.032)

- (2) *One Percent Real Estate Excise Tax for Conservation Areas.* A county legislative authority may submit a ballot proposition to the voters for an additional real estate excise tax on each sale of real property in the county at a rate not to exceed 1 percent of the selling price. The revenue from this tax is restricted to the acquisition and maintenance of conservation areas. Conservation areas are defined in RCW 36.32.570. The property buyer, rather than the seller, pays this tax (MSRC, 2001)

The only Washington County that has utilized Option 2 is San Juan County, though Snohomish County residents voted on it (it did not pass). Option 2 REET revenues could be used for the Snoqualmie/Skykomish watershed protection activities and would serve as a broad base for revenue (i.e. an urban to rural transfer).

Currently REET revenues are managed by King County's Park Division. REET and CFT are the two largest county-managed revenue sources in terms of land acquisition for King County (Kilroy 2004; Tieman 2004). See Appendix A, mechanism #7 for more details.

3.1.7. River Improvement Funds

The primary revenue source for the River Improvement Fund is a county-wide **property tax levy** of approximately \$2.3 million a year. The fund also receives state and federal grants. The River Improvement Fund is a Special Revenue fund that King County uses to finance flood mitigation and preservation activities (Rice 2004). Such flood specific activities include, but are not limited to:

- Building and maintaining dikes and rip-rap;
 - Improving or maintaining stream channels, main or overflow;
 - Acquiring property or rights to preserve any flood plain or regular or intermittent stream channels from any interference to the free or natural flow of flood or storm water.
- (RCW 86.12)

Note: About one third of the fund comes from the Green River Flood Control Zone District (Rice, 2004). This allows for targeted funding of projects geographically located in the Green River flood plain, and includes the cities of Kent, Auburn, Renton and Tukwila (RCW 86.15).

3.1.8. Salmon Recovery Funding Board

The Washington State Salmon Recovery Funding Board (SRFB) administers funds for salmon recovery that are **appropriated by the state legislature and Congress** (RCW 77.85). SRFB's mission is to "support salmon recovery by funding habitat protection and restoration projects and related programs and activities that produce sustainable and measurable benefits for fish and their habitat." SRFB receives administrative support from the State Interagency Committee for Outdoor Recreation (SRFB 2004). They describe their funding process as follows:

- Project sponsors such as cities, counties, agencies, tribes, non-profit organizations, and private citizens submit applications to local lead entities such as Watershed Resource Inventory Area - Steering Committees,
- The lead entities submit prioritized lists of project applications to SRFB for consideration,
- Sponsors request funds to protect or restore salmon habitat, commit to long-term monitoring, and provide a monetary or in-kind match of 15% or more,

- Projects may include acquisition; in-stream passage or diversion; in-stream, riparian, upland, or estuarine habitat actions; or assessments and studies,
- Lands acquired in fee with SRFB assistance must be dedicated to habitat conservation, outdoor recreation or salmon recovery uses in perpetuity. (SRFB 2004).

In 2003, the watershed planning unit within which the Snoqualmie/Skykomish watersheds sits (WRIA 7) received \$3.5 M in grants between the Salmon Recovery Funding Board and matching dollars of the Conservation Futures and King Conservation District for lands within the Tolt River sub-watershed. Though the Snoqualmie/Skykomish is located within WRIA 7, these funds did not necessarily go towards its forestlands. Congress appropriates SRFB Federal funds on an annual basis as part of the NOAA-Fisheries budget. State funds are appropriated by the Legislature biennially, and come from general obligation bonds. There is no specific percentage of a tax or other revenue source that is dedicated to this purpose (Fox 2004).

3.1.9. Surface Water Management Fees

One type of **impact fee**⁸ utilized by King County is the Surface Water Management (SWM) Fee and rural drainage fees. The Department of Development and Environmental Services is authorized to issue these fees in payment for development permits. The obligation of the SWM program is to identify, prevent and manages the impacts of development on water runoff like flooding, erosion, pollution, and low stream flows. They are imposed on the person holding title to the subject property (KCC 9.04.105) and are assessed on property owners in unincorporated King County. The fee was increased in 2002 by ordinance and with passage of the 2002 King County budget. It had only been increased once before. The following describes the program in more detail:

King County's surface water management fee is based on the average amount of impervious surface on residential properties and the overall amount and parcel size of commercial properties. Residential property owners pay a flat \$102 annual fee. Commercial property owners pay on an incremental scale based on how much of their parcel is impervious or hard (buildings, roads and parking lots for example) and the size of the parcel. Low-income senior citizens and the disabled are exempt. (KCWLR 2004).

The fees appear on property tax statements and are then redistributed to the King County Department of Natural Resources and Parks to pay for the program. Every property owner with impervious surface area – residential and commercial - in unincorporated King County pays this fee. Almost every jurisdiction in King County has its own SWM program and assesses a fee for it. North Bend, a city within the Snoqualmie/Skykomish, assesses a flat \$118 residential fee. In King County (KCWLR 2004).

Almost every jurisdiction in King County has its own surface water management program and assesses a fee to pay for it. King County pays for the impacts that roads have on our surface water system.

⁸ Though “impact fee” may be theoretically considered as a tax, the differentiation is common in literature references.

SWM Fees have occasionally been used for forest conservation because forests serve a surface water management function (Creahan 2004). Because it is an “impact fee,” SWM fees should incur a direct nexus between the person being charged and the impact their fees help to offset or mitigate. In turn, this results in the majority of SWM fees collected in developing areas. As the urban area incorporates (i.e. annexation), the SWM fee will be collected primarily in rural, developing areas (Creahan 2004). This allows for minimal urban to rural transfer, though any fee charged on development essentially serves as an incentive to develop elsewhere (where no fee is charged) and a disincentive to develop in areas where the fees are collected (such as unincorporated parts of the county).

3.1.10. Rural Drainage Fees

As noted in Section 3.1.9, rural drainage fees are **impact fees** utilized by King County. Rural drainage fees are assessed in rural areas and are designed to fund rural projects. At the same time SWM fees were increased by 20% in 2002, the King County Council adopted changes to the Rural Drainage Program (RDP) that included adding programs to preserve forests and agriculture (given their stormwater and environmental benefits). Other changes included a commitment to spending fees where collected (strengthening the nexus between fee and service), limiting staff, maintaining rural “character”, and managing the program efficiently. Funds can and have been used as leverage for matching funds from the federal or state government on multiple forest related projects. There are three main service areas within the RDP: Snoqualmie (11,100 residents), Enumclaw (4200 residents), and Vashon (4600 residents). (KCWLR 2003)

3.1.11. Transfer Development Rights Program

King County’s Transfer Development Right program is a **market-based mechanism** that allows for the trade of development rights on lands that meet certain environmental criteria with lands that are under certain growth management restrictions. Though this isn’t technically a mechanism to raise revenue, it does serve as a mechanism to *replace lost revenues* because of the savings that it provides King County in land purchases. Essentially, forest owners may want to sell their development rights⁹, and developers may want to buy them, so a transfer development rights “market” essentially facilitates “gains from trade”. The transaction, the conditions of who can sell their development rights, and where a developer can then use those rights depends on growth management regulations (zoning, districting, limits to growth within and outside growth boundaries) and individual, negotiated arrangements with local governments. A description of potential changes to the TDR program following Comprehensive Planning changes, updates to the Critical Areas Ordinance, and Annexation activities can be reviewed in Chapter 4.

To date the KC TDR Program has helped permanently preserve (from development) 1465 acres of forestlands in King County. Of this, 750 acres were purchased “in-fee” with an estimated market value of \$11.8 million. The public cost to acquire these lands utilizing TDR was \$3.4 million because development rights had been sold off and thus lowered the price of the land to the county. TDR theoretically saved the public \$8.4 million. An additional 715 acres of easements have been purchased. There are an additional 900 acres that are in the approval “pipeline” (Sollitto 2004). This \$8.4 million figure does not include the transaction costs involved in the transfer.

⁹ Allowable under certain zoning – see <http://www.metrokc.gov/ddes/compplan/ CPP-current.pdf>

For sending site owners to find buyers (at receiving sites), the King County Department of Development and Environmental Services (DDES) works with the TDR program to announce potential receiving sites and opportunities for transfer transactions as they arise.

There is an economic concern that market-based mechanisms like this one incur transaction costs equal or outweigh the costs of purchasing the development rights and/or the property outright. However, as described by Mark Sollito, King County's TDR program director, "There is no truth to the notion that TDR is more expensive than outright acquisition - the Issaquah transaction is probably the best example. It is relevant that it is complex..... if you have a boatload of money, you can just go buy it, but the reality of 2004 is that public money is schwanking.....[it is] more and more difficult" to purchase or preserve property without a tool such as TDR (Sollitto 2004).

Michelle Conner, Vice President of Conservation, Cascade Lands Conservancy, notes "The way you're going to get a compelling TDR will be facilitation in very specific land use transactions" and this method has been "under utilized". She believes that if "we leave the [TDR] market to its own devices, its too weak. But if you facilitate, it's viable". Its success largely depends on implementation (Conner 2004).

3.1.12. Wastewater (Biosolids) Program

The biosolids program provides for a **collaborative trade-based mechanism** to help protect working forestlands in King County. Specific revenue streams are not the result, rather the benefit is the continued management and protection of the forest itself (vs. revenues for land acquisition). Under this program, forestry managers consume fertilizers and distribution systems for their use. King County Wastewater Treatment Division supplies, treats, deposits, and manages waste "biosolids." Opportunity for trade is established and coordinated through forest owners (initially Weyerhaeuser) and King County Wastewater Treatment. Savings to the forest owner comes from decreased cost in purchase and distribution of fertilizer. Savings to the utility comes from management of biosolids (Konigsmark 2004).

In 1995, King County transferred the title of existing forestland parcels to WA State DNR at minimal cost to DNR. WA State DNR then manages those lands in forestry, still utilizing the biosolids program. Harvest revenues are then shared with 60% going back to King County's biosolids program to repay acquisition costs, fund program operations, and fund restoration projects; 15% to King County's general fund (replacing lost property taxes), 25% to WA DNR for continued forest management. Purchases since 1995 total 5,919 acres. Over 25,000 tons have been applied to Weyerhaeuser lands each year since 1995. The contract was renewed in 2001. "The county gets new land protected as permanent public working forestlands, DNR gets more acreage to manage and a 25% fee for doing so, and the public gets forestland preserved. Everybody wins," says Ken Konigsmark, Trustee with Mountains To Sound Greenway, a non profit that help create the program (Konigsmark 2003)¹⁰.

¹⁰ The biosolids contract was preserved following Weyerhaeuser's sale of the Snoqualmie Tree Farm to Hancock Insurance.

3.1.13. Other

Additional financing mechanisms and strategies have been used within King County watersheds:

Waterway 2000 - Waterway 2000 Funds was approved in 1993 and was administered through 1997. It established a system of interlocking greenways in priority sub-basins (17 identified), including the Middle Fork Snoqualmie River Basin (within the Snoqualmie/Skykomish). Over 1,600 acres were permanently preserved and over 300 acres added to the PBRs current use taxation program. Waterways 2000 was a partnership between the King County Park System, the King County Department of Natural Resources, and the King County Department of Construction and Facilities Management. A variety of measures were utilized in concert to purchase conservation easements, acquire land in fee, and encourage landowner participation in the Public Benefit Rating System.¹¹ Waterway 2000 Funds came from the 1989 Open Space Bond, CFT revenues, and REET revenues (King County 1995) (KCWLR 2003).

Four to One - The 4 to 1 program allowed a large developer to apply and receive a permit for 1 acre of much higher density (zoned urban) in exchange for roughly 4-acres of their property donated as permanent park. Issaquah Highlands is one example of success where King County was given 1,250 acres for open space (Grand Ridge Park), Issaquah received 275 acres in the urban area for development, a mixed-use urban village was developed on a total of 352 acres, and RA-5 was allowed on an additional 185 acres. The tradeoff was for density and flexibility. Another “Planned Urban Village” was arranged in Tallus, where 150 acres were developed and 650 were kept in forest (Konigsmark 2004) (KCOE 1997).

Open Space Bond - One final example is the last Open Space Bond issued by King County in 1989. Debt service is still being paid on this bond. This \$117,640,000 bond was authorized by King County voters to provide funds for the acquisition, development, renovation and improvement of public green spaces, green belts, open space, parks and trails in King County. These funds helped protect over 5,000 acres of open space and tens of miles of regional trails. Specific goals included preserving wildlife, enhancing scenic vistas, providing access to the water and open space, and providing trail connections between virtually all the cities in King County to a regional trail system and trails within the suburban cities and unincorporated areas of King County (KC Ordinance 9071). This made forestlands in the Snoqualmie/Skykomish eligible, though it did not target them by any means. It did however provide substantial funding for WRIA 8 (the Cedar River Watershed). Prior to the 1989 Open Space Bond, King County voters supported the 1968 “Forward Thrust Bond Initiative,” for which debt service is complete (KCWLR 2003) (KCOE 1999).

3.1.14 Funds Expended and Acquisitions: 1970-1999

Table 1 provides a straightforward visual of how much has been spent on permanent acquisition of watershed lands in King County and within the Snoqualmie/Skykomish:

¹¹ The Public Benefit Rating System is a property tax incentive system for landowners that encourages conservation of land and maintaining land in working forest condition.

Table 1

Natural Lands Acquisition in King County-Since 1970 (3/1/99)			
Programs	Amount	Acres Acquired	Funds Expended
COUNTYWIDE	Total	<u>29,263</u>	<u>273,999,102</u>
	Riparian	9,414	123,002,445
	Watershed	19,849	150,996,657
KING COUNTY	Total	<u>26,542</u>	<u>162,769,776</u>
	Riparian	7,660	71,665,774
	Watershed	18,882	91,104,002
CITIES	Total	<u>2,721</u>	<u>111,229,326</u>
	Riparian	1,753	51,336,671
	Watershed	967	59,892,655
ACQUISITIONS BY WATERSHED			
Cedar/Lk. Washington	Total	<u>7,166</u>	<u>138,108,603</u>
	Riparian	4,548	60,849,016
	Watershed	2,618	77,259,587
Green River	Total	<u>7,623</u>	<u>54,156,737</u>
	Riparian	2,117	20,768,136
	Watershed	5,506	33,388,601
Puget Sound	Total	<u>1,793</u>	<u>37,703,838</u>
	Riparian	913	27,055,848
	Watershed	880	10,647,990
Snoqualmie	Total	<u>10,779</u>	<u>36,797,895</u>
	Riparian	1,836	14,329,445
	Watershed	8,943	22,468,450
White	Total	<u>1,902</u>	<u>7,232,029</u>
	Riparian		
	Watershed	1,902	7,232,029

(KCOE 1999)

3.2. Ongoing Discussions of Funding Options

The identification of financial mechanisms is ongoing for watersheds – both at the county and state level. Ideas, priorities, and leadership are dynamic.

Legal limits and apprehension of political opposition make increases in revenue streams, especially from taxes or fees, questionable to King County decision makers. In seeking finance options for the Snoqualmie/Skykomish specifically, planners must work within the greater King County (and Snohomish County) financial jurisdiction. This is especially so considering the tax base within the Snoqualmie/Skykomish is not considered so substantial that it could generate the kind of revenues that would be needed for the stewardship investments that have been prioritized within the watershed. Therefore, a county-wide or region-wide reach is a priority where funding strategies are concerned.

Increases in property or sales taxes are a very common and successful financial mechanism in leveraging dollars for watershed protection – for communities in urban, suburban and rural settings. Despite its repetitive use across the country, these are certainly not the only options open to King County. Chapter 7, 8 and 9, the essence of this report, reviews a wide range of financial lenses that King County and the Snoqualmie Watershed Forum might consider.

Section 3.3.1. and 3.3.2. describe two recent efforts that have analyzed this challenge, though not specifically from a Snoqualmie/Skykomish perspective.

3.3.1. Tri-City RNA funding analysis (2000)

Internally, King County is working hard to identify revenue options that can serve its Regional Needs Assessment (RNA) for watershed planning. An ESA Finance Group was created among King, Pierce, and Snohomish Counties and with due diligence, it set out to identify financial mechanisms that could be utilized to meet the RNA. The following analytical framework was considered by the ESA Finance Group in carrying out their charge:

Table 1

Analytic framework for RNA financial options	Existing funding authority	New funding authority¹²
Existing funding sources	<ul style="list-style-type: none"> • Existing fee and tax authority • Collection at King County level • Option for rate increases 	<ul style="list-style-type: none"> • New tax and fee authorities • Multi-county authority • No change in “ceilings” for taxes and fees • Option for rate increases
New funding sources	<ul style="list-style-type: none"> • Existing fee and tax authority • Collect new fees and/or taxes at county level • Option for supplementary funds from existing sources (such as county/multi-county) 	<ul style="list-style-type: none"> • New tax and fee authorities • Increases in “ceilings” as needed • Option for supplementary funds from existing sources (such as county/multi-county)

(KCESA-FG 2000)

Sources given primary or ongoing attention:

Table 2

Existing	New
<ul style="list-style-type: none"> • Conservation Futures Tax (raise, include restoration) • Conservation District (raise, shift) 	<ul style="list-style-type: none"> • Countywide levy lid lift • REET 3 – restricted to ESA purpose • Flood Control Zone District – rates, charges, or junior tax authority • Countywide excess levy • Council override of R-47 limits • Reallocation of current expense fund • Water or wastewater revenues (surcharges or tax for specific ESA purpose) • Sales tax (for specific ESA purpose)

(KCESA-FG 2000)

In considering existing revenues and new revenues, multiple scenarios could be identified, as demonstrated in the theoretical combination of Table 1 and Table 2. In 2000, the legal constraints and allowances for existing funding authorities, hypothetical (new) funding authorities, existing funding sources, and new funding sources were examined and circulated

¹² Authority to raise revenues for water related projects is detailed thoroughly in RCW 39.34.190.

amongst the ESA Finance Group and King County decision makers, and submitted to the King County Prosecuting Attorney's Office for review.¹³

3.3.2. Watershed Plan Implementation Committee

The Department of Ecology's Watershed Plan Implementation Committee reviewed several proposed approaches¹⁴ at the state level to generating additional revenues to augment existing funds for watersheds within watershed research inventory areas (i.e. WRIAs)s. These included:

- (1) SAFE Water Initiative (2002) proposing \$1 billion in state bonds backed by a *surcharge on water utility bills and power bills*;
- (2) HB 1133 and SB 5420 (1997) proposing \$258 million in general obligation bonds backed by *general revenues*, or other sources to be determined by the Legislature;
- (3) Initiative 769 and HB 2147 (2000) proposing \$1 billion in state bonds backed by a statewide *increase in sales tax*;
- (4) A proposal advanced by a member of the Committee, for *consumption-based fees* on all water users statewide. The proposal projected revenues of approximately \$33 million per year.

The Committee recommended to the Legislature that they enact a new revenue program to generate substantial funds for water-related infrastructure projects, as well as watershed management programs. However, no proposals or specific revenue sources were endorsed by the Committee. In conclusion the committee did specifically recommend that regardless of the final determination of revenue source, "funding should be directed to a dedicated account¹⁵ for carrying out eligible water-resource projects and programs," (WADoE-WPIC 2002). As an example, New York State permanently enacted an Environmental Protection Fund, as part of its 1993 Environmental Protection Act. This fund has grown four-fold from \$31.5 million in appropriations in 1994, to its 2002 funding level of \$125 Million (NYS 2002). Revenues dedicated to the fund include a portion of the real estate transfer tax, refinancing of state and public authority debt, sale or lease of State owned underwater lands, and revenues from their conservation license plate (see Chapter 9 and Appendix A).

The committee made additional recommendations to the Legislature that were relevant to the funding needs of WRIAs. Those recommendations relevant to King County and which King County can consider in its own local funding programs include following excerpts:

- The Legislature should include the Committee's list of principles for funding (such principles included fairness and equity, direct nexus to use, practical collection mechanism, and political neutrality).
- The Legislature should expand the grant program in Chapter 90.82.040 RCW to provide *matching grants* of at least 10 percent, but no greater than 25 percent, for plan implementation. The State grants should phase out over a five-year period.
- The Legislature should consider *amending the Interlocal Coordination Act*, to allow watershed-based coordination and funding or collaborative payoff of bonds for capital facilities.

¹³ Existing statutory authorities reviewed were: RCW 35.58, RCW 36.89, and RCW 86.15.

¹⁴ This proposal was not endorsed by the Committee as a whole.

¹⁵ The WSTSC is referenced in Section 4.2.1. saying the state should "avoid dedicated taxes that bear no clear relationship between taxpayers and those who receive benefits."

- The Legislature should consider creating a new option in State law, for local areas to form a “*Water Resources District*.” This district could be created at the *option of voters* in a watershed, and would have taxing authority to raise money for implementation of watershed plans (see Appendix L for more details).
 - The Legislature should consider *authorizing local governments* to impose a *new source of revenue linked to water resources* if approved by local voters.
 - The Legislature should consider how funding requirements for environmental mitigation of major projects, including transportation projects, could be applied to implementation of watershed plans to maximize environmental benefits at the watershed level.
- (WADoE-WPIC 2002)

3.4. Note on Overlap

In identifying funding sources for watershed protection activities¹⁶, a comprehensive approach is essential and it must be realized that any one financial mechanism identified will not likely be utilized for one particular activity *unless it is specifically mandated and created for that purpose*. A large number of those interviewed emphasized this overlap and the need to leverage revenues through strategic financial planning.

Carole Richmond, Associate Director for Washington’s Interagency Committee, comments “Unless there is a fund specifically designed for working forests – then working forests must compete” with projects that do have specific funding packages. In other words, working forests specifically must package with something else (Richmond 2004).

Tim Raphael, Northwest Conservation Finance Director for the Trust for Public Lands, comments that it comes down to figuring out “what is the organizing principle” and messaging. Leveraging revenues from the public for working forestlands would be a really tough sell and the communications strategy “needs to be about the realities of water quality and salmon” even when sustainable forestry remains an activity on forestlands. In essence, Raphael believes “water quality is where it’s at” and the Trust for Public Lands is moving on this message around the country helping to identify this nexus (connection) with communities that benefit (Raphael 2004).

To date, King County has focused extensively on funding for salmon, whereas water quality could be better packaged within that effort and help to leverage more funding. “The problem is not having the [revenue] stream – the problem is not having enough within the stream” and matching funding with planning, notes Raphael (Raphael 2004).

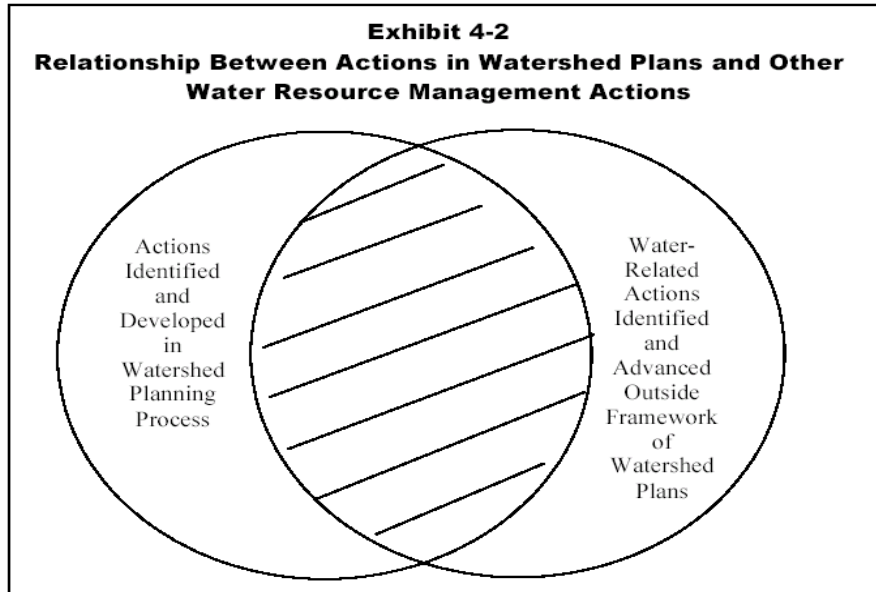
Funding for management within this broad context of water supply, water quality, and habitat projects, that are already in progress throughout the county, can and do create overlap of priorities and activities within the watershed. As recognized by the Department of Ecology’s Watershed Plan Implementation Committee:

Cities, counties, special districts, tribes and private sector organizations are continually planning for the future; funding and building new water-resource infrastructure; repairing or replacing existing infrastructure; or implementing programs to manage water resources, land use and environmental quality. In many cases, watershed plans will acknowledge and recommend these same projects and

¹⁶ Activities are generally defined as restoration, assistance with private land stewardship, acquisition of land in fee, or acquisition of development rights.

programs. Watershed plans may also identify new projects and programs, or recommend modifications to those already planned.
(P4WP-IC, 2002, section 4)

The Department of Ecology’s Watershed Plan Implementation Committee has prepared a good visual of this:



(WADoE-WPIC 2002)

In addition to those that overlap, there are also those activities that do not overlap (see Section 2.3.4.). This is one reason why the Salmon Recovery Funding Board was created – to be more efficient in reviewing recovery projects and allocation of funding. Recommendations for how the state should consider funding watershed projects is detailed in the Committee’s Watershed Plan¹⁷ (WADoE-WPIC 2002).

3.5. Conclusions from Chapter 3

- King County has already established multiple mechanisms for generating revenue for watersheds
- These include tax-based, fee-based, incentive-based, and market-based categories
- Watershed planners at the State and King County level are looking at and analyzing additional financial options
- This report can augment that process by exploring mechanisms utilized in regions other than King County and Washington that could potentially be applied within King County and which are applicable to Snoqualmie/Skykomish.

¹⁷ Note: The committee observed that the various state funds listed for watershed planning are more oriented towards capital projects than towards programmatic activities.

4. KING COUNTY

Financial planners for watersheds within King County must navigate through jurisdictional and legal challenges in addition to the challenges facing the watershed. Challenges that will directly and indirectly impact the financing of watershed protection activities include: Legal limits, political climate towards taxes and fees, Comprehensive Planning, the economy, and a dynamic population. They service as a series of lenses through which mechanisms identified can be evaluated and sorted (see Chapter 8 for sorting details).

4.1. Legal Limits

Legal limits and apprehension of political opposition make increases in revenue streams, especially from taxes or fees, questionable to King County decision makers. To leverage the kind of funds needed, Snoqualmie/Skykomish planners must work within the greater King County (and Snohomish County) financial jurisdiction. This is because the tax base of Snoqualmie/Skykomish is not considered substantial enough to generate the kind of revenues that would be needed for the stewardship investments that have been prioritized within the watershed. Therefore, a county-wide or region-wide reach is a priority where funding strategies are concerned.

Following the ESA Finance Group’s efforts to identify revenue options that can serve the Regional Needs Assessment of King, Snohomish, and Pierce Counties (see Section 3.2), they conducted a statutory analysis of the funding scenarios identified. It was then submitted to the King County Prosecuting Attorney’s Office for review.¹⁸

The following briefing is only an introduction to the legal constraints King County faces in assessing financial mechanisms, based on (a) the ESA Finance Group’s statutory analysis and (b) the four legal restrictions affecting its allowable reach with property taxes as stated by the King County Assessors Office:

4.1.1. Authority

- “Counties have broad authority to provide for sewerage systems (RCW 36.94, RCW 35.58), storm water control (RCW 36.89), and flood control (RCW 86.12, 86.13, 86.15). Control of water pollution is an express purpose under RCW 35.58. Protection of water quality is an incidental purpose under the storm water and flood control statutes,” (KCESA-FG 2000)
- None of the above statutes “expressly provides authorization for restoration of fish habitat or meeting ESA mandates.” However, these are cross references to “preservation of natural resources” (RCW 36.89) and “protection of quality of water resources” (RCW 86.15), for example. None of the above statutes “provide a perfect vehicle as a funding mechanism for projects whose primary purpose is to restore fish habitat or to meet ESA mandates,” (KCESA-FG 2000).

¹⁸ Existing statutory authorities reviewed were: RCW 35.58, RCW 36.89, and RCW 86.15.

- King County can reorganize into a “countywide flood control zone district, with sub-zones for specific watersheds (RCW 86.15),” so long as they disband existing flood control zone districts for the reorganization. (KCESA-FG 2000)

4.1.2. Taxes & Fees

- *Authority for rates and charges*: “Funding mechanisms for each statutory authority include rates and charges and options for issuing revenue bonds. . . . Standards for setting those rates and charges depend on the particular statute.” (KCESA-FG 2000)
- *Voter approval*: Those “rates and charges for water quality, storm water control, and flood control do not require voter approval.” They may provide “a rational basis for funding certain RNA projects.” (KCESA-FG 2000)
- *Special Assessments*: “Special assessments are authorized under each of the four statutory authorities.” (KCESA-FG 2000)
- *Special Taxing Authority*: The flood control zone district (RCW 86.15) “is an independent taxing authority authorized to levy up to \$0.50/\$1000 of assessed value.” (KCESA-FG 2000)
- *1% constitutional limit*: The total regular property tax levy is limited to a maximum of \$10.00 per \$1,000 of the market value of property (or 1%). Excluded from this \$10 limit are levies for ports and public utility districts (RCW 84.52.050).
- *Statutory maximum rates for districts*: A maximum aggregate rate of \$5.90 per \$1,000 of assessed value (or 0.59%) is allowed for counties, cities, fire districts, library districts and certain other junior taxing districts (RCW 84.52.043).¹⁹
- *106% limit*: An increase in regular property taxes for most taxing districts is not to exceed 106%. It applies to the total amount of property tax for the district, not to individual properties. With majority voter approval, districts may raise the 106% limit within statutory and constitutional limits (RCW 84.55).
- *Excess levies*: Most districts can submit propositions for additional property tax levies to a vote of the people. They must be authorized by a 60% majority of the voters and such levies are not subject to any of the limitations described above.

(MSRC 2001)

This short list of legal issues that correspond to challenges or constraints faced by King County do not address Business and Operating taxes and other various selective sales taxes. This brief introduction demonstrates the need for a statutory analysis of any shifts or new additions to taxes or fees. It also indirectly demonstrates the attractiveness of market-based mechanisms, many of which do not require statutory approval.

4.2. Taxing Climate

4.2.1. Systemic Issues

King County ties with Pierce County for the second largest local sales taxes in the State at 2.3%. Of that, 1% is local/city taxes and 1.3% disbursed to the transportation and criminal justice system. Snohomish County has the largest (2.4%). The statewide average local sales/use tax rate is estimated to be 1.9%. These figures are in addition to the 6.5% state tax²⁰ (WDoR 2003).

¹⁹ Commons schools are an exception to this rule and are subject to the constitutional \$10 limit.

²⁰ These figures do not account for state-credited, local taxes that do not increase the tax rate paid by purchasers. Nor do they include limited-base local taxes (e.g., the 0.5% food/beverage tax in King County or hotel/motel taxes).

To look at this issue further, the Washington State Tax Structure Study Committee²¹ was created by statute to report to the Legislature on how well Washington's current tax system works and how it might be changed. The Committee evaluated Washington's tax system based on fairness, stability, adequacy and the effect of the tax system on Washington's economic vitality.

The Committee concluded that Washington's current tax system is "fundamentally inequitable to low- and middle-income people, unfair to many businesses, and subject to sharp fluctuations in revenue." The current structure is not set up for the increasingly service-based economy, while increases in the internet economy further limit the retail sales tax base.

The committee made over 12 recommendations to the Legislature. A selection of those most relevant to this report includes:

- Adopt a subtraction method business value added tax to replace the business and occupation (B&O) tax²².
- Adopt a flat rate personal income tax to reduce the state sales tax rate and eliminate the state property tax, while sharing all or part of the state property tax relief with *local* governments and/or local schools.
- Avoid dedicated taxes that bear no clear relationship between taxpayers and those who receive benefits.
- Streamline the sales tax to enact uniform sales tax definitions and simplify taxes overall, with the possibility of subjecting remote sales (such as e-commerce) to state tax requirements. A remote sales tax could potentially help maintain the retail sales tax base.
- Exempt construction labor from sales tax.
- Continue to impose an estate tax in the amounts of the state credit allowed under prior federal law.

(WSTSC 2002)

To what degree the Washington Legislature adopts any or all of the committee's recommendations are merely conjecture, but future systemic tax policy changes at the State level are certainly possible though not imminent.

4.2.2. Public Receptivity & Initiatives

According to the Department of Ecology's Watershed Implementation Committee, voters in local areas throughout Washington State are increasingly unreceptive to imposing new fees or taxes for government endeavors. They predict that "it is unlikely that funding to implement watershed plans could be raised entirely at the local level." However, they remain optimistic for locally supported funding strategies given a "*clear nexus between watershed protection benefits and their related costs*" (WADoE-WPIC 2002). This will require due diligence and coordination

²¹ The majority of the Committee members were professors specializing in public finance, tax economics, accounting, and tax law.

²² The WSTSC report uses an example of the impact of value added tax to timber and wood products. Projecting the resulting incentive structure to the timber economy, especially within the Snoqualmie/Skykomish, is complex in the least. A value-added tax would raise the tax on raw materials exiting the forest, and lighten the tax on wood products at the retail level, making the tax more equitable along the supply chain (but heavier, than before, on forest landowners). This *could* result in an increase in value-added wood products that typically utilize higher quality wood, which is more likely to come from sustainably managed forests, neutralizing the burden effect.

between watershed planning units, lead agencies and local organizations involved in the implementation process of relative watershed plans (see Section 3.3. and 8.1.).

In addition, as a result of recent citizen initiatives, limitations have been placed on Washington counties in regards to maintaining or raising current rates. Rulings in court will largely determine the legitimacy and strength of these initiatives, but in the words of Scott Noble, King County Assessor:

“Our region is the 48th largest economy of the world, and our local government finance system supporting it will fundamentally change due to Initiative 747. The initiative basically minimizes reliance on property taxes, and in doing so will increase reliance on site-based sales taxes. This increased reliance is on top of Washington’s ranking as #1 in the United States for sales tax dependence,” (KCDA 2001).

Initiative 747 limited county increases in the property tax to 1%, despite inflation rates higher than 1%. This is expected to decrease the per capita revenues available to the county, despite increases in population growth (and service needs).

This reliance on sales taxes has specific consequences to land use, but in regards to public receptivity, it has created strong apprehension from County decision makers in raising taxes or fees, temporarily paralyzed by the fear of initiative backlash or lawsuits.

4.2.3. Land Use

Without adjusting for it, Washington’s current tax system could encourage following in California’s land-use footsteps²³ due to an increased degree of competition among local governments and a “fend for yourself” or “intergovernmental cannibalism” environment (KCDA 2001). This is because restricting property taxes increased the reliance on sales taxes.²⁴ In California, this increased governmental incentives and changes in land use regulations towards retail land uses, sprawl and “cash register communities” in the urban fringe and away from things like affordable housing and density based development (KCDA 2001) (Wassmer 2001). Though King County government maintains a strong ethic towards conservation (as is demonstrated by local initiatives, the recent Cascade Foothills Initiative, and the strengthening of the Critical Areas Ordinance), the economics of this shift are straightforward and awareness of it internally is critical to future planning.

4.3. Comprehensive Planning

Two key elements of comprehensive planning that impact financial mechanisms are the annexation of cities and the Critical Areas Ordinance.

4.3.1. Annexation

The annexation of remaining urban unincorporated areas, or “urban islands,” within King County is supported in the revised Comprehensive Plan. No major changes to the urban growth boundary were made, though nine land use and area zoning amendments were proposed, none of which address rural forestlands directly. Annexation of cities from outside the Urban Growth Boundary to within the Urban Growth Area raises strategic issues for financing watersheds, including the

²³ The change in reliance from property tax to sales tax happened 20 years ago in California.

²⁴ Especially in Washington because no income tax exists.

Snoqualmie/Skykomish. Two immediate issues it are (A) Opportunities or threats for the Transfer Development Rights program, and (B) Opportunities or threats to current revenue streams that fund watershed protection and restoration activities.

4.3.1.1. *Transfer Development Rights (TDR) program*

As existing cities expand through annexation, TDR transactions will increasingly need arranged interlocal agreement. This is because before annexation, King County had the authority to arrange density transfers within its zoning code. This does not eliminate the opportunity of gains from trade that can occur from a transfer, but it could increase the costs and complexities of the transaction.

Alternatively, as more land is annexed to cities, cities might encourage commercial development on those lands because property tax revenues with commercial lands (property and B&O) is a more robust revenue source per square foot than residential. TDR transactions are more likely to take place for commercial development than for residential development, especially when scarce space is available and revenues are sought.

Speculating what cities will decide and *demand* for sending sites is not attempted in this report. It depends on a number of basics, including their interest in densification (e.g. zoning from R4 to R6²⁵), how they would like to achieve it, their desire for revenues, and whether the revised Comprehensive Plan zones for receiving sites (areas tagged as “green²⁶”) within areas those cities prefer their growth. Individual cities are likely to have additional criteria, as well. The updated 2004 Comprehensive Plan includes changes that should turn many “red” zones into “greens” allowing for an increase in receiving sites and potentially a greater market for TDR transactions.

No analyses have been done as to the available land for receiving sites and the counter supply of sending sites. It is speculated that there are far more sending sites available (relative to supply of receiving sites).
(Sollitto 2004)

4.3.1.1. *Budgeting*

Revenue forecasting will be difficult due to comprehensive planning and annexations (i.e. changing jurisdictions), though predictions of revenue, for each and every revenue source listed in Chapter 3, is not analyzed in this report. The FY2004 budget does request that the King County Executive identify vision and goals for every annexation, identify management responsibilities, submit implementation plans, and produce a *fiscal impact analysis* for King County Council, prior to releasing any reserve funds (KCC 2004).

In terms of the Conservation Futures Tax, one of the larger revenue sources for watershed planning, there should be no extensive changes caused by annexation because the collection of CFT occurs by county government on all property in the county. It gives a more stable, regional approach (Tieman 2004).

²⁵ “R4” is equivalent to four units per parcel; “R6” is equivalent to six units per parcel.

²⁶ The 2004 Comprehensive Plan categorizes “red” and “green” zones where development is allowed to densify by 50% from R4 to R6, for example. Green zones allow rezoning, whereas red zones do not.

Any service charges being used to fund the retirement of debt which may have directly benefited the annexed or incorporated area and customers will be allowed to continue, and hence, will not draw from watershed budgets elsewhere (KCAO 1993)..

Finally, the King County Auditor reported that the SWM Program has adequately estimated the reduction in revenues resulting from annexations and incorporations and has reduced its program level, expenditures, and staffing to accommodate these budget changes (KCAO 2002) .

4.3.2. Critical Areas Ordinance (CAO)

The CAO is the portion within the county’s comprehensive planning efforts that establishes land-use regulations – the action-based extension of the broad goals within King County’s Comprehensive Plan. The County Council is scheduled to finalize the updated CAO in Winter 2004, integrating a year of public comments (K.C.C. 21A.24).

CAO was designed to adhere to the Endangered Species Act, Clean Water Act, and King County’s revised Comprehensive Plan, while integrating best available science, and preventing the extension of the county’s UGB. County Executive Ron Sims believes the urban areas (i.e. the “rural annexation areas”) can accommodate all of the projected countywide growth through 2022. He sees the CAO as the "green wall against sprawl" – keeping growth and development within the urban unincorporated areas of the county (Modie 2004).

The CAO is ultimately designed to strengthen the protection for critical habitat and decrease the need for additional revenues to purchase easements or lands in fee for its protection. Required stewardship planning by landowners is designed to qualify property owners for reduced property assessment²⁷ and surface water management fees while assuring best management practices. Landowners will be given more flexibility to develop these plans instead of having to comply with uniform restrictions. Specific emphasis on best management practices is towards stricter stream buffer requirements (to 165 feet on each side from 100 feet) and mitigation requirements. Rural residents would be required to retain existing trees on at least 65 percent of their property and have no more than 10 percent covered by impervious surfaces (KCDDES 2004).

To the extent that forest landowners see the CAO as an additional drain to their timber management operations (i.e. an increase to their opportunity cost) or their fair-market value, it could drive landowners to selling their property, developing an allowable portion of it, or contesting the CAO in court. In addition, reduced property assessment will decrease revenues to King County, in which a revenue-neutral effect may occur.

4.3. Economy

There are three elements of the local economy most important to local funding for the Snoqualmie/Skykomish:

- (1) Vitality of the timber economy (or economy based on forest goods and services),
- (2) Vitality of the real estate market adjacent to Snoqualmie/Skykomish forestlands, and

²⁷ Whether the reduced property assessment will result in lower or equivalent assessments to that which the PBRS provides is unknown.

- (3) Competing economies or labor markets within commuting distances of Snoqualmie/Skykomish forestlands.

These elements effect funding for the Snoqualmie/Skykomish because their changing nature can help reveal what funding will be needed for forestlands – how much, what kind, and when. For example, the greater the opportunity cost of forestry, the greater the funding need for the Snoqualmie/Skykomish. On the contrary, the stronger the economy, the more viable and stable locally based revenues for watershed protection activities will be, though this could also create a greater opportunity cost! This is important because were financial mechanisms to be dependent on activities that planning aims to prevent, then financial strategies may go sour.

The Puget Sound Regional Council specializes in analyzing the economic health and patterns of the region. Economic projections of cities within the Snoqualmie/Skykomish can best be found at <http://www.psrc.org>. Projects on economic health of the local timber economy can best be found at the Rural Technology Initiative (<http://www.ruraltech.org/>).

4.4. Demographics

As noted in Section 2.3.3. the population is aging. Not only does this raise questions and concerns related to social service needs and land use, but this changing demographic also creates changes to expected revenue predictions. As of 2004, property tax exemptions will increase if your total annual income is \$30,000 or less and if a person is 61 years of age or older, or if a person is retired because of physical disability, or if you are a widow or widower at least 57 years of age whose spouse had an exemption at the time of his or her death (RCW 84.36.381).

In addition, the 2004 legislature raised the income limits for this exemption to \$35,000 (from \$30,000). In addition, adult living and Medicare insurance premiums were added as an allowable expense (and deduction) and the senior exemption qualification changed the requirement from “physical” disability to read more broadly as “disability” (KCDA 2004).

These allowances may make it easier for seniors to hold onto their forestland, but it also alters the revenue base with which King County can draw from for county services and watershed projects.

4.5. Conclusions from Chapter 4

- Prediction of changes to revenues, within the context of this report, will not be attempted due to ongoing changes within the county
- Regardless of specific predictions, these factors will influence the sorting and criteria-based mechanism selection process and should be recognized
- The Snoqualmie Watershed Forum must work within this King County context in order to use county-wide resources to protect one of multiple watersheds within the county

5. SNOQUALMIE/SKYKOMISH WATERSHED: A BIO

The Snoqualmie/Skykomish is dependent on King County for its management, financing, and planning. However, the Snoqualmie/Skykomish has its own unique characteristics that make it different than that of other watersheds in King County. These must be considered in identifying potential financial mechanisms for use in watershed protective activities.

5.1 WRIA Background

Ecological and economic indicators that “red-flagged” their resources have helped elevate watershed planning to the forefront of natural resource management in the county. The Endangered Species Act is one catalyst law that led Washington State to plan for watershed resources in a more comprehensive and cohesive manner.

As described by King County’s Department of Natural Resources:

In 1999, Chinook salmon and bull trout were listed as *threatened* under the Endangered Species Act (ESA). This federal law protects not only the fish themselves, but also the habitat the fish need to survive and prosper. Part of the response to the decline of salmon is planning how to protect and restore habitat that salmon depend on. Planning by watershed or Water Resource Inventory Area (WRIA) is increasingly understood to be an effective way to account for the specific needs of the different fish populations and habitats found in different parts of the county (KCDNR 2004).

At the state level, the Watershed Planning Act of 1998 and the Salmon Recovery Planning Act of 1999 serve as guidance for salmon habitat recovery and watershed planning.

5.1.1. Watershed Planning

WRIAs were identified subsequent to the Watershed Planning Act of 1998 (RCW 90.82)(WADoE-WPIC 2002). . The Act set a framework for addressing the State’s water resources, water quality issues as well as establishing instream flows and addressing salmon habitat needs. In addition to ecological needs, RCW 90.82 emphasizes:

- Local interests by placing planning in the hands of residents with planners;
- Long-term management of resources;
- The economic well being of the state’s citizenry and communities;
- Local governments’ orderly development of these watershed plans

WRIAs are essentially groupings of watersheds. King County is made up of four main WRIAs, though some of these WRIAs cross into the Counties of Pierce and Snohomish, as well. King County manages for six specific watersheds:

- Snoqualmie/Skykomish (within the Snohomish River Watershed) – WRIA 7
- Cedar River/Lake Washington – WRIA 8
- Sammamish – WRIA 8
- Green/Duwamish – WRIA 9
- Central Puget Sound – WRIA 9
- White/Puyallup River – WRIA 10

Figure 2 depicts the boundary of King County with the watersheds within it.

Figure 1



(KCDNR 2004)

5.1.2. Salmon Recovery Planning Act

Subsequent to the Salmon Recovery Planning Act of 1999 (RCW 77.85 RCW) a coordinated, interagency funding process was established (see Section 3.1.8.) and local and tribal leadership was incorporated in the identifying and sequencing of habitat projects to be funded by state agencies.

5.1.3. Governance

Washington State Department of Ecology (DoE) serves as the “headquarters” for watershed planning, in that individual WRIA units report planning efforts and subsequent status to the DoE. WRIA 7, within which lies the Snoqualmie/Skykomish watershed, is one such unit and shares a county jurisdiction between King and Snohomish County.

The initiating governments for developing the salmon recovery plan for WRIA 7, as recognized by the DoE are:

- City of Everett (Public Works)
- Tullalip Tribe
- Snohomish County
- King County
- Alderwood Water District

As noted in Section 2.3.2., the Snoqualmie Watershed Forum, shared by the cities of North Bend, Snoqualmie, Duvall, and Carnation through an arranged interlocal agreement, is conducting planning for the Snoqualmie/Skykomish watershed.

5.2. Financial Priorities

The Environmental Finance Center at Boise State University (Western EFC Division) breaks financial priorities for watershed funding into two categories:

- (1) Macrofinance: “watershed finance – regionally focused, non-point source,” and
- (2) Microfinance: “utility finance – community oriented, point-source.”

In this report, the primary financial concern for WRIA 7 collaborative salmon recovery actions, specifically in forested areas of the Snoqualmie/Skykomish watershed, is accessing or generating financial resources necessary to implement identified actions that meet ESA and King County Regional [WRIA] Needs Assessment goals as well as local goals. These actions, when pertaining to forestry issues, include maintaining the hydrologic and sedimentation process of the river and securing a certain percentage of the watershed in forests. To do this, initiating governments must have financial resources to conduct a combination of the following summarized actions:

- Purchase priority forest lands in fee for long-term protection of ecological integrity
- Purchase conservation easements or development rights on priority forestlands for long-term protection of ecological integrity,
- Lease critical habitat acreage from landowners to prevent harmful activities to habitat during the lease term
- Support forest landowners in using best management practices and restoring forestlands near critical, prioritized, salmonid habitat
- Monitor performance of land use policies, incentive programs, and conservation easement agreements to assure effective use of limited financial resources
- Balance tax incentives for best management with revenue needs to assure contractual agreements

Ken Konigsmark, Trustee of the successful Mountains to Sound Greenway notes that financial prioritizing and strategic success depends on “not allowing yourself to get mired down on typical battles” (referring to protecting working forests vs. preserving forests) and what is most important is “saving the landscape first; worrying about protection later” (referring to purchasing lands in-fee or purchasing development rights and easements) (Konigsmark 2004).

On the east coast, forestlands are facing similar, if not greater, pressures to develop or convert. As Chris Modisette, Director for the Southern New England Forestry Consortium, comments, “If you don’t own it, it’s not protected. But there is never enough money to buy it all,” they focus a large portion of their forest protection activities on securing development rights and conservation easements in trust.

Given these perspectives and the scope of challenges facing the Snoqualmie/Skykomish (see Chapter 2), the Snoqualmie Watershed Forum cannot rely on microfinance alone, but instead must direct considerable attention to macrofinance options for the watershed.

Chapter 3 details financial resources currently utilized; they span both Macro- and Microfinance categories.

5.3. Challenges facing Snoqualmie/Skykomish funding

There are specific finance challenges for the Snoqualmie/Skykomish watershed that the Snoqualmie Watershed Forum should either be aware or be reminded of.

5.3.1. Competition for funding

As mentioned in Chapter 1, competition for funding is tight. There are multiple areas where competition exists for watershed funding:

- Among other projects (watershed or non) within the relatively small tax base of the Snoqualmie/Skykomish,
- Among two other watersheds needing funding within King County,
- Among 62 other watersheds needing funding in Washington State²⁸,
- Among thousands of watersheds seeking funding from the Federal government,
- Among non-watershed specific projects that seeks funding for habitat enhancement, habitat recovery, or habitat protection projects at multiple levels in all environmental arenas (such as air, land, marine, freshwater),
- Among non-watershed, non-environmental projects that seek funding for the protection of other public goods – such as health care, transportation, education, etc.

Given this, the Snoqualmie/Skykomish is left with a *very* competitive market for funding. Previous estimates by the Watershed Plan Implementation Committee *anticipated that funding needs for effective water resource management* would greatly exceed the capacity of existing funds. However, ongoing planning for Chinook recovery may change this concern.

For further details on competition and proprietary information, see Chapter 6.

5.3.2. Development Pressure & Pricing

The Critical Areas Ordinance and permitting regulations will undoubtedly influence the pricing of development rights and forestland over the long term. Projections for funding needs will be complex and wide-ranging. Assuming that development pressure will never entirely subside, development right prices will either remain steady or rise. It is doubtful that they would fall, unless growth management regulations and eminent domain superceded “takings” laws. Therefore, prioritizing the purchase of development rights, sooner rather than later, would be the most efficient use of scarce funds. In turn, this increases the temporal importance of identifying financial mechanisms.

5.3.3. Acquisition & Easements

Prioritizing acquisitions and easements, as a means for protecting the watershed, also contain limitations in relation to funding of complimentary watershed protection activities, as presented in Table 3.

²⁸ As of 2002, 33 “Planning Units” had formed to develop plans for 42 of the State’s 62 WRIAs (P4WP-IC, 2002).

Table 3	Negative	Positive
Acquisition	<ul style="list-style-type: none"> • Acquiring lands is too costly to reasonably protect all resources • Reduces the amount of land on the tax rolls 	<ul style="list-style-type: none"> • Provides the most permanent protection of land • Could raise the value of nearby property, increasing tax rolls (see “Incentives & Balance” above) • Could reduce conflicts over conservation approaches since the public bears the cost.
Easements	<ul style="list-style-type: none"> • Monitoring, to adhere to conditions of easement, is required • May not protect land to the desired degree 	<ul style="list-style-type: none"> • More permanent than regulations • Landowners decide to protect their land and may benefit from tax incentives • Easements are cheaper than acquisition • Land is kept on the tax rolls • Buys time (i.e. maintain future option for acquisition)

(TPL 2004)

5.4. Conclusions from Chapter 5

- The watershed still has a relatively intact forest ecosystem from which multiple ecological benefits can be studied and potentially quantified for nexus oriented financial mechanisms (relative to other watersheds within King County).
- Because of the Snoqualmie/Skykomish condition and demographic, in relation to King County’s more populated watersheds, nexus-oriented financial mechanisms and mechanisms that incorporate education and awareness components should be a priority to help the Snoqualmie/Skykomish compete for funding
- Mechanisms that allow for the purchase of development rights, or purchase of conservation easements, should be emphasized because (1) it is an efficient use of scarce resources, (2) a shorter time horizon is needed in raising needed revenues, (3) time is of the essence and prices will only increase, and (4) a support structure for a local timber economy still exists within in the watershed.
- King County must work with multiple stakeholders to plan for the Snoqualmie/Skykomish while complying with state-wide directives

6. METHODS and LIMITATIONS

Identifying financial mechanisms that could be used for forest protection within watersheds involves the following sequence of steps:

- (1) Identification of general financial mechanisms for raising revenue
- (2) Of these, identify those that pertain to protecting natural resources
- (3) Of these, identify those that pertain to forest lands
- (4) Of these, distinguish those that are most applicable to King County and the Snoqualmie/Skykomish

Theorized financial mechanisms *and* existing mechanisms with relevant, in-use examples were sought.²⁹

6.1. Information Search

A variety of sources were utilized in searching for relevant financial mechanisms.

6.1.1. World Wide Web

The internet was a primary source of information for:

- Government documents, publications, and statistics
- Contact information of professionals within organizations or agencies working on watershed protection
- Academic publications
- Non-profit and conference reports

6.1.2. Personal Interviews

Professionals to personally interview or extract information from were identified by:

- Watershed and forestry professionals at King County³⁰
- Reviewing relevant conference attendee lists
- Identifying regions, within the United States, facing development or conversion of forests and then identifying professionals within organizations or agencies of those regions with goals to alleviate that threat
- References of references

Contact for interviews was initiated by sending qualitative questionnaires to identified professionals and following up with phone calls. Questionnaires were tailored to (a) contacts in the Pacific Northwest vs. those that were not, (b) contacts working for government (counties) vs. those that were not. Tailoring in questionnaires and adjustments in interviews were used for many reasons, two of which were (1) Watersheds in the Pacific Northwest are similar in ecosystem function, species diversity, population growth, and expanse than compared to, for

²⁹ Some mechanisms have been developed in theory or have been put into practice in very few scenarios or only in one style. That is to say – they are a financial mechanism in theory, but King County they may not be remotely realistic in the climate of King County.

³⁰ Sandra Kilroy, King County's Snoqualmie/Skykomish Coordinator was the primary contact at King County.

example, forests in the Southeast, and (2) Non-profit and private professionals were more responsive and willing to communicate on the topic than county professionals. Questionnaires included a brief bio of the project for which questions were asked. An example questions posed can be found in Appendix G. Over 100 questionnaires were emailed to county agencies within regions facing development or forest conversion pressures. Almost 100 questionnaires were sent to non-profit professionals working to alleviate that threat³¹. Rates of response from county agencies were very low. Rates of response from non-profits were satisfactory, and led to more targeted and responsive contacts.

Most often, scheduled times were arranged to allow for detailed discussion. **Appendix H** displays the names of professionals with whom in-person discussions occurred. Though questionnaires specifically geared the interviews towards *identification* of existing or theorized financial mechanisms and relevant examples of their use, additional, relevant themes emerged from the interviews:

- Financial mechanisms for protection of working forestland
- Examples of financial mechanisms in use³²
- Limitations and challenges in identifying such mechanisms
- Limitations and concerns in applying various mechanisms
- Varying conditions that make mechanisms applicable to some regions; obsolete to others
- References to other relevant resources
- Dependency on staple sources such as Forest Legacy Program or Land and Water Conservation Funds

This was an ongoing process due to the constant accumulation of references from ongoing communication.

6.1.3. Books, Reports, Official Documents

Two written resources provided substantial information for this report and merit special attention: Land Conservation Financing by McQueen and McMahan, produced by the Conservation Fund and the *EFAB/EFC Guidebook*, produced by the Environmental Finance Center in 1999 out of Boise State University. These two resources served as a solid base for general financing information that is and can be used for open space and purchasing easements or land in fee. They identified numerous examples, many of which are cited in this report.

Other written resources were used, in addition to these two, and are referenced and cited throughout this report.

6.2. Identification Process

In addition to the steps recognized above, the following considerations were also made over the course of the search:

- Innovation in finance mechanisms (i.e. novelty or uniqueness)
- Mechanisms used by county *and* by states, non-profits, and private companies

³¹ Questionnaires were also used to establish a connection for interviews.

³² Many examples provided are not listed in this report primarily because many of them are commonly used and have been used within King County. The emphasis in this report is on *innovative* financial mechanisms. However, traditional mechanisms are still recognized because they carry with them successful track record.

- Mechanisms used for financing protection of non-watershed lands – but that could be replicated for use within a forested watershed
- Mechanisms that may not be in use and may remain in theory, but may be applicable nevertheless

The greatest danger in innovation and thinking “outside the box” is that mechanisms identified may be more difficult to implement (or may be obsolete) for those most interested in using them. For instance, King County may not have the legal authority to use a particular financial mechanism, or the transaction costs may prohibit the mechanism’s cost-effectiveness, or the County’s constituency may not be ready to support such a mechanism (though county’s in Maine or Florida may have been). This danger is considered in more detail in “Limitations” below.

Though “innovation” was a priority in identifying mechanisms, there were obvious reoccurring trends amongst counties and states nationwide favoring sales tax and property tax increases for financing watersheds, open space, parks, and environmental protection. In addition, the East Coast has employed numerous measures to fund quickly diminishing natural areas because their development and fragmentation pressures are different. For instance, it is rare to find 200 acres of forest that isn’t already subdivided into 20 or 5 acre parcels. Despite this difference, it is not irrelevant to the West Coast because it is experience that King County can learn from, especially as development pressures strengthen.

Following the identification of numerous mechanisms, time was spent in determining what evaluation criteria and threshold criteria would be used for preparing a condensed version of mechanisms identified – those most useful to the Snoqualmie/Skykomish and King County (see Chapter 8). With time remaining, information was gathered to compose a preliminary assessment of the various mechanisms in the context of those criteria.

6.3. Limitations

Limitations in seeking innovative financial mechanisms that King County can utilize, in the short and long-term, include the following:

- *Funding is competitive and financial mechanisms may be considered “proprietary” or strategically concealed*³³ → Different financial mechanisms face different levels of competition and different forms of it. However, similarities do exist and the following examples should be considered in the context of all financial mechanisms – taxes, fees, markets/charity, cooperative arrangements, and especially grants:

Example [Taxes] → Regarding competition, assuming the public is supportive and willing to vote “yes” for a school levy to fund school reconstruction and vote “yes” for a general obligation bond to fund the purchase of open space, they may not be willing to vote “yes” to those tax increases simultaneously. The leaders for each project may feel equally strong that the timing for the project may be that year, possibly due to market interest rates or assessed need. In this case, the different projects are in competition with each other as to which the

³³ Governments are legally subject to public disclosure laws. However, to what extent those agencies feel they are bound by public disclosure laws on *ideas*, to what degree they are bound, how they respond to them, and what their transparency culture is varies among agencies and among employees within those agencies. Governments and agencies *are* strategic institutions.

public will fund and which may not be funded in that year. This isn't to say that they both may not be funded, but it is critical to assess political timing and competitive ballot measures when attempting to pass a new tax within any jurisdiction. Thus, competition is obscure when comparing two projects with inherently different outcomes (school reconstruction v. watershed protection) and somewhat obvious when comparing two projects with somewhat related outcomes (watershed protection [environment] v. Puget Sound mitigation [environment]).

Example [Fees] → Regarding proprietary, if an agency that regulates and funds projects for clean air plans to propose a vehicle registration fee to reduce SOV driving and emissions, and an agency that manages forests and projects to protect watersheds plans to propose a vehicle registration fee to fund the mitigation of carbon emissions through the purchasing of forests for carbon sequestration, the clean air agency may not want to share their concept with outside inquirers to prevent the hijacking of the potential idea, and vice versa.

Example [Markets] → Again, regarding proprietary, if an entity hopes to propose environmental license plates as a means for funding watershed protection (see Section 7.5.7.), but that entity recognizes the use of environmental license plates to fund other public goods (such as children's literacy, homeless, or pollution prevention) that entity may not be willing to disclose their financial mechanism to inquiries so as to avoid competition among other interested fundraisers.

This competitive and proprietary character of *innovative* financial mechanisms augments the identification challenge, at least when seeking information from private organizations, and explains one interviewee's comments:

“You are treading in an area where a lot of information is proprietary” or considered to be “information capital.” NGO's and counties are protective of their resources, there is competition even amongst complementary NGO's, and “there isn't a lot written” about this topic (anonymous, 2004).

- *Process for identification of financial mechanisms is limitless and time is a constraint* → In order to provide a meaningful list of financial mechanisms to Snoqualmie/Skykomish planners and King County, criteria was needed to relate the mechanisms to the Snoqualmie/Skykomish and King County, and information was gathered to assess the various mechanisms in the context of that criteria. This resulted in the formation of an “exit strategy” from the limitless search for mechanisms. Essentially, the exit strategy used was based on timing. Following an identified period of time (approximately 8 weeks), the search for mechanisms evolved into the search for information to evaluate those mechanisms.

- *Barriers exist to immediate utilization of financial mechanism identified* → Barriers to the implementation of various mechanisms, such as those mentioned above, must be considered in a detailed financial analysis of the preferred options. This report briefly describes considerations that must be made on each, but does not attempt to critically analyze each and every mechanism in full detail because of the quantity identified and the numerous considerations that are facing each (e.g. legal, political, economical). See Chapter 10 for more details on further analyses suggested.

• *Varying threats and opportunities face entities that employed various financial mechanisms* → How and why various entities came to use the various mechanisms they did is not reported, but could be pertinent information to understanding their success. In general, development pressures or pressures to log forested watersheds more intensively are assumed as the dominant factors leading to utilization of these financial mechanisms. However, additional factors are likely to have played a role:

- Support, initiation, or sponsorship of partnering entities,
- Community support or initiation,
- Market prices for lands financed,
- Conditions of lands financed,
- Conditions of the goods and services those lands were providing to the public.

See Chapter 10 for more details.

For full details on limitations of financial mechanisms themselves, see Section 7.5.

6.4. Conclusions from Chapter 6

- There are numerous resources available that can augment financial planning for the Snoqualmie/Skykomish.
- As threats to watersheds and scarcity of their benefits increase, so will efforts to seek innovative financial mechanisms for their protection.
- Though these efforts will increase the competition for that funding, they will also increase the options available, potentially raise awareness of watershed needs, and potentially result in a higher willingness to pay for watershed protection.
- Time spent in seeking mechanisms used by other entities was mutually exclusive with time spent identifying specific criteria and analyzing those mechanisms against those criteria.
- Multiple barriers exist to financial mechanisms. Clear identification of legal authority and priority barriers³⁴ prior to seeking mechanisms would be useful information for research future efficiency.

³⁴ “Priority barriers” are those that have no internal inertia to overcome.

7. PUBLIC FINANCE

This chapter provides the framework with which financial mechanisms for the Snoqualmie/Skykomish were conceived, organized, and distilled. The contents of this chapter, categories of revenue, options for finance, coordination of funds and limitations of general revenue sources, are all relative to general public finance. They are also important to consider in preparing for criteria based sorting of financial mechanisms compiled for Snoqualmie/Skykomish planners.

7.1 Introduction

There is no silver bullet to generating revenues. This is certainly the case for a public good like a watershed – a good that provides non-excludable and non-rival services for *everyone* within the watershed. If paying for the protection and maintenance of watersheds were as easy as using them and degrading them, there would be no need to seek out “innovative” financing for their protection. This preface is important because readers should understand that identifying financial mechanisms requires a comprehensive approach, and it is not likely that one mechanism will fulfill all funding needs. Rather, a combination of mechanisms will be necessary to couple with the multiple ecological services the Snoqualmie/Skykomish provides.

There are a few ways to conceptualize “innovative financing mechanisms for watersheds.” One would be in two forms: (1) They are designed, applied and developed for a specific purpose for specific projects, or (2) They are conventional mechanisms commonly used in other public or private sectors, but that have been adapted and applied to stimulate watershed protection and/or sustainable forestry (PROFOR 1999). Another conceptualization more closely adapted to watersheds is: (1) Mechanisms that raise revenues to put towards watershed protection activities, and/or (2) Mechanisms that influence a change in the behavior of watershed users, in favor of their protection, (3) Mechanisms that serve as self-funding education and awareness strategy components. In other words, the mechanisms may have concurrent goals but different strategies.

None of these are mutually exclusive, and this report does not discriminate between them. The “innovation” is largely required because of the persisting challenge of environmental externalities related to private (and public) natural resource management, and the increasing difficulty of raising public revenue (i.e. borrowing, high real interest rates, stringent fiscal constraints, and the high cost of capital). So what is “innovation” exactly? This report considers “innovation” to be that which is unique, creative, and resourceful. However, this report also does not discriminate against mechanisms that are not new, but have had a successful track record.

Many local and state public authorities are increasingly attracted to additional private finance and reexamining and revising traditional public sector pricing policies to internalize costs that have typically been externalized. Issues of landowner equity, intergenerational equity, legality, ongoing management and policy outcomes, and flexibility are considered in order to develop robust financing mechanisms that achieve goal-oriented outcomes (vs. perverse and unintended

outcomes). With this, public authorities have been encouraged to “demonstrate more clearly the nexus between the benefits that flow from new infrastructure and the incidence of cost,” (Kirwin 1989). King County has done a good job of this over the past decade (see Chapter 3), and as interviews indicated, it has been a model to others. However, the additional revenue-need remains and thus, due diligence is applied in seeking innovation.

To do this, the SWOT technique is loosely applied to the mechanism search. “SWOT” stands for: strengths, weaknesses, opportunities, and threats. In Chapter 2-6, Snoqualmie/Skykomish current status and current threats were examined. Section 6.2 examined the services and opportunities that the Snoqualmie/Skykomish provides. Chapter 7 examines the strengths and weaknesses of revenue categories.

7.2. Categories of revenue

Potential financial mechanisms useful to directing financial resources to watershed protection either raise or preserve revenues and their use can be multipurpose. Expanding on Section 7.1, the various mechanisms categorized below and identified in Chapter 8 assume one or more of the following characteristics:

- (1) Mechanisms more suitable to raising revenues to put towards watershed protection activities,
 - a. Large, stable revenue sources ideal for land-related goals such as purchase land in-fee,
 - b. Smaller, ongoing operating functions such as personnel, monitoring, and technical assistance
- (2) Mechanisms more suitable to changing a behavior of watershed users, in favor of their protection (which may result in collection of less revenue).
- (3) Mechanisms more suitable as self-funding education and awareness funding strategy components.

These mechanisms are broken into five main categories in this report: Taxes, Fees/Charges, Revenue Recapture, Market/Voluntary, and Statutory. This section highlights their general use when applied to the environment and some of their broad strengths and weaknesses, considering King County and the Snoqualmie/Skykomish. Which sub-category they are in largely depends on the mechanisms design and revenue potential.

7.2.1. Taxes

Income, property, and sales taxes are the broadest of categories with which to consider taxes. Though individual income taxes are not charged in Washington (see Section 4.2), business and operations taxes (i.e. B&O) are collected from companies (a form of “income” taxes).

Key differences between the base for these tax ratings are as follows:

- *Property* – Tax based on a percentage of assessed value. Assessed value can vary with use (incentives exist).³⁵
- *Sales and Use* – Tax based on a percentage of commodity value or a flat rate per transaction.
- *B&O (“income”)* – Tax based on a percent of the gross revenues of a corporation.

³⁵ **Appendix D** for more details on King County’s tax incentive structure under the Public Benefit Rating System.

Strengths:

- They typically have a broader revenue base and thus are capable of generating high revenues at relatively low rates.
- Dedicating a surcharge or a percentage of an existing tax to watershed activities involves little additional administrative costs (especially when systems for this are already established – see Chapter 3).
- They can be used as a temporary surcharge when local support is high.

Weaknesses:

- Public perception of new or increased taxes can hinder or reverse their passage (see Chapter 4).
- Taxes are typically used for general budgetary support, rather than being dedicated to particular programs.³⁶
- Constitutional or statutory limitations may exist on dedication of taxes.
- Depending on the type, some taxes are inappropriate because of the need for predictable revenue annually.
- Tax bases fluctuate over time.
- General property, B&O, and sales taxes usually only have an indirect relationship between the charge and the use of funds – resulting in a poor nexus and poor cost-benefit relationship.
- Raising or creating taxes is a complex governmental process, most of which can be controversial

Key Considerations:

The new, increased or dedicated tax is only the first step in the legal process. The design of the tax must take into account the collection, possible circumvention, and possible diversion of funds – over time. Dedication can be made directly to the specific purchase of easements on a series of forestlands (e.g. Rural Forest District), or indirectly as a source of bond repayment for one large purchase (e.g. Snoqualmie Tree Farm) ((EFC 1999). The success of bonds is heavily reliant on the credit rating of the issuing agency and on the stability of the revenue source (in this case, taxes). See Section 4.2. and **Appendix I** for more details.

7.2.2. Fees & Charges

“Fees” and “charges” are considered to be the same tool within this report. They are based on services rendered or benefits to be received. They establish a link between the demand for services and the cost of providing them. For example, the cost of connecting residents or businesses to the eco-services and benefits of watersheds, such as water and air quality, requires maintenance of the watershed, permitting and monitoring changes to the watershed to prevent damage, connecting people to those services and benefits, etc. Fees can be thought of in three ways: administrative (service), activity based, and utility based.

³⁶ In recent years, levy tax surcharges have typically been used by smaller localities and dedicated to a specific environmental use.

Strengths:

- Matching service costs to service recipients can be the most equitable of mechanisms, assuming fees are well structured. It creates a close cost-benefit relationship and potentially a nexus with a watershed eco-good or service.
- They help eliminate subsidies, which can then free up existing revenues for other government services (assuming taxes aren't reduced because of the fee replacement).
 - They help reduce the frequency of free riders, assuming fees adjust for volume of use.
 - If carefully adjusted (based on user-ship demographics), they can be equitable.
 - If collected in already existing billing cycles, their collection can be less costly.
 - They can be used cover expenses related to anticipated watershed problems in the future.

Weaknesses:

- The revenue base is limited by who is being serviced and charged.
- Statutes and ordinances limit fees to the cost of providing the service. Determining that cost may be expensive, technically infeasible, and time consuming.
- Activity and utility fees may require voter approval, and voters may defeat an increase.
- If localities are accustomed to subsidized rates, imposing new or increased fees may be politically challenging.

(EFC 1999)

Key Considerations:

“Full Cost Pricing” has become a more popular practice among municipal utility providers in the past decade. Seattle Public Utilities is presently considering how best to integrate full-cost pricing into their operations – a challenging undertaking for a utility that manages a watershed for water quality (vs. managing a treatment facility). As noted above, determining the cost of the eco-benefit or service is technically challenging, which is likely to result in an expensive process. Impact fee and permitting processes may dip into revenues that originally were intended for on-the-ground watershed protection activities. Permitting agencies need to continue to ensure compliance with permit and consultation requirements but work in earnest to identify ways to reduce the costly and time-consuming efforts necessary to prove compliance³⁷ (Baker 2004).

Full-costing may also include high uncertainties, resulting in an increase in rates for uncertainty adjustment. Sophisticated rate structures (e.g. ascending block rates) and billing mechanisms could accompany and augment fees to integrate the various funding principles described in Chapter 8. Linking capital and operating budgets in the rate structure is another challenge. Arguably the greatest challenge is defining the scope for the rate and how to incorporate the maintenance of broader eco-system attributes to the watershed, even when they are indirectly related (biodiversity of the region, cumulative effects, etc.).

7.2.3. Recapturing Revenues

The category “recapturing revenues” could also be called “methods for lowering costs.” This category is not typically considered a financial mechanism to “raise” revenues, but it most certainly creates access to previously foregone revenues. Thus, it is included as its own category.

³⁷ The revised CAO was designed to alleviate some of this burden.

Strengths:

- Operating more efficiently is always looked upon favorably by the public.
- Some mechanisms to recapture revenue *may not* require changes in statute or ordinance.

Weaknesses:

- Some mechanisms *may* require changes in statute or ordinance, to overcome policy barriers and constraints that create bureaucratic inefficiencies (e.g. CAO).
- Savings in revenues may not necessarily be considered available revenue for prioritized projects, unless the undertaking was specifically targeted to raise revenues for that purpose.
- Savings may only be temporary, unless the mechanism used is sustainable.
- Internal departmental adjustment may be required and may face resistance.

Key Considerations: Financial drains on revenue sources for which a mechanism is not specifically identified but should be mentioned is mistrust between landowners, the public, and the agency. Mistrust leads to serious communication barriers about priority behavior, incentives, project implementation and opportunities for collaboration.

7.2.4. Markets and Charity

Markets- and charity-based mechanisms are those that can “sell” and extract a contribution for the protection of watershed eco-goods and services on a voluntary basis from individuals or businesses.

Markets and charitable contributions are combined in one category for two reasons:

- (1) Markets and charity are both voluntary-based. There are no requirements that someone purchase a good or service in a voluntary market.
- (2) It is difficult to distinguish between charitable contributions towards eco-goods and services and market-based payments for eco-goods and services. For instance, if one were to “adopt a stream” by making a voluntary contribution towards its maintenance and protection, they could either be (a) paying for offsetting his/her perceived impact on the stream, or (b) protecting the stream out of passion and charity (regardless of their perceived impact), or (c) a combination of (a) and (b).

Therefore, the various mechanisms in this report that are market-charity oriented include variations on both, so they are combined.

Strengths:

- In recent years, market-based mechanisms for environmental protection have been emphasized among diverse funders. One example of this is the U.S. Environmental Protection Agency’s “Watershed Initiative and Call for Nominations” in which the EPA has placed additional emphasis in its competitive grant program on market-based approaches to water quality protection and restoration (EPA 2004). (See mechanism #35 in **Appendix A** for more details).
- Likelihood that service costs are more closely matched to service recipients; a nexus with the watershed eco-good or service is possible.
- Creates an equitable funding source in that it is not regressive (see *weaknesses*)

- If offered or marketed as part of already existing billing cycles, their collection can be less costly.
- Pricing does not necessarily have to equal the cost of the good or service (it can be more than or less than).

Weaknesses:

- Concerns about the long-term robustness of market and charitable finance mechanisms are profound and political. For instance, some consider market-based mechanisms as a means of substituting allocations from the general fund rather than supplementing them.
- The non-excludable and non-rival nature of watersheds has typically been, and continues to be, one of the greatest barriers to integrating market mechanisms into payment for their protection.
- The problem of “free-riding” is frequent. In other words, though everyone benefits from watersheds, not everyone pays for protection activities in a market/charitable-based system. Some people benefit because of the voluntary actions of others.
- The revenue base is limited by who is capable and willing to pay; it is very vulnerable to macro-economic conditions.
- Collection of payment may create infeasible transaction costs.
- Marketing and education are key components and have associated costs.

Key Considerations:

The intense competition for funding within the public sector puts market-based mechanisms on the map as a strategy and legitimate mechanism. It is because of this that organizations such as the Pacific Forest Trust and U.S. Forest Capital have turned to market-based mechanisms, fees and voluntary contributions for forest protection. As a testament to this, Tom Tuchman³⁸, Director of U.S. Forest Capital states “My belief is that politically we’re going to have to come up with other mechanisms [because] federal appropriations haven’t kept up with it” and they are “not reliable over time.” He notes “tapping into the private market – that’s when things can really pop” (Tuchmann 2004).

Laurence A. Wayburn and Constance Best write “The more important these [market-based] sources become to an agency’s programs, the more entrepreneurial the agency must become, creating partnerships among other agencies, nonprofit private organizations, and private businesses to accomplish its goals,” (Best and Wayburn 2001).

However, market-based mechanisms do not present a panacea for watershed funding. The sustained motivation for voluntary expenditure depends largely on the perceived return on investment. Cost effectiveness is extremely important. An excellent resource emphasizing associated transaction costs of market-based mechanisms as they apply to watersheds is Landell-Mill’s Silver Bullet or Fools Gold (Landell-Mills and Porras 2002).

7.2.5. Statute and Planning

This category is similar to 6.3.3. Recapturing Revenues in that it is not typically considered a financial mechanism to “raise” revenues. Instead, these mechanisms encourage watershed protection activities that can reduce the expenditure of scarce funds, though they are not

³⁸ Tom Tuchmann notes that he helped with the original drafting of the USFS Forest Legacy Program.

specifically revenue focused. Rather, they are behavior focused, providing a direct relationship to watershed protection activities rather than semi-direct.

This category is also limited to those mechanisms that are not currently being employed by King County. Conceivably, this category could be expanded considerably to include a wide range of additional “smart-growth” planning tools. However, it is limited because it adds another dimension to this report and because current Critical Areas Ordinance redevelopment and Comprehensive Planning largely overlap with this category.

For example, conservation development designs are those, which by statute or incentive, conserve forestlands through density and open space design requirements for permitting. Conservation developments could also require a percent of open space preserved based on the size of development, thus discouraging large development. This mechanism, one among many statutory options, is not focused so much on directly raising or recapturing revenues as it is on protecting forestlands through planning and permitting design.

Another example is a statute requiring the county to “buy local” wood products when constructing buildings with public dollars. This would help raise the demand of local wood products and increase the competitiveness of local landowners (i.e. competing against other timber industries and against development). This is not focused so much on directly raising or recapturing revenues as it is on keeping forests in forestland production.

See mechanism # 36 and #37 in **Appendix A** for more details.

Strengths and weaknesses for this category are not listed because each “Statute and Planning” mechanism varies significantly.

7.3. Categories of finance

Again, watershed investment ranges from education, to technical assistance, to purchasing of land, and there are numerous financing options for these activities. Once a monetary estimate of need is established, and a revenue source has been chosen, the county must consider the financing strategy with which to collect and administer the revenues for watershed investment (for those mechanisms that directly raise revenue). This next stage is described in more detail in Section 9.3 and 10.2 as “Phase II.” However, this report focused mainly on Phase I (revenue sources). Section 7.3.1. and 7.3.2. introduces the options of bonds or loans, two common options used for Phase II financing of capital-intensive projects (purchasing conservation easements or lands in-fee).³⁹ **Appendix L** contains additional preliminary options. Further analysis is necessary to choose amongst the most prudent financial strategies. Choosing will largely depend on the volatility and the size of the revenue source.

Sections 7.3.1 and 7.3.2 are largely paraphrased extractions from the Environmental Finance Guidebook:

³⁹ Grants are another form, though not considered here.

7.3.1. Bonds

A bond is a written promise to repay borrowed money on a definite schedule, usually 15-30 years, at a fixed or variable rate of interest for the life of the bond (see 3.1.13). Bond debt service is repaid with a dedicated revenue stream such as fees or taxes. The length and interest of the bond largely depends on the security of the repayment, the repayment structure, the type of collateral used, and the type of bond. Most government bonds are tax-exempt, which redeems the bonds competitiveness because typically their interest rates are lower than private, non-exempt bonds. Some bonds require voter approval, despite projected payback. In addition, King County is limited in the amount of debt it can have and this is determined by state and local statute.

The Tax Reform Act of 1986 altered the tax-exempt status of some government-issued bonds. The Act reclassified bonds into two categories, governmental purpose bonds and private activity bonds. Governmental purpose bonds are automatically tax-exempt, but private activity bonds must meet certain criteria in order to be classified as tax-exempt. To qualify as a governmental purpose bond, a State or local government must use 90 percent of the bond proceeds, and no more than 10 percent of the debt service on the bond may be derived from or secured by a trade or business. If a bond does not meet these criteria, it is classified as a private activity bond. Private activity bonds that are issued for specific public-purpose projects-- such as water supply facilities--can be tax-exempt. However, each State is limited to issuing private activity bonds in the amount of \$50 per capita or \$150 million each year, whichever is greater.

Bonds provide financing for immediate capital needs. This can be beneficial in the face of rising land costs, development right costs, and/or pressing threats to conversion. However, getting to the point where bonds can be issued is not immediate and requires expert (and costly) legal and financial advice. Rather, certain types of bonds require voter approval. In addition, bonds increase the total cost of the project because of interest accumulated.

Note:* Within the Snoqualmie/Skykomish, the Evergreen Forest Trust (EFT), with U.S. Forest Capital, was working to purchase the Snoqualmie Tree Farm through the issuing of “tax-exempt,” private-activity bonds. Debt-service was to be paid with revenues from timber harvest. However, this project was placed on hold pending Congressional approval on whether forestry activities would be providing a public-good thus qualifying for “tax-exempt” status in bond issuance (see **Appendix L).

See **Appendix I**: List of Bonds.

(EFC 1999)

7.3.2. Loans

A loan is the temporary provision of a specific amount of funds up-front for an expenditure that must be repaid in a set amount time, typically with interest. Again, debt service is repaid with a dedicated revenue stream such as fees or taxes. Typically, larger and more financially secure customers receive the best interest rates, compared to smaller borrowers. Depending on King County’s credit rating, it would be considered a large borrower. Government loan programs provide capital funds to a select number of governments, non-profit organizations, and private businesses. Like grants, government loans are made with very specific goals in mind, often are

accompanied by specific mandates, may be less than 100% of total project costs, and are limited by legislatively appropriate dollar amounts. Unlike commercial loans, government loans often are made available at subsidized (lower than market) interest rates for projects that meet eligibility criteria, or may be interest-free, (e.g. some State Revolving Fund (SRF) loans). The Federal SRF program is clearly the largest government environmental infrastructure loan program available today. Direct federal loan programs are few in number.

Government loan programs frequently provide loans at lower interest rates than those that are available for commercial loan and bond financing. Loans involve fewer and lower transaction costs than bonds, and may be acquired without voter approval. Moreover, loans from different sources may be co-mingled (i.e. with grant funds). Loans requiring matching funds are highly leveraged. Both SRF and commercial loans are especially flexible as to application deadlines and cost overruns. These strengths are especially relative to watershed financing because of their timeliness and their flexibility.

Government loans are subject to the availability of approved funds and could face tough competition. Special restrictions and mandates apply. Small, disadvantaged communities may be unable to borrow even at zero interest. Governments could use bonds to create a capital fund from which short-term flexi-forest loans (low interest) or grants could be offered. Other than SRF loans, government refinancing and short-term loans are rare (EFC 1999).

For forestry, loans should have payback times tied to time of harvest. Because timber production yields cash infrequently, and even more so for sustainable timber production,⁴⁰ making loan payments during years without harvest income can be difficult. To alleviate this inconsistency, loans set up so part or all debt can be paid off at harvest time would help to synchronize income with expenses (Buckeye 2003).

See **Appendix J**: List of Loans

7.4. Finance Sharing

A very common theme throughout the research for this report is the partnerships that collectively established mechanisms for revenue in order to achieve large, long-term goals for watershed protection. This is especially true in the purchasing of land in-fee or large tracts of development rights. No examples were found where one agency single handedly prioritized the project, identified the revenue source, raised the money, arranged the disbursement and financing, and implemented the project. This is especially true at the county level.

Watershed protection efforts in King County have used finance sharing consistently. From Interlocal Agreements, to the Mountains to Sound Greenway, to the Forest Legacy Program, to CFT matching funds, to the WA Department of Natural Resources Trust Land Transfer Program – finance sharing is a common, effective, and fundamental tool that must be utilized in conjunction with every mechanism identified.

Not only does finance sharing leverage more resources, but it also commits the community closer to their natural resources.

⁴⁰ Partly from longer rotations; partly from higher retention.

EFC's perspective on this connection to the community is captured in the following excerpt:

No [Community Based Environmental Protection] funding mechanism should be regarded as unimportant, because of the enormous potential to harness market forces, heighten environmental awareness, leverage additional resources, and join the public and private sectors in new ways. The focus of CBEP funding, moreover, whether communities or ecosystems, represents the new wave of environmental protection, which relies on prevention and cooperation as opposed to regulation. (EFC 1999)

"[Co-op/collaborative efforts], to me, are the only thing that's going to work long-term [for forest protection]," comments David Zumeta and Jenna Fletcher, from the Minnesota Forest Resources Council. "Threats are greater than any one entity can deal with." Resources must be pooled and it's not just about "new money" (Zumeta and Fletcher 2004).

7.5. Funding Limitations

In addition to the limitations in *identifying* financial mechanisms (see Section 6.3.), there are limitations with the mechanisms themselves.

7.5.1. Cash flow challenges

Funding limitations are not limited to the scarcity of funding per se. They are also limited by the flow of that funding. Restoration work faces cash flow constraints for a few reasons: (a) the Snoqualmie/Skykomish is located in a climate with a short summer work season, (b) grant-based funding can cause delays in the face of this short season, (c) funding scenarios involving timber management are temporally lengthy and complex, and (d) sunset dates on projects or demonstrating performance measures may not be in sync with the long-term time frames that watershed protection activities work within.

For instance, restoration contractors may have to wait two to nine months after completing a job before receiving payments. This is usually only the case with lengthy processes involving federal grants (though this is changing). Credit lines from local banks or short-term loans from governments may help remedy this limitation, but the drawing down of limited funds from additional payments on interest is not ideal. In addition, qualifying for lines of credit can be challenging. Washington manages a Revolving Loan Fund, but these typically have lengthy qualifiers and onerous registration processes, as well. One option is to provide loans and financial "bridgers" to help alleviate this challenge. (Baker 2004).

Another cash flow issue is that related to the fluctuating prices of land. Assuming entity X is interested in purchasing development rights from Forest Y, but entity Z is interested in purchasing Forest Y in fee - the pricing of that property can escalate dramatically. This is one reason why professionals arranging such purchases are somewhat reserved and why lands are typically not "targeted" outright (Glidden 2004). It also demonstrates the resulting fluctuations in funding needs – early on needed cash is anticipated at one level, but once that cash flows, early projections may be insufficient to actual need.

The lifespan of grants can also limit the potential of projects. Many projects are a combination of grants from a variety of funding sources – each of which may have a different sunset date or validity periods when the money must be used or forfeited. This can be limiting when dealing

with a project that involves lengthy environmental analyses and permitting processes (Baker, 2004)⁴¹. The Northwest Economic Adjustment Initiative⁴² is a good Federal example, the Salmon Recovery Funding Board and the Forest Stewardship Coordinating Committee are two good State examples where funding priorities and a comprehensive approach to funding is used. The Conservation Futures Citizens Committee sets priorities for the Conservation Futures Tax within King County, but more coordination and stronger communication amongst the various local funding disbursement groups could stand improvement.

Coordination among agencies that fund watershed projects at the local level should be built in to any new (or revised) financial mechanisms to minimize limitations in project lifespans. The severity of the cash flow issue will vary depending on the funding source and the use for that funding, but the accessibility caused by the temporal logistics of the funding disbursement may be limiting for projects nonetheless.

7.5.2. Competition & Vulnerability

Strong competition exists for scarce⁴³ funds. These funds are also extremely vulnerable to budget cuts. For example, based on assessed need, from FY 1978-2003 the U.S. Congress authorized a spending level of \$900 million a year for the Land and Water Conservation Fund, but actual annual appropriations have never reached this level. In fact, by 2002, the Treasury Department estimated that because of its under-appropriation of LWCF monies during this period, it held a “paper balance” of roughly \$12.9 billion (McQueen and McMahon 2003). The National Park Service estimates that between FY 2000-2002, at least 70% of states’ request for LWCF funds was unmet (by over 50%) and that in total, approximately 92% of states “need” were left unmet. Washington State submitted \$127,329,816 in grant requests in this period and received \$5,459,728, or 4% of its request (NPS, 2002).

Another commonly used matching funds program, the USFS Forest Legacy Program, has increased in size substantially since its inception because of the high demand for forest habitat and watershed protection assistance. However, far more applications are received than are funded. Washington has been a recipient of large amounts of funds over the years, especially with the Mountains to Sound Greenway project, though not all proposed projects have been funded.⁴⁴ In the President’s FY2005 budget, \$100,019,000 was proposed, of which \$2,000,000 was proposed for the Cedar Green Forest (in WRIA 8) and \$1,600,000 for Phase 1 of the Carbon River Forest (in WRIA 9), constituting 3.6% of total allocations to Washington projects (USFS, 2004). However, as of September 2003, the Washington State Forest Legacy Program FY 2005 Forest Stewardship Coordinating Committee was planning on submitting 7 Washington projects for funding, approaching \$11 million. Ranked within the top three priority projects were the Carbon River and Cedar Green projects (WDNR 2004).

⁴¹ Baker also notes, as a positive example, the electronic payment methods used by the National Oceanic and Atmospheric Administration (NOAA) that reimburse restoration grantees in an easy-to-access account.

⁴² <http://www.fcresearch.org/neai/>

⁴³ Scarce funds relative to the needs of watersheds nationally.

⁴⁴ Snoqualmie/Skykomish projects were not listed by this committee; but with watersheds in WRIA 8 and 9 depending on more FLP, there could conceivably be less demand for local resources.

In addition to competition for funding at national levels, competition for funding at local levels also exists. For instance, Conservation Futures Taxes distributed by the Conservation Futures Citizens Committee are allocated based on an internal, competitive review process (see Section 3.1.1.).

Increasing competition for shared funds eventually leads to developing new techniques or reinventing old techniques (see Section 7.2.4), despite ongoing support and dependence on established sources. In addition, to avoid the vulnerability of general fund allocations, professionals are mindful of the need to establish trust funds or dedicated source funds when establishing new or redirected revenue streams, to avoid competitive drains on those sources to prepare for downturns in the economy.

Finally, and a less commonly recognized element of competition, is that caused by multiple conservation programs and their impact on each other. For instance, in Minnesota, because of years of well-developed programs to conserve agriculture land, such as the Agriculture Lands Protection Program, forest lands are now facing much higher pressures from development ((Zumeta and Fletcher 2004).

The high demand of funding for watershed needs and the limited supply of funds to meet those needs results in tight competition for watershed funds.

7.5.3. Diversified Funding “Portfolio”

Reiterating the vulnerability of various sources, diversifying the watershed-funding portfolio is essential. Relying on any one source for any length of time is no more strategic than relying on one mutual fund for one’s retirement. Shifts in the economy, swings in political idealism and/or priorities, changes to the tax-base (see Chapter 4), and additional environmental changes can all effect funding sources. The more planners for the Snoqualmie/Skykomish rely on relatively few sources, or sources with similar mechanisms (i.e. different forms of property taxes and fees), the more they are vulnerable to shortcomings in times of change. Diversifying the watershed-funding portfolio is in fact very similar to the ecological principles⁴⁵ behind the preservation of biodiversity that they indirectly seek funding for.

King County does a good job of diversifying its watershed-funding portfolio (see Section 3.1.), though it does rely quite heavily on property taxes – a predicament faced by counties statewide (see Section 4.2.1).

Without diversifying the sources of revenue that Snoqualmie/Skykomish planners for watershed protection activities, funding volatility will likely result.

7.5.5. Legal Constraints on Funding

Legal constraints to funding and financial management exist among all watersheds, creating limitations and inefficiencies with potential resources. To the extent possible, watershed planners should communicate with other watershed planners to identify those constraints,

⁴⁵ Fitness of a species is strongly correlated with its genetic diversity – the ability to adapt and adjust to changes in the natural environment. Biodiversity is essentially genetic diversity, on a larger ecological scale.

educate the legislature on them, and educate the public on the importance of communicating their support for watershed protection to their elected officials. See Chapter 4 for more details.

7.5.6. Operational Needs

Funding needs do not disappear following one round of restoration, or the purchase of conservation easements, or the purchase of land in-fee. Rather, funding needs continue on those projects for stewardship, monitoring, maintenance, and assurance of binding agreements.⁴⁶

Operations and management for risk, in addition to capital expenditures, must be included in finance strategies. In many cases, acquisition is only the first stage among many expensive and ongoing watershed management challenges. The limitation is that many large funding options are largely geared towards Stage I – without contingencies and funds dedicated towards Stage II and on. Care must be taken among those applying for funding that Stage II and beyond are planned for and have sustainable finance strategies. Recognizing the scarce resources for funding follow-up stages may limit the utilization of available funds for initial stages or may result in poorly prepared projects utilizing scarce funds (Laird 2004) (Baker 2004) (EFC 1999).

The more revenue that is leveraged for capital-intensive projects, the more a portion of that will be needed to support the ongoing life of those projects, unless other finance strategies (such as timber management) are planned. This is partly a limitation in available resources, and partly a restraint to the utilization of those resources. It raises capital versus operating issues, which does not work well with some small or short-term revenue sources.

7.5.7. Proprietary or Strategically Concealed Information

See Section 6.3.

7.5.8. Incentives & Balance

Using tax incentives as drivers for watershed protection activities is an effective strategy for achieving watershed planning goals, though it does present relative challenges depending on the diversity of funding for the county and the degree to which incentives replace the cost of successfully ensuring forest stewardship.

First, governments are reliant on tax revenues (or fees) in achieving government goals such as restoration work or monitoring landowners for their adherence to incentive qualifications. Were those revenues to decrease from exemptions to landowners, governments must compromise or adjust restoration and monitoring activities.

A widely used incentive structure in Washington State stems from the Open Space Taxation Act of 1970. King County's Department of Natural Resources describes the law as allowing:

For property owners to have their open space, farm and agricultural, and timberlands valued at their current use rather than their highest and best use. The act allows for property tax abatement for land designated as open space land in local comprehensive plan and zoned accordingly or otherwise meeting certain criteria. To receive property tax relief, a landowner must apply for and receive the open space classification and abide by the restrictions placed upon the land in the open space classification. The owner is obliged to leave property in the program for ten years, or face penalties upon withdrawal. Some counties have made it easier for property owners to enter the system by

⁴⁶ Specifically regarding tax incentives, conservation easements, and the sale of development rights.

adopting a public benefit rating system. If the county legislative authority has established a public benefit rating system for the open space classification, the criteria contained within the rating system govern the eligibility of the lands described in each application for that classification and the current use valuation of that land.

(KCWLR 2004)

To effectively implement the Open Space Taxation Act at a local level, King County operates a tax incentive system called the Public Benefit Rating System. As described by King County:

If land contains one or more open space resources and is participating in the Public Benefit Rating System (PBRs) it will be assessed at a “current use” value. This assessed value is lower than the “highest and best use” assessment value, which usually applies on land in the County. The reduction in taxable value ranges from 50% to 90% for the portion of the property in PBRs. The PBRs program is based on a point system. Points are assigned to specific open space resources. The total points awarded on a property translate into a percentage tax reduction for the portion of the land enrolled in PBRs. For property to be approved as open space under this program, either the potential for use or additional development must be present. The owner may also agree to other restrictions or provide public access in return for the tax reduction. Public access is encouraged but not required on open space resources for this program. In some cases public access must be allowed in order to gain credit for the current use taxation.

Depending on where forests remain standing, from individual actions of forest landowners or from public acquisition of land, nearby property values may increase, subsequently increasing tax rolls. However, this is mainly true in forested areas within or on the fringe of widespread urban development. This is not necessarily the case among forestlands in 20 or 80-acre parcels, in the Forest Production District of King County, for instance.

A second challenge that incentives raise is that of “which came first” – the behavior or the incentive. If incentives are offered for best management practices that would have occurred regardless of the incentive, then the revenues forfeited are not technically incentivizing the positive behavior. If this is the case, the county faces a serious opportunity cost from the revenues that could have been utilized for identified watershed priorities.

A third challenge that incentives raise is their overlap and whether one precludes another from being used by a landowner. Allowing landowners to “double dip” can reduce an incentive barrier to a landowner comments Jenna Fletcher, Policy Analyst of the Minnesota Forest Resources Council (Zumeta and Fletcher 2004). This follows the same line of reasoning as promoting multiple eco-goods and services on forestland and accessing various funding associated with the protection of each (see Section 3.3).

See **Appendix D** a list of tax incentives relative to forest landowners.

Given these incentive challenges, it is clear that balance must be prioritized when incentivizing activities that correspond to watershed planning priorities.⁴⁷

⁴⁷ Arriving at that balance is not the purpose of this report. Incentives are presented in **Appendix D**, but are not addressed in an exclusive category within this report..

7.6. Conclusions for Chapter 7

- Financing watershed protection activities involves two parts – revenue sources and tools to harness them. This report focused heavily on revenue sources, with a mild emphasis on how to harness them.
- There are multiple revenue categories that could be established; how they are broken out largely depends on the assumed legal and structural framework or system needed for their collection.
- The categories are mainly useful for conceptualization and organization. They do not dictate the resulting criteria based descriptions, though there may be trends.
- Financial mechanisms must be shared between supporting entities. In other words, sharing the responsibility of raising and prioritizing revenue sources across multiple entities are more likely to lead to successful revenue initiatives.
- Multiple limitations exist within each revenue category and some limitations exist within multiple categories

8. CRITERIA & SORTING

As described in Chapter 6, financial mechanisms for raising revenue were sought with watersheds in mind, but in order to widen the search and reach “innovative” mechanisms, watersheds were not a limiting factor – only the starting point. Because of this, a great deal of options were identified, not all of which are optimal for King County. To present meaningful mechanisms, some criteria-based sorting was applied. The sorting matrix and mechanisms included can be reviewed in **Table 3** (Chapter 9) and **Appendix A**. Chapter 9 reviews the nine mechanisms that met the sorting criteria presented in this chapter.

8.1. Context for financing watersheds

Specific sorting criteria are identified in Section 8.2. The following context provides the bridge from general public finance to financial mechanisms applicable to the Snoqualmie/Skykomish.

8.1.1. Guiding principles for Washington

The WA Department of Ecology’s Watershed Plan Implementation Committee identified a set of principles that should be applied to any approach to raising additional revenues. These principles are:

- *Fair and equitable* - Funding sources should be broad-based by reflecting all the uses and benefits of the watershed and by avoiding “double-taxing” of those who have already paid for improvements in water resource management in other ways.
- *Benefit nexus* - If possible, there should be a clear linkage between the source of revenue, and water uses, so those paying understand why the money is being collected.
- *Without extensive new administration* - Collection of revenues should be practical, prioritizing existing funding programs versus extensive new administrative arrangements or procedures.
- *Politically palatable* – There must be political support, or at least neutrality. “Excessive” fees or taxes, or the perception of them, on one or more sectors of the economy are not preferred (WADoE-WPIC 2002).

Minnesota’s recent tax reform provides additional insight on guiding principles when raising revenues in the context of forest stewardship. “Taxes exist to fund government goods and services. Consequently, any proposal to change or reform taxes must include an analysis of the revenue implications for local government. Proposed changes to current tax regime must include an analysis of local revenue effects and explicit provisions to replace lost revenues, or recognition that the proposal may cause increases in other taxes” (MNDR-OC 2001).

In addition to fairness and minimal hassle, they suggest the following principles:

- *Efficiency* – A tax is said to be efficient (or neutral) if it leaves unaffected the underlying economics of consumption and production decisions.
- *Competitiveness* – Taxes should not put one industry or firm at a competitive disadvantage. (MNDR-OC 2001)

8.1.2. Recipients in the Snoqualmie/Skykomish

In the Snoqualmie/Skykomish, recipients of the forested watershed goods and services include the following generalized users, none of which are mutually exclusive:

- People earning income, directly or indirectly, from managing forest lands for timber,
- People earning income, directly or indirectly, from developing forest lands,
- People that simply live or work within the watershed, but that have no commodity-based attachment to the watershed,
- People that live outside of the watershed, but that live within the region and downstream of the watershed's mainstem.

Among those, there is a scale of watershed knowledge that must be considered as well

- People that recognize some or all of the various watershed goods and services,
- People that recognize and are willing to pay to maintain the health and integrity of the watershed,
- People that either don't recognize or don't consider the eco-goods and services the watershed provides them worthy of payment.

It is because of these principles, perceptions, and uses that recognizing multiple eco-goods and services provided by the watershed is useful. Recipients may not come to agreement on the totality of benefits they receive from watersheds, or their value, but they agree in part or marginally. Therefore, when sifting through traditional public financial mechanisms for "innovative" options, matching individual benefits attributable to one or more of the recognizable eco-goods and services provided helps in adhering to the nexus ideal.

8.1.3. Nexus

Demonstrating a strong nexus between new taxes or public fees and resulting watershed protection is a tough order because of many reasons, a few of which are that:

- Watershed goods and services are largely non-excludable and non-rival,
- The change in watershed goods and service "rates" are scientifically technical to quantify following damage and/or following stewardship,
- Damage is usually an externality; it could be an accumulation of externalities attributable to multiple parties, and
- Recipients of watersheds (virtually everyone) have varying degrees of knowledge or value for their watershed's function.

Working towards this nexus is helpful in crafting mechanisms or altering existing mechanisms to fit a watershed context, but the nexus itself is not a determinate. Multiple factors must be considered in relating traditional finance mechanisms to watersheds.

8.1.4. Eco-Goods & Services

In searching for revenue sources, it was recognized that forested watersheds do provide multiple ecological goods and services, whether or not various stakeholders recognize all those goods and services in totality. The following schematic helps demonstrate these "eco-goods and services" that watersheds, including the Snoqualmie/Skykomish, provide:

Table 2.1 Examples of Multiple Products and Services of Typical Conservation and Production Forests

Conservation forest	Production forest
<ul style="list-style-type: none"> • Recreation / amenity • Biodiversity conservation • CO₂ storage • Ground water retention • Surface water buffering • Non-timber products (if allowed) • Local income from tourism • Existence value 	<ul style="list-style-type: none"> • Wood • Recreation / amenity* • Biodiversity conservation* • CO₂ sequestration and storage* • Ground water retention • Surface water buffering • Non-timber products* • Income from employment • Existence value*

*secondary products

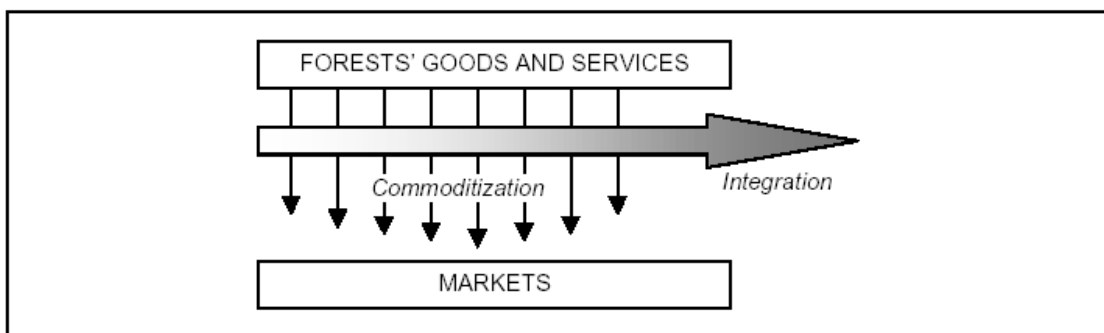
(PROFOR, 1999)

Assuming each of these goods and services could be differentiated from each other and carry its own revenue stream, regardless of whether recipients recognize and/or value them that way, would be folly. This is so for a number of reasons, some of which include:

- The financial and temporal investment it takes to quantify each and every good or service could be cost inefficient relative to investing scarce dollars into more general education and protection of that resource,
- Double counting (and double taxing) is very possible and is discouraged,
- Public goods are not considered commodities; it is only acceptable to charge for them if they are valued, under threat, and in need of investment.

However, it is worthwhile to consider how to associate revenue streams tied to the various goods and services that watersheds provide because this helps meet three of the four previously mentioned principles: fair and equitable, benefit nexus, politically palatable. Though markets are only one mechanism for collecting such revenues, the following two diagrams help with this conceptualization.

Figure 3.4 Integrating Multi-purpose Forest Management



(PROFOR, 1999)

8.2. Criteria

Chapters 2-7 detail the various issues that must be considered in identifying and choosing financial mechanisms. With that information, eight criteria categories were identified to aid the Snoqualmie Watershed Forum and King County decision makers regarding revenue sources useful to the Snoqualmie/Skykomish. These categories are *qualitative* due to the breadth of mechanisms identified. In follow up analyses, *quantitative* estimates should replace them (see Chapter 10).

8.2.1. Urban to rural transfer

Urban to rural transfer indicates a transfer of dollars from the more populated parts of the county (primarily “incorporated”) to the more unpopulated parts (primarily “unincorporated”). This was a conceptual specification, not based on specific borders or numbers, because the parameters of each financial mechanism vary considerably and should be decided by King County.

Urban to rural transfer does not imply that there should be no payment in the rural region. It simply assumes that (1) the rural region does not have the revenue base to raise the kind of incremental funding per person or per parcel that will have substantial leveraging powers, and (2) the urban region does benefit from the rural region’s protection of the watershed and the urban region has a much larger and more stable revenue base.

Yes indicated there could be a rural to urban transfer.

No indicated there wouldn’t be a rural to urban transfer.

*N/A*⁴⁸

8.2.2. Revenue potential

Revenue potential is gauged by the extent to which it could fund various prioritized projects. The range of stewardship activities that are prioritized in the Snoqualmie/Skykomish are described in Section 5.2. Revenue potential gives some indication of the estimated effectiveness of the mechanism in terms of paying for the protection of environmental benefits, but it is not presented in relationship to total environmental needs.

High – Ability to purchase conservation easements and lands in-fee.

Flux – Could fluctuate from high to low and vice versa.

Low – Ability to augment payment for operations, stewardship, restoration, or education (but not enough potential to pay for conservation easements and lands in-fee).

LT – As a long-term source.

ST – As a short-term source.

N/A

8.2.3. Authority

Authority is based on what level of authority the financial mechanism can be implemented without further approval at another level.

⁴⁸ “N/A” assumes data is unknown, unavailable, or needing far more technical analysis

Local – Needing no authority or needing authority through King County. May need a public vote. May be constrained by state (e.g. debt restrictions).

State – Needing authority at the state level. May need a supermajority in the Legislature (an increase of a tax) or the Legislature may take it to the voters regardless of its authority.

Federal – Needing federal authority.⁴⁹

N/A

8.2.4. Administrative adjustment

Adjustment is the changes to the system as a result of the new/altered fee, tax, payment collected. It pertains to the issuer, but if overly burdensome or confusing to the user, it is taken into consideration. Table 3-1 and 3-2 of the Phase 4 Watershed Plan: Implementation Committee Report to the Legislature (WADoE-WPIC 2002) was loosely used for guidance in assessing this criteria against mechanisms.

Less – Systems for collection and/or disbursement are already established.

Some – (a) Systems for collection and/or disbursement are already established, (b) establishment is needed but could potentially piggy-back on another system, (c) establishment is needed and expected to cause some adjustment, but not so much that the mechanism would not be worth analyzing in more detail.

More – Systems for collection and/or disbursement are not established and are expected to cause major adjustment.

N/A

8.2.5. Startup costs

Startup costs are related to adjustment, but are directed more towards whether initial capital will be needed in association with the mechanism.⁵⁰

Yes – Most definitely, there will be additional costs in administering of this mechanism. Such costs may be from marketing, education, administrative, scientific research, etc.

Possible –Foreseeable, but relative to that of all new programs

Unlikely – Unforeseen, but with any change or adjustment, costs may be hidden

No - Unforeseeable

N/A

8.2.6. Political (public) reception

As indicated repeatedly throughout this report, directly and indirectly, public reception and political palatability is essential to any financial mechanism. Because this is a complicated and multi-faceted criteria, estimates used are very general. Further analyses will be needed for more specific estimates (see Chapter 10).

(+) Public receptivity is expected to be higher and/or effective/organized political opposition is expected to be lower. Typically, this is because of its equitable character to a majority of the population.

⁴⁹ In general, mechanisms needing federal authority were avoided because of the local emphasis with which this report was conducted.

⁵⁰ Costs to convince authorities (i.e. state) of the decision to use the mechanism are not considered.

(-) Public receptivity is expected to be lower and/or effective/organized political opposition is expected to be higher

Varies – Highly depends on other factors (such as the state of the economy)

Nexus-needed – Assumes that with a clear nexus, receptivity and palatability will increase
N/A

8.2.7. Watershed nexus

The watershed nexus relates to the eco-goods and services the watershed provides. Some financial mechanisms have more potential for a direct, visible connection than others.

Yes – A nexus is clear (assuming a base level of watershed good/service understanding).

Potential – A nexus may not immediately be clear, but the argument can be made for it.

Varies – A nexus is not immediately clear and/or whether or not it is clear largely depends on how the mechanism is designed.

No – There is no direct nexus and/or creating a direct nexus would be logically stretched.

8.2.8. Equity

Equity means many things to different people. In this report, it denotes which mechanism has *more* or *less* potential to be fair to people – especially in terms of a mechanism’s impact on an individual’s income relative to another individual with less income.

More – It is more equitable if it reflects affordability concerns of ratepayers and/or the ability to integrate graduated or non-regressive rate structures. Voluntary options are also considered very equitable in this assessment.⁵¹

Less – It is less equitable if all users pay the same price regardless of economic circumstances, not accounting for the marginal utility of income.⁵²

8.2.9. Source character

This category is included because it reinforces Sections 8.2.4 and 8.2.5. and provides useful information. It is not used as a criterion. Instead is it used as an informational category. These categories are not mutually exclusive.

New – New tax, fee, market, statute, etc.

Increase – An increase to a tax or fee.

Reallocate – This can be an increase to a tax or fee and/or a dedication of funds from a current revenue source.

Shift – This is primarily a behavioral based financial mechanism to shift the burden of cost and shift a resulting behavior in the watershed.

Structural – This is a change in operations or statute that either alters a revenue stream or alters a behavior or activity directly.

⁵¹ Voluntary mechanisms are considered equitable in this assessment, however the “free rider” issue can be considered unequitable and is detailed in Section 7.2.2. and 7.2.4.

⁵² “Marginal utility of income” denotes the utility of one’s income on a marginal basis. As one’s income increases, each additional dollar is worth less to that person. In other words, one dollar is worth much less to someone with \$100,000 income than it is worth to someone with \$100 income.

8.3. Sorting the Criteria

Three criteria were used for sorting through a large set of identified financial mechanisms and providing recommendations from that set. To draw out those mechanisms most relevant to initial priorities, a *threshold* was established. This threshold was used in two stages:

Stage 1 – Mechanisms to be included in this report.

Stage 2 – Mechanisms to be recommended for further policy analysis.

Therefore, the three threshold criteria were:

- (1) Urban to rural transfer with a descriptor of “*yes*”.
- (2) Revenue potential with a descriptor of “*high*”.
- (3) Administrative authority with a descriptor of “*local*”.

The “urban to rural transfer” criteria was chosen based on concerns about an insufficient revenue base within the Snoqualmie/Skykomish watershed to fund priority watershed protection activities and the need to have a broad and stable revenue source (see Section 8.2.1.). The “revenue potential” criteria was chosen based on concerns about the climbing costs of priority protection activities (i.e. purchase of easements and lands in-fee) – the most assured activities for watershed protection (see Section 8.2.2.). The “administrative authority” criteria was chosen based on the time-sensitive nature of watershed threats, recognizing the ongoing pressure to develop and convert forested lands to non-forest and mutually exclusive uses (and again, the increasing prices). Thus, whether the mechanism required authority changes at the local level versus the state level or higher was used as a proxy for the time intensity required of that mechanism. Authority at the local level is assumed to be faster than at the state level.

. In both stages, the same criteria were used. In Stage 1, mechanisms had to meet *one or more* of the three criteria. In Stage 2, mechanisms had to meet *all* of the three criteria. The other five criteria remain for:

- Descriptive purposes,
- Flexibility in choosing a different set of threshold criteria by Snoqualmie/Skykomish planners, and
- Incorporation into subsequent policy analysis (see Chapter 10).

*The resulting matrix can be reviewed in **Table 4**, Chapter 9.

*All 37 financial mechanisms identified can be reviewed in **Appendix A**.

9. POTENTIAL MECHANISMS

There are multiple financial mechanisms that King County could use for raising revenues applicable to the Snoqualmie/Skykomish.⁵³ The difficult decision is in choosing which mechanism is the most applicable to Snoqualmie/Skykomish needs relative to its situation. It is assumed that preliminary mechanisms chosen, and mechanisms recommended, will endure additional financial and legal analysis by Snoqualmie/Skykomish planners (see Chapter 10 for recommendations). This chapter contains a list of potential mechanisms, for which this report was primarily commissioned, following a screening based on threshold criteria. **All 37 mechanisms identified should be reviewed in Appendix A.** A matrix highlighting consistent attributes and characteristics can be found in **Table 4** below.

9.1. Threshold criteria – review

The three criteria that were used in narrowing identified mechanisms were the following:

- Urban to rural transfer- *yes*
- Revenue potential - *high*
- Authority - *local*

Mechanisms with “N/A” or unknowns were not considered to have met the threshold and are not listed below. The eight mechanisms detailed below met all three of the above criteria.

9.2. Mechanisms meeting threshold

The following 8 were identified as meeting these threshold criteria:

9.2.1. Local Sales Tax

Local sales taxes are in addition to State general sales tax. It is most common to see local taxes serving as dedicated revenue streams paying debt service to local general obligation bonds, revenue bonds, or to specific programs (EFC 1999).

Features:

- Leverage for attracting matching funds (especially at the state or federal level)
- Higher potential for nexus between tax and environmental benefits at local level
- Revenue size depends upon the community (county) awareness and connection with the issue
- Unless the community in which the tax is applied has minimal variation in income, the sales taxes are generally regressive

Examples:

- Very common.
- Nevada: Carson City and Douglas County use a 1/4 cent "quality of life" sales tax add-on for open space and parks (EFC 1999).

⁵³ Note that these are also applicable to other watersheds within King County, and thus, could be used by other watersheds.

9.2.2. Real Property Taxes (Ad Valorem)

Taxes on commercial and residential property are based on the assessed value (fair market value) of the property (with the exception of incentive programs, such as King County's Public Benefit Rating System). Requires voter approval. Local and state statutory limits exist on rate changing and levels. Tax remains ongoing or is increased only for a defined time period. The two most common uses for real property taxes are: (1) earmarking a specific portion for a specific fund, (2) directing a specific increase or surcharge, temporary or permanent, to a specific purpose (TPL 2004).

Variations:

"Split-rate or two-rate property tax" where higher rate applied to "land values" and a lower rate is applied to "improvement values" such as buildings. The tax burden is then shifted from density development to "land-extensive" development. However – though this property tax measure is promoted to densify urban centers (a catalyst for the Transfer Development Program for example), it would have unintended consequences for premature forest conversion, unless adjusted for (Bengston, Fletcher et al. 2003).

Features:

- Typical increases or shifting are used for growth management; water quality improvements, public safety issues, education
- Frequently used because of its high revenue yield, its relative stability and broad-base, and its administrative ease in application
- Depending on total real estate transaction costs (including increased/new tax) relative to neighboring counties, an elasticity effect could occur over time, with homebuyers choosing other counties for residency.

Examples:

King County's Conservation Futures Tax is one variation (see Section 3.1.1.)

9.2.3. Real Estate Excise (transfer) Tax

Real estate transfer taxes are charged to the buyer and/or seller of real property at the time of sale, based on a percentage of sale value of the property, a flat deed registration tax, or a combination (TPL 2004). It is also called a "transfer" tax. See Section 3.1.6.

Features:

- It could be used to shift incentive structures by raising the tax outside the UGB, and lowering it within the UGB (or rebating it within the UGB).
- It may not be covered in closing fees of mortgages.
- It can provide leverage for large revenue streams with low rates.
- It may have inequitable distribution effects, so it should be structured to minimize this with close cost/benefit relationships.
- Depending on total real estate transaction costs (including increased/new tax) relative to neighboring counties, an elasticity effect could occur over time, with homebuyers choosing other counties for residency.
(TPL 2004)

Examples:

- King County's access to additional funds through the Real Estate Excise Tax, or REET (see Chapter 3). Snohomish County tried, but did not succeed, to leverage more funds for conservation through REET. However, their downfall is partly attributed to opposition by the real estate community. Whereas, in San Juan County, the only Washington county that has institutionalized this option, real estate agents were enlisted in the support for the REET addition. "The driving factor was more about their land ethic comments Dennis Schaffer, Director for the San Juan County Citizen Conservation Land Bank. The "quality of life" component was a selling point. "Real estate professionals recognize it as one reason people want to purchase land on the islands," (Schaffer 2004).
- NY: Dedicated portion of revenues from real estate transfer tax is directed towards New York's Environmental Protection Fund (NYS 2002) .
- Utilized by the following states: AR, DE, FL, HI, IL, MD, NY, NC, PN, RI, SC, TN, VT (McQueen and McMahon 2003).
- MD: Assesses an agriculture land transfer tax only when agriculture land is converted to other uses
- MA: Almost enacted a transfer tax. Following strong opposition by real estate contingency, conservationists and real estate interests agreed upon a 3% property tax, instead (Gomes 2004).
- MD: Dramatically reduced/ eliminated taxes on transfer of new or rehabilitated homes in growth areas and dramatically increase, transfer taxes assessed on new homes in areas causing conversion of habitat. [Recommendations that emerged (but have not necessarily been acted on) from the Maryland's Smart Growth and Neighborhood Conservation program) (MDDNR 2004).

9.2.4. Administration Fee

Fees to cover administrative costs of public services (or transaction costs).

[E.g. When a person/business sells/buys land, jurisdiction responsible for recording the property transfer (often the county) levies a recording fee].

Variation:

A dedicated portion of tax revenues could be routed to special fund for watersheds.

Features:

- Typically these fees are charged *only* to cover expenses of administration service.
- Certain legal restrictions may prohibit charging more for the service or dedicating revenues indirectly.

Examples:

- South Carolina: Titles their administration fees for transferring property titles are called "revenue stamps" and are affixed to the deed of real estate. These "deed recording fees" are based on \$1.30 per \$500 of value and \$0.10 of every \$1.30 per \$500 goes to their Heritage Land Trust Fund (SGA 2002). The latest estimate shows revenues of \$10,000,000 more or less *annually* (SCDNR 2004).
- Other states have similar programs to SC with substantial annual revenues (Florida - \$300 million; New Jersey - \$500 million; Georgia - \$90 million; North Carolina - \$100 million). The logic and support for the program stems from the knowledge that it costs much more to go back and [retroactively preserve] rather than be pro-active (SCDNR 2004).

- IL: Part of motor vehicle title transfer fees is dedicated to bicycle paths (McQueen and McMahan 2003).
- WA: Part of gas tax is dedicated to recreation programs and trails.

9.2.5. Local Watershed Protection Fees

Issued charge or increase in charge (required or optional) to residents and businesses within watershed for watershed protection activities, under independent authority or through direct utility nexus. These are similar to “quality of life” or “conservation taxes” added on to local general sales taxes or property taxes. They are designed to correct market failures in streamside uses and impacts.

(EFC 1999).

Features:

- Revenues can be dedicated to specific projects for a strong nexus and cost/benefit relationship
- Fees administered could also increase the incentive to conserve water.
- Their dual purpose serves to heighten public awareness and raise revenues for the aquifer
- Fees are easiest to administer as a flat rate, but this is regressive. A tiered rate structure based on water use may be more equitable, but low-income users are more likely to be ill equipped with new, residential, water-saving appliances.
- New fees or increases in fees may require voter approval.
- They should be designed to heighten environmental awareness as well as raise revenues. This helps to establish public support and raise the willingness to pay.

(EFC 1999) (TPL 2004)

Examples:

- Washington: All Spokane residents are charged a \$15 annual “aquifer protection fee” and utility users pay a 3% surcharge on all water bills. See “King Conservation District” and the \$5 per parcel fee in Chapter 3.

- Rhode Island: All water customers pay a watershed protection surcharge of 1 cent per 100 gallons on regular water bills.

(EFC 1999)

- Colombia: Regulation requires the electric power companies to transfer 2% of their gross sales to direct investment in watershed management.

- Costa Rica: The water company is charged US\$6 million and the power company another US\$3 million per year to finance the conservation of some 1.3 million ha of forest in the watersheds supplying water to the city

- Ecuador: Quito established a Watershed Protection Fund. Funding is raised from water charges to electricity companies and private water users and from the public water authority.

(PROFOR 1999).

9.2.6. Special Assessment Fees

One-time or recurrent fees levied on property owners by local jurisdictions usually to benefit a sub-group of the jurisdictional population. If charges are to be incurred by the full jurisdiction, benefits to those outside the immediately benefiting sub-population must be demonstrated (e.g. higher property values, increased business activity, etc.). Some jurisdictions form special

assessment improvement districts to better define the geographical boundary of the proposed improvement (e.g. 3 miles of new park) – this may require state approval. (EFC 1999).

Features:

- The revenue yield completely depends on the structure of the established assessment. It could be stable, sporadic, or just vulnerable to political opposition. However, the revenue yield could be substantial.
- Direct cost/benefit relationships should and can be established.
- Difficulties may arise when downstream users benefit from upstream watershed improvements (or vice versa).
- When benefits can clearly demonstrating increasing property values, "Tax Increment Financing" (TIF) can be used.

Example:

- CA: Marin County, Santa Clara County, Simi Valley and Ventura County have all created “benefits assessment districts” to exact fees for open space (MRCA 2004). Santa Clara County residents voted to approve a \$20-per-house assessment to raise funds for parks and open space through use of benefits assessment districts (McQueen and McMahon 2003) (Grippi 2004).
- CA: In 2002, property owners in the City of Los Angeles portion of the Santa Monica Mountains zone voted to establish two separate assessment districts under the Municipal Improvement Act of 1913 and the Improvement Bond Act of 1915. Property owners assessed themselves to no more than \$40.00 per year, over thirty years. Revenues go to the acquisition and preservation of nearby open space and parkland, and to reducing fire hazards in acquisition area. The amount varies by the purchase price of the property in question, though property owners have the option to pay the total fixed lien assessment up front or on their property tax bills. The ballot measures were approved by a weighted majority of 77.3% in District One and 68.1% in District Two (MRCA 2004).

9.2.7. License Plates

Revenues are raised and routed to dedicated environmental fund through the sale of license plates with environmental designs on them (e.g. Yosemite plate routes money to Yosemite National Park in California). Plates are reissued annually, through renewal fees with “environmental design premium.”

The purchasing of specially designed plates is completely voluntary.

Variation:

- Rather than environmental vanity plates, climate plates (with a forest design) could be sold, combining the license plate mechanism with the carbon management mechanism. Fees could be based at a set rate (like traditional vanity plates) or based on a carbon emissions formula that relates specifically to the carbon emitted by the licensed driver and the cost of mitigating for that carbon (the cost of conservation easements in the region and rates of carbon sequestration the forests are managed for). Calculating the rate would be difficult primarily because of the varying cost range of conservation easements.
- A preliminary program at the local level could begin by issuing magnetic/bumper stickers to test program receptivity.

Features:

- Since the program is voluntary, it's very equitable. However, those paying into the program may be paying for a public good – and those not may be considered “free riding” while enjoying the benefits of that public good.
- Marketing and awareness would be a cost of the program. However, because every driver in WA State must register their car through the Department of Licensing, interagency partnerships could alleviate administration difficulties.
- Caution must be taken in considering voluntary sales. If administrative costs exceed revenues raised, the program is not advisable (despite educational component).

Examples:

- At least 25 states sell license plates that raise revenues for environmental programs ranging from manatee protection activities (in Florida) to deposits in the Tahoe Conservancy Account for preservation and restoration projects in the Lake Tahoe area (California).
- For instance, the Trust for Public Land estimates that California's environmental license plate program (3 plates) has raised \$500 million in plate revenues since 1970. However, it is unknown whether this estimate includes the costs of administering the program (TPL 2004).
- See **Appendix K**: License Plates (no carbon license plates were identified).

9.2.8. Timber Management

Forests can be managed for timber production, raising revenues to fund further acquisition or stewardship activities.

Features:

- King County currently owns working forestlands in WRIA 7
- In order to manage for timber with ecological forestry and still remain competitive (or unsubsidized), operations will probably need to market other forest attributes (i.e. special forest products, habitat for hunting, carbon, etc.) (Von_Hagen 2004)..
- Public entities can acquire new lands, financed with “tax-free bonds,” if the purposes of the operation are clearly for the “public good.” Pending legislation in the U.S. Congress may allow use of “tax free” bonds for this purpose by private entities (see Appendix L).
- The biggest challenge, or as noted by Tom Tuchmann, Director of US Forest Capital, “the biggest crystal ball” are future prices predictions in making the timber management – conservation model work (Tuchmann 2004).

Examples:

- See also #36 (waste management)
- WA: Department of Natural Resources has proposed “Recreation Trust Lands” where forest lands would be managed to raise revenues specifically for the purposes of recreation projects on other DNR lands.
- WA: Evergreen Forest Trust model of issuing a private activity bond, managing lands for timber, and paying debt service with timber revenues (see Appendix L).
- EcoTrust Forest Capital LLC on the Olympic Peninsula in WA (Von_Hagen 2004). In 2002 the Natural Capital Fund began pursuing the ownership and management of timberland, to raise revenues in support of EcoTrust programs and support sustainable forestry as a key “conservation economy sector,” (EcoTrust 2004) (See Mechanism #27).

9.2.9. Transfer Development Rights Program

Transfer Development Right programs allow for the trade of development rights on lands that meet certain environmental criteria, with lands that are under certain growth management restrictions. Essentially, forest owners may want to sell their development rights, and developers may want to buy them so transfer development rights programs essentially facilitate “gains from trade.” The transaction and the conditions of who can sell their development rights and where a developer can then use those rights depends on growth management regulations (zoning, districting, limits to growth within and outside growth boundaries) and individual, negotiated arrangements with local governments.

Variations:

Incentive program for cities to participate in TDR process and establish interlocal agreements (cities have to allow density beyond existing code).

Features:

- The sale of the development right raises revenue for the landowner, allows them to remain on their land and work their land, provides them with lower assessed values of their land and thus lower property taxes, but keeps their land in a forested landscape. The consumer of the development right allows a developer to develop in an area that would normally have been limited to no more growth – creating a denser framework that accommodates growth (rather than promoting sprawl).
- TDR markets can generate high transaction costs. Careful attention must be given to the net benefits of the transactions.
- See Chapter 3 for more details.

Examples:

- Washington: King County has a successful TDR program (see Chapter 3).
- Maryland: Landowners of agriculture land must first form land preservation districts of 50 acres or more. Then they are eligible for state purchase of development rights (McQueen and McMahan 2003).
- New Jersey: Pinelands Development Credit Bank which can buy and sell credits, guarantee loans using credits for collateral, and maintain a registry of credit owners and purchasers. The gap between supply of credits and demand for them (i.e. demand for growth) is expected to create a stronger market for the credits (NJPC 2004).

9.3 Financial tools

To be very clear, revenue sources make up a very large part of the financial mechanism, but they are only the first in two parts to it. As indicated in Section 7.3, once there is a source for revenues (Phase I), the appropriate tool with which to harness those revenues must be chosen (Phase II). This relates to the overall financial strategy for the watershed. There are numerous bonds and loans that can be used (see **Appendix I and J**). Options with promise are briefed in **Appendix L** to start.

9.4. Complete List and Matrix

All 37 mechanisms identified are listed in the sorting matrix below (**Table 4**) and in full detail in **Appendix A**.

Table 4

MECHANISM MATRIX									
KEY • “N/A” assumes data is unknown, unavailable, or needing far more technical analysis • Some mechanisms have multiple data based on their capacity to vary in structure	Urban ↑ Rural transfer	Revenue (leverage) Potential	Authority (barriers)	Admin ⁵⁴ adjustment	Startup ⁵⁵ costs	Political (public) reception	Watershed nexus (eco-benefits)	Equity	Source character
	•Yes •No •n/a	•High •Flux •Low •L-T •S-T •n/a	•Local •State ⁵⁶ •Fed •n/a	• Less • Some • More • n/a	•Yes •Possible •Unlikely •No	•(+) •(-) •Varies •Nexus- needed •n/a	•Yes •Potential •Varies •No	•More •Less •Varies •Neutral	•New •Increase •Reallocate •Shift •Structural
TAXES									
Corporate Income Taxes (B&O)	Yes	High LT	State	Less	Unlikely	(-) Nexus needed	Varies	Less (for business)	Increase Reallocate
Excise Tax (Harvest)	No	Flux LT	Local	Less	No	Varies Nexus needed	Yes	Varies	Reallocate
State General Fund	Yes	Flux	State	Less	No	Varies	No	More	Reallocate
Local Sales Tax (King County)	Yes	High LT	Local	Less	Unlikely	Varies Nexus needed	No	Less (regress)	New Increase Reallocate Shift
Real (Ad Valorem) Property Taxes (King County)	Yes	High LT	Local	Less	Unlikely	Varies	Varies	Varies	New Increase Reallocate Shift
Real Estate Tax Surcharge	Yes	Low L-T	Local	Some	No	Varies Nexus-needed	Potential	Varies++	New Shift

⁵⁴ Admin adjustment – excludes unwilling-to-change factor

⁵⁵ Startup cost – excludes the cost in building political will to support mechanism. Operating/ongoing costs are not addressed in this matrix.

⁵⁶ It is not distinguished here which mechanisms must adhere to certain state statutes – even when using local authority.

Real Estate Excise (transfer) Tax	Yes	High L-T	Local	Less	No	Varies Nexus-needed	Potential	Varies++	Increase Shift
State Sales & Use Tax	Yes	High L-T	State	Less	No	Varies	No	Less (regress)	Reallocate
Selective Sales Tax	Yes	N/A LT	Local State	Less	No	Varies	Varies	Varies	New Increase Reallocate
Tax Contribution	Yes	N/A	Local State	Some	Possible	(+)	No	More	New
FEES & CHARGES									
Access Fees	No	Low LT	Local	Less	No	N/a	Yes	More	Increase Reallocate
Administration Fee	Yes+	High LT	Local	Some	Unlikely	(-)	No	Varies	New?? Increase
Connection Fees	No	High LT	Local	Less	No	N/A	Yes	Neutral	Increase
Impact Fee (Construction Fees)	No	High LT	Local	Some (justification)	Possible +++	(-) Nexus- needed	Yes	More	Increase Shift
Licensing and Recreational Fees	Yes	No LT	Local State	More	Yes ^^	Varies Nexus- needed	Yes	More	New Increase
Local Aquifer Protection Fees	Yes+	High LT	Local	More +++	Yes +++	Varies Nexus-needed	Potential (edu)	Less	New
Mitigation Financing	Yes	Flux	Local	More +++	Yes +++	(+)	Yes	More	New Increase Reallocate Shift
Special (property) Assessment Fees	Yes	High ST or LT	Local	Some	Unlikely	Varies	Potential	Less++	New
Registration Fees	Yes	Low LT	N/A	N/A	Possible	(+) Nexus- needed	N/A	More	N/A
Utility Fees (Full Cost Pricing)	No (1)	High LT	Local	More +++	Possible +++	Nexus- needed	Yes	More	New Increase Reallocate
RECAPTURING REVENUE									
Land Matching	N/A	(Save)	Local State Federal (4)	More	More	(+) Nexus-needed	Yes	More	New Increase
Low-interest loan &	No	(Save)	Local	More	More (3)	(+)	Yes	More	(Save)

easement exchange (fund)									
Refinancing Loans	Yes	High ST	Local State	Some	Possible (2)	N/A	N/A	More	(Save)
MARKET & CHARITY									
“Adopt a watershed”	Yes	Low ST	Local	More	Yes	(+)	Yes	More	New
Carbon Management	Yes	N/A	Local State	More +++	More	(+)	Yes	More	New
Co-op (Specialty) Bank	Yes	N/A LT	Local State	More	Yes	(+)	Yes	More	New
Eco-Labels: Market Share	Yes	N/A	Local State	More +++	Possible	(+)	Yes	More	New
Forest Bank	N/A	(save) LT	Local	More	Possible	(+)	Yes	More	New Structural
Investments tied to best management practices	N/A (6)	(save)	Local State	Some	Unlikely	(+)	Yes	Varies	New
License Plates	Yes	High LT	(Local) State	Some	Possible	(+)	Yes (5)	More	New
Sponsored Credit Cards	Yes	N/A ST	Local State	Some	More	(+)	No	More	New
State Lottery	Yes	High LT / ST	State	Some	Varies (7)	Varies	No	More	New Reallocate
Timber Management	Yes (8)	High (save)	Local	Some	Yes	Varies	Yes	More	Structural
Transfer Development Rights Market	Yes	High (save)	Local	More +++	More	(+)	Yes	More	Structural
Voluntary Fee_ Govmt sponsor	Yes	Low LT	Local	Some	Possible	(+)	Yes	More	New
Voluntary Fee_ Private sponsor	Yes	N/A ST	Local State	More	Varies (9)	(+)	Varies (7)	More	New
Waste Management (fertilizer) services	Yes	High (save) LT	Local	Some	Varies	Varies	Yes	More	Increase
EPA Watershed Initiative	N/A	High	Federal (10)	Some (10)	N/A	(+)	Yes	More	New
STATUTORY									
“Buy Local” statutory priority	Yes+	N/A	Local	More +++	Possible +++	(+)	Yes	More	Structural
Conservation Developments	N/A	(Save)	Local	Some+++	Possible +++	(+) Nexus-needed	Yes	More	(Save)

+ Assumes tax/fee/charge is administered county-wide rather than within a smaller, city/local jurisdiction.

++Potential for rate structure establishment to adjust for inequities in income

+++Adjustment difficulties or cost comes from analysis, justification, and quantitative technicalities

^^ Cost comes from monitoring and/or enforcement

(save) – Mechanism is more likely to reduce expenses and indirectly increase revenues

(edu) – Mechanism more for education/awareness than substantial revenue mechanism

- (1) Though the Tolt River is within the Snoqualmie/Skykomish watershed, Seattle Public Utilities is already working towards full-cost pricing for its ratepayers (water users). King County technically does not administer drinking water supplies for Snohomish County and City of Evergreen.
- (2) Refinancing is standard practice among prudent finance departments. Refinancing may incur penalties, but this can simply be measured against the gains.
- (3) Available funds must source the loans, but they should be repaid with low-interest (like microfinance).
- (4) Similar to matching funds for lands – like DNR Trust Land Transfer or Forest Legacy Program
- (5) Assuming license plate scheme relates to carbon emissions rather than pure charity/vanity
- (6) Dependent on priorities of investors; assumption is that pension funds are a primary CSR fund for their long term stability; pension funds are highly likely to be invested in forestry ventures.
- (7) Dependent on whether this mechanism would be a reallocation or creation of a new, temporary game
- (8) This assumes that urban or rural investors can sponsor timber management. It is not dependent on the rural landowner's management.
- (9) Dependent on private sponsor
- (10) Competitive grant process; it is not an authoritative barrier or adjustment in the same context as other mechanisms

10. CONCLUSION & RECOMMENDATIONS

The process for choosing sustainable financial mechanisms, regardless of their intended uses, is long and arduous. A comprehensive approach is needed and innovation helps.

Chapter 9 culminates with eight financial mechanisms meeting prioritized, threshold criteria. Some of these have already been implemented in some form; some have not. Those that have could stand improvements. None could be implemented without significant buy-in and support from King County, partners and the public. Collectively, they must endure a more rigorous policy analysis to choose between them. All of them require complimentary tools to collect and disperse those revenues, which will require further research.

10.1. Further Research

Though potential mechanisms have been identified, further research is needed in choosing among them.

10.1.1. Partners

The eight mechanisms identified could easily have been a different set of eight using different priority criterion. Again, the threshold criteria used for this report were rural to urban transfer (broad revenue base), revenue potential, and authority adjustment needed. Prior to policy analyses, collective prioritizing of criteria must take place between Snoqualmie/Skykomish planners. This involves identifying the partnering entities that would assist in the implementation of the mechanisms and disclosing the strategic knowledge of those entities and their priorities for the funding process. “Figuring out how to pay for it is the tip of the iceberg,” says Phil Pearl, Washington Associate for the Pacific Forest Trust (Pearl 2004). The partnerships, the politics, and the sustainability of the mechanism can be the real challenge.

10.1.2. Policy Analysis

Following identification of five to ten potential mechanisms, further analysis of the projected performance of each mechanism must occur. This will allow for a more complete evaluation of the mechanism alternatives and a determination of which mechanism, or combination of mechanisms, are most desirable. In the identification and initial policy analysis process, threshold criteria serve only to narrow the options when ten or more options exist. From there, more intricate criteria should be chosen and used for more intensive policy analysis to evaluate their projected performance. The following list of criteria are recommended for further policy analysis:

- *Comprehensive Planning* → To the extent possible, comprehensive planning effects on identified mechanisms should be included as a criterion indexed to long term stability and preparedness.
- *Cost Effectiveness* → Estimates of implementing the financial mechanism, including overcoming legal or political challenges, must be a criteria, relative to projected revenues

(revenues/cost). Analysts may also want to consider estimating the leverage potential⁵⁷ that each mechanism offers.

- *Equitability* → This criteria should reflect multiple factors, including the regressive nature of the mechanism, whether it can be adjusted for income inequalities, whether a nexus exists, whether it targets certain parties of people unfairly, etc.⁵⁸

- *Legality* → This is a core criteria when choosing a financial mechanism. As demonstrated in Chapter 4, this criterion is incredibly cumbersome and could preclude numerous mechanisms. These criteria could also reflect multiple factors, including the extent to which watershed planners are willing to challenge its legality (or its parameters) and at what authoritative level a change must be made.⁵⁹

10.1.3. Referencing Past Experience

Upon analyzing priority mechanisms for use by King County and the Snoqualmie Watershed Forum, examining the threats and opportunities faced by entities that have already utilized those preferred mechanisms should also be considered in order to enhance chances of success. How and why various entities came to use the various mechanisms they did could be pertinent information to recognizing:

- (1) Implementation pitfalls,
- (2) Unintended or perverse consequences, and
- (3) Key elements to their success.

For example, there should be no assumptions about the public's willingness to pay for conservation, based on a failed bond referendum, if the bond was poorly marketed, it was packaged with unrelated projects, or it faced strong competition at the ballot box (i.e. another bond for schools).

Key questions to ask of references:

- What sort of support, initiation, or sponsorship, from partnering entities, did they receive?
- What was the community/regional sentiment?
- What was the community/regional economy like at the time of initiation?
- What sort of price differential, between lands in-fee and their associated development rights, were they experiencing?
- What were the conditions of the lands they aimed to protect?
- What sort of flexibility or jurisdictional authority do they have with property, sales, and income taxes?
- What sort of major/minor events occurred that led up to initiation (i.e. floods, ESA listings, industry departure, etc.)?
- Were any other initiatives being offered at the time theirs was launched?

10.1.4. Changes in State Taxes

The WSTSC report uses an example of the impact of value added tax to timber and wood products. Projecting the resulting incentive structure to the timber economy, especially within

⁵⁷ Potential for matching funds, for example.

⁵⁸ Multiple methods exist for rating equity. One option is to choose several relevant factors, as identified in this report, apply a weight to each, then score each mechanism based on how those factors relate to mechanisms' impacts.

⁵⁹ A rating system could also be applied to legality, like that of equity.

the Snoqualmie/Skykomish, is complex in the least. A value-added tax would raise the tax on raw materials exiting the forest, and lighten the tax on wood products at the retail level, making the tax more equitable along the supply chain (but heavier, than before, on forest landowners). This *could* result in an increase in value-added wood products that typically utilize higher quality wood, which is more likely to come from sustainably managed forests, neutralizing the burden effect. Or this *could* result in greater pressure for the liquidation of forestlands. Further preparedness is needed on this potential consequence were a value-added tax, or other WSTSC recommendations, to be implemented.

10.2. Phase II Tools

Again, this report has detailed potential financial mechanisms for Snoqualmie/Skykomish watershed protection activities, but only Phase I. The mechanism with which to collect and administer the capital is Phase II.

Bonds are the most common methods for financing large-scale conservation projects (LTA, 2003). Loans serve as another option (see Section 7.3 and 9.3 or **Appendix I and J**). Additional preliminary options with promise are noted in **Appendix L**. They are listed below:

- New public authority
- Tax-free bonds and timber revenue debt service
- Self-liquidating bonds
- New (or strengthen) special assessment district

10.3. Strategy

The following final comments reflect elements of strategy that should be considered in finalizing financial mechanisms.

Bonds can be successful in tough economic times.

California's greatest success in passing a bond issue has been their 2002 November ballot decision for a \$3.44 billion "water bond" that specifically preserved land along the waterfront, as well as water quality projects. It was even more of a success because just seven months prior they passed a similar \$2.1 billion bond measure and because the California economy was experiencing a major economic downturn. Exit polling, conducted by the Los Angeles Times, also uncovered that a large percent of low income voters⁶⁰ and a large percent of minorities were in favor of the bonds – an interesting discovery that further demonstrates the importance of the environment across demography and income (McQueen, 2003, p.14).

Revenue sources that are insulated from economic downturns or political reprioritizing will allow for more strategic, long-term, multi-year planning for conservation activities.

This is the case, for instance, of lottery sales (such as with Colorado).

Attributes to look for:

- Inelastic demand
- Relatively few substitutes
- Dedicated revenue streams (versus allocated)

⁶⁰ Voters whose family income was less than \$20,000 annually.

How funds are managed is just as important as how funds are raised.

Public perception, how funds are used, and additional leverage points (such as matching requirements) effect: (1) the opportunity costs of every allocation, (2) the efficiency of the funds, (2) the ability to continue utilizing that source or additional sources. Where the revenues come from and how revenues are leveraged is only *part* of the important financing equation. Recognition that conservation provides “public infrastructure” helps to minimize the volatility of appropriated revenue streams.

Matching funds should always be considered when Trust Funds or new revenue pools are dispersed for conservation.

Prior to choosing a matching ratio, matching success rates should be given some attention or research. For instance, Douglas County, Colorado, boasts a matching success of 3:1. In other words, for every dollar spent on land acquisition, three dollars have been matched (McQueen and McMahon 2003).

A diverse portfolio of funding methods is essential to successful financing.

See Section 7.5.3.

Comprehensive planning for conservation finance is an effective use of limited funds.

For instance, in Maryland, five 30-year programs have been integrated as an interactive network for conserving land (Green Print, Rural Legacy, Program Open Space, Agricultural Land Preservation Program, and Maryland Environmental Trust). “As a result of our hard work, we are now protecting more land than we are losing to development and have been able to preserve one-million acres of precious open space for future generations,” said Maryland Governor Parris N. Glendening in 2002 (SGA 2002).

For example, comprehensive planning of funding sources must include analysis of funding sources overlapped with the relevant forest eco-goods and services they are designed to preserve. Final funding packages for specific projects should display a map that connects the multiple eco-goods and services provided with the multiple funding sources that can be harnessed for them (i.e. separate funding sources for water quality and flood protection may be partially overlapped for use in forest restoration and protection). Special care must be taken to avoid double counting.

A strong nexus, between fees or taxes or payments exacted with eco-services and goods received, should be a priority.

Though it may be more difficult to accomplish when developing a regional-level funding plan, accentuating the connection to forest ecosystems and their direct and indirect benefits to those people paying for their protection should be included. This fosters an atmosphere of support and it also fosters a more robust, long-term source of funding. To do this, an education component will most likely be necessary.

11. REFERENCES

- Baker, M. (2004). Socioeconomic Characteristics of the Natural Resources Restoration System in Humboldt County, CA. Humboldt County, Forest Community Research. <http://www.fcresearch.org/Humboldtpage.html>
- Bengston, D. N., J. O. Fletcher, et al. (2003). "Public Policies for managing urban growth and protecting open space: policy instruments and lessons learned in the United States." Landscape and Urban Planning.
- Best, C. and L. Wayburn (2001). America's Private Forests: Status and Stewardship, Island Press. Publication of the Pacific Forest Trust.
- Buckeye (2003). The Buckeye Forest Project Report, The Buckeye Conservancy. <http://www.buckeyeconservancy.org/pdf/bfpr.pdf>
- Conner, M. (2004). Personal communication: Financial mechanisms for forests, Cascade Lands Conservancy (Vice President of Conservation). February 23, 2004.
- Creahan, K. (2004). Email Communication: Skykomish/Snoqualmie funding, King County - Water and Land Resources Division - Office of Rural and Resource Programs (Assistant Manager; Project Program Manager IV). April, 2004.
- EcoTrust (2004). Natural Capital Fund - A Brochure, EcoTrust's Natural Capital Fund. http://www.ecotrust.org/NCF/NCF_Brochure.pdf
- EFC (1999). EFAB/EFC Guidebook. Boise State University, Environmental Finance Center (EFC)
- EPA (2004). Press Release: Nomination of Projects for Watershed Grants, U.S. Environmental Protection Agency. <http://www.epa.gov/owow/watershed/initiative/budget.form/2004pressrls.html>
- Fox, J. (2004). Email Communication: Salmon Recovery Funds, Salmon Recovery Funding Board. May 4, 2004.
- Franklin, J. (2003). Challenges to temperate forest stewardship: Focusing on the Future. Towards Forest Sustainability, CSIRO Publishing
- Garcia, J. P. (2003). FM 464: Economics of Conservation, University of Washington - College of Forest Resources
- Glidden, T. (2004). Email Communication: Financial Mechanisms, Maine State Planning Office. February, 2004. <http://www.state.me.us/spo/lmf/>
- Gomes, J. (2004). Email Communication: Financial Mechanisms, Environmental League. March 12, 2004.
- Grippi, T. (2004). Mail-in ballots to decide fate of open space: Measure will raise \$175 million for new parks and lands in Contra Costa. Tri-Valley Herald. Santa Clara County. <http://www.trivalleyherald.com/Stories/0,1413,86%257E10671%257E2172595,0.html>
- Haynes, R. (2002). Gen. Tech. Rep. PNW-GTR-529. R. Monserud, U.S. Department of Agriculture: Forest Service - Pacific Northwest Research Station
- KCAO (1993). KC Auditor Report: Impact Fees, King County - Auditor Office (KCAO). <http://www.metrokc.gov/auditor/>
- KCAO (2002). Report No. 97-08: Surface Water Management Program, King County - Auditor Office (KCAO). <http://www.metrokc.gov/auditor/>

KCC (2003). Amendment to the 2003 Budget Ordinance, King County Council (KCC)

KCC (2004). King County 2004 Budget, King County Council (KCC).<http://www.metrokc.gov/mkcc/budget/budget1.htm>

KCDA (2001). Annual Report Message from Assessor Scott Noble, King County - Department of Assessments (KCDA).<http://www.metrokc.gov/assessor/AnnualReportMsg/2001AnnualReportMessage.pdf>

KCDA (2004). Senior and Disabled Property Tax Exemption, King County - Department of Assessments (KCDA).<http://www.metrokc.gov/Assessor/Exemptions/Exemptions.htm>

KCDDDES (2004). King County Comprehensive Plan: 2004, King County Department of Development and Environmental Services (KCDDDES).<http://www.metrokc.gov/ddes/compplan/>

KCDDDES (2004). Proposed Critical Areas Ordinance: Summary of changes from current to proposed requirements, King County - Department of Development and Environmental Services (KCDDDES).<http://www.metrokc.gov/ddes/cao/>

KCDNR (2004). King Conservation District Policy Procedure, King County - Department of Natural Resources (KCDNR).http://dnr.metrokc.gov/wrias/7/PDFs/KCD_Policy_Procedure.pdf

KCDNR (2004). Snoqualmie-Skykomish Watershed, King County Department of Natural Resources (KCDNR).<http://dnr.metrokc.gov/wlr/watersheds/sky-snoq.htm>

KCDNR (2004). Watershed Planning in King County, King County - Department of Natural Resources.<http://dnr.metrokc.gov/Wrias/index.htm>

KCESA-FG (2000). DRAFT Funding Assignment: Statutory Analysis (11/16/00) and Assignment (12/19/00), King County - Endangered Species Act Finance Group (ESA-FG)

KCOE (1997). Press Release: County acquires title to new 1,250 acre of Grand Ridge Park near Issaquah., King County - Office of the Executive (KCOE).<http://www.metrokc.gov/exec/news/1997/112597nr1.htm>

KCOE (1999). Conservation: Past, Continuing and Early Actions (Chapter 5), King County - Office of the Executive.http://www.metrokc.gov/exec/downloads/rok_kc_ch5_1-6.pdf

KCORPP (1999). Annual Growth Report, King County - Office of Regional Policy and Planning (KCORPP)

KCPBRS (1998). Public Benefit Rating System: Resource Information, King County - Department of Natural Resources (KCDNR). KC Ordinance 12969 - Attachment 4.<http://dnr.metrokc.gov/wlr/LANDS/doc/PBRSResInfo9712.doc>

KCWLR (2003). King County regional open space acquisition programs since 1970 with Open Space Citizen Advisory and Oversight Boards, King County - Water and Land Resources Division.<http://dnr.metrokc.gov/wlr/cposa/pdf/acquisition-programs-primer.pdf>

KCWLR (2003). Rural Drainage Program: 2002 Accountability Report to the King County Council, King County - Water and Land Resources Division (Department of Natural Resources and Parks).<http://dnr.metrokc.gov/wlr/rural-drainage-program/pdf/2002-accountability-report.pdf>

KCWLR (2004). Funding Sources for Watershed Stewardship Projects, King County - Water and Land Resources Division (KCWLR).<http://dnr.metrokc.gov/wlr/PI/Fundsres.htm>

KCWLR (2004). Surface Water Management Program, King County - Water and Land Resources Division (KCWLR).<http://dnr.metrokc.gov/wlr/surface-water-mgt-fee/>

- Kilroy, S. (2004). Personal Communication: Snoqualmie/Skykomish watershed, King County - Water and Land Resources Division (Snoqualmie Watershed Coordinator). February - May 2004.
- King County (1995). Waterways 2000 Acquisition and Stewardship Recommendations, King County
- Kirwin, R. M. (1989). "Finance for Urban Public Infrastructure." *Urban Studies* **26**: 285-300.
- Konigsmark, K. (2003). Progress Report of BioSolids Program: February 2003, Mountains to Sound Greenway (Board Member)
- Konigsmark, K. (2004). Personal Communication: Financial Mechanisms, Mountains to Sound Greenway (Board Member). February 6, 2004.
- Laird, M. (2004). Personal Communication: Financial mechanisms, The Nature Conservancy, Washington State (Planned Giving Officer). February 17, 2004.
- Landell-Mills, N. and I. T. Porras (2002). Silver Bullet or fools' gold: A global review of markets for forest environmental services and their impacts on the poor., International Institute for Environment and Development.
- Lippke, B. (2001). Issues Impacting the sustainability of family forest ownership and the functioning of working forests: What we know and don't know., Rural Technology Initiative (College of Forest Resources, University of Washington). <http://www.ruraltech.org/pubs/sustainability.asp>
- LTA (2003). Land Vote 2003: Americans Invest in Park and Open Space, Trust for Public Lands and Land Trust Alliance (LTA). http://www.tpl.org/content_documents/landvote_2003.pdf
- Marchak, M. P. (1995). Logging the Globe, McGill-Queen's University Press: Montreal.
- McQueen, M. and E. McMahon (2003). Land Conservation Financing, Island Press. Publication of the Conservation Fund.
- MDDNR (2004). Recommendations from citizens: Maryland's Smart Growth and Neighborhood Conservation program, Maryland - Department of Natural Resources (MDDNR). <http://www.dnr.state.md.us/education/growfromhere/LESSON15/MDP/SUGGEST/OC1.HTM#OC1>
- MNDR-OC (2001). Report to Legislature pursuant to MN Session Laws 2000, Chapter 490, Article 5, Section 38., Minnesota Department of Revenue (MNDR) - Office of the Commissioner (OC). www.frc.state.mn.us/info/MFRdocs/forestry_tax_reform.pdf
- Modie, N. (2004). Proposed land-use changes would boost density, ease rules in rural areas. Seattle Post-Intelligencer. http://seattlepi.nwsourc.com/local/162370_compplan27.html?searchpagefrom=1&searchdiff=80
- MRCA (2004). Santa Monica Mountains Open Space Preservation Assessment Districts, Mountains Recreation and Conservation Authority. **2004**. <http://www.preserveopenspace.org/faqs.html>
- MSRC (2001). A Revenue Guide for Washington Counties, Municipal Research & Services Center (MSRC): Report No. 53. <http://www.mrsc.org/Publications/textcntyrev.aspx>
- NJPC (2004). A Summary of the New Jersey Pinelands Comprehensive Management Plan, New Jersey Pinelands Commission (NJPC). <http://www.state.nj.us/pinelands/cmp.htm>
- NYS (2002). New York State's Open Space Conservation Plan, New York State (NYS)
- Pearl, P. (2004). Personal communication: Financial mechanisms for forests, Pacific Forest Trust (WA Program Associate). February 4, 2004.

- PROFOR (1999). Financial Mechanisms for Sustainable Forestry. P. M. Costa;, J. Salmi;, M. Simula; and C. Wilson, UNDP Programme on Forests (PROFOR)
- PROFOR (1999). Workshop Report: Financing of Sustainable Forest Management, UNDP Programme on Forests (PROFOR);
- PSRC (1997). Updated PSRC Long-range Population and Employment Forecasts for Analysis Zones in the Central Puget Sound Region, Puget Sound Regional Council (PSRC)
- PSRC (2002). Puget Sound Milestones: Population, Employment, and Housing 1995-2000, Puget Sound Regional Council (PSRC)
- Raphael, T. (2004). Personal communication: Financial mechanisms for forests, Trust for Public Lands (Northwest Conservation Finance Director). February 10, 2004.
- Reinert, H. (2004). Email communication: Funding, King County - Department of Development and Environmental Services (Special Projects Manager). April 9.
- Rice, R. (2004). Email communication: Watershed funding, King County - Water and Land Resources Division (Business & Finance Officer). April, 2004.
- Richmond, C. (2004). Personal communication: Financial mechanisms for watersheds, Washington Office of the Interagency Committee (Special Assistant to IAC Director). February 9, 2004.
- SCDNR (2004). Email Communication: Administration fees for conservation, South Carolina Department of Natural Resources (MarvinD@scdnr.state.sc.us). March 8, 2004.
- Schaffer, D. (2004). Personal communication: REET and San Juan County, San Juan County Citizen Conservation Land Bank (Director). February 10, 2004.
- SGA (2002). State Leadership and Best Practices in Conservation (a white paper), Southern Governors' Association on State Natural Resource Agency Best Practices, Funding Mechanisms and Partnerships
(SGA). <http://www.southerngovernors.org/publications/PDF/StateWhitePaper.pdf>
- Sollitto, M. (2004). Personal Communication: King County Transfer Development Rights program, King County - Water and Land Resources Division (TDR Manager)
- SRFB (2004). Salmon Recovery Funding Board. <http://www.iac.wa.gov/srfb/default.asp>
- Tieman, D. (2004). Email Communication: Watershed funding, King County - Water and Land Resources Division (Open Space Planner). March 8, 2004.
- TPL (2004). Local Parks, Local Financing - Volume 1: Matrix of Local Finance Tools, Trust for Public Lands (TPL)
- TPL (2004). Protecting the Source: Land, Trust for Public Land (TPL)
- TPL (2004). State Funding Profiles, Trust for Public Lands. http://www.tpl.org/tier3_cdl.cfm?content_item_id=872&folder_id=706
- Tuchmann, T. (2004). Personal Communication: Financial Mechanisms, U.S. Forest Capital (Director). April 17, 2004. <http://www.usforestcapital.com/>
- Von_Hagen, B. (2004). Presentation: EcoTrust, University of Washington: MGMT 579. <http://www.ecotrust.org>
- WADoE-WPIC (2002). Phase 4 Watershed Plan: Implementation Committee Report to the Legislature, December 2002, Washington State - Department of Ecology: Watershed Plan Implementation Committee (WPIC). <http://www.ecy.wa.gov/biblio/0206023.html>
- Wadsworth, B. (2004). Personal Communication: Snoqualmie/Skyomish watershed, King County Department of Natural Resources - Forestry Program (Public Outreach & Rural Forest Commission). February 2004.

- Wassmer, R. (2001). An Economist's Perspective on Urban Sprawl, Part 1 and Part 2., California Senate Office of Reporting.
http://www.sen.ca.gov/sor/REPORTS/COMM_STUDIES/SPRAWLREPORTFINAL.HTP
- WDNR (2004). Washington State Forest Legacy Program: FY 2005 Forest Stewardship Coordinating Committee Parcel Draft Ranking, Washington Department of Natural Resources - Forest Stewardship Coordinating Committee (WDNR)
- WDoR (2003). Major Washington State Taxes - 2003, Washington Department of Revenue (WDR).http://dor.wa.gov/Docs/Reports/2003/Tax_Statistics_2003/Chart1.pdf
- WSTSC (2002). Tax Alternatives for Washington State: A Report to the Legislature, Washington State Tax Structure Study
Committee.http://dor.wa.gov/content/statistics/WAtaxstudy/Volume_1.pdf
- Zumeta, D. and J. Fletcher (2004). Personal communication: Financial mechanisms for forests, Minnesota Forest Resources Council (Director; Policy Analyst). February 9, 2004.