

OKANOGAN COUNTY COMPREHENSIVE PLAN UPDATE

Current Draft As Of: June 15, 2005

A balance of:

Accepting responsibility for our future by
honoring our past, respecting our rights and managing our resources.

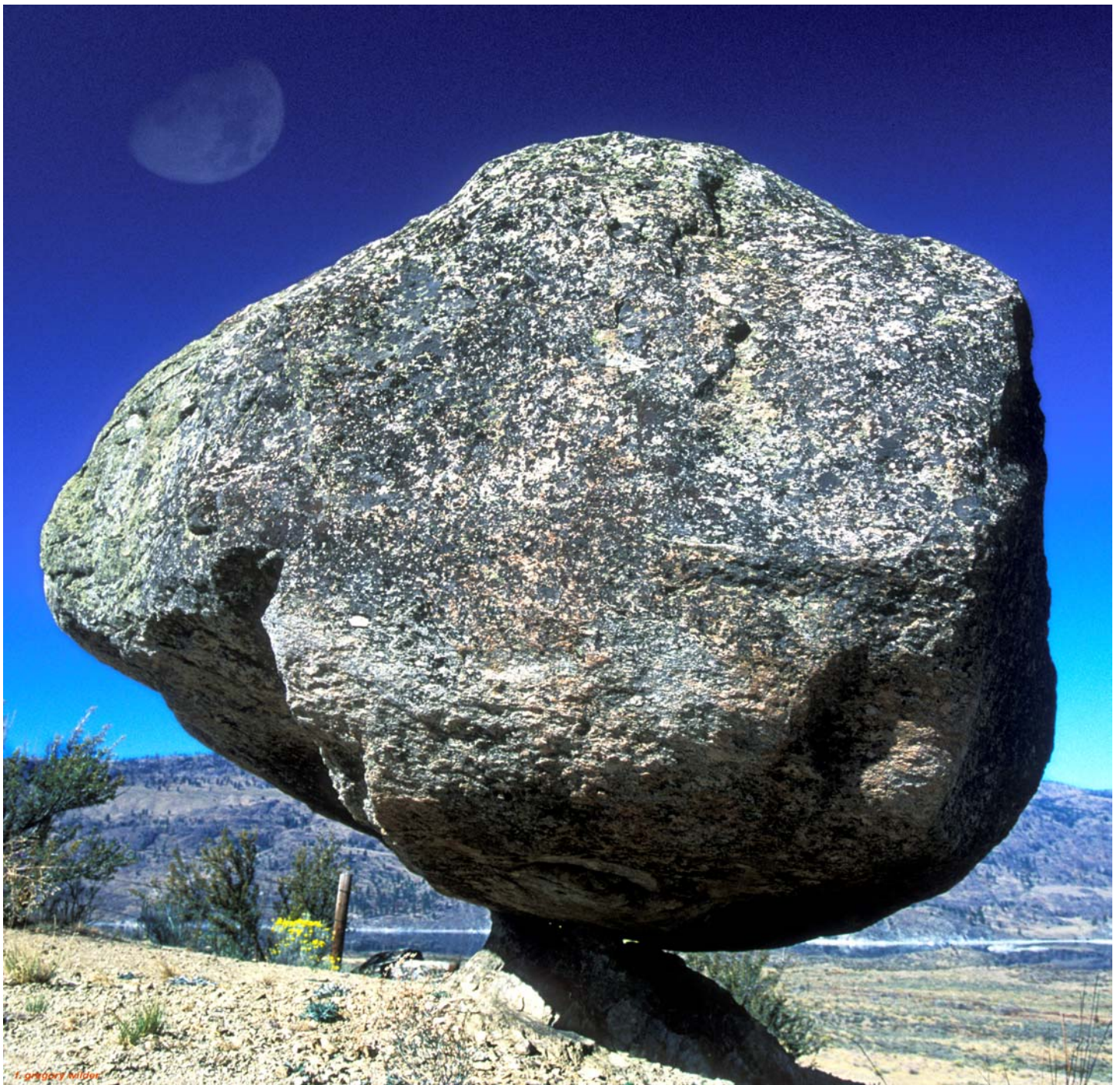




TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....6

LIST OF MAPS/FIGURES7

LIST OF TABLES.....9

PART I:..... 10

INTRODUCTION 10

Chapter 1: Purpose & Intent of the Comprehensive Plan 11

 1.1 What is a Comprehensive Plan?..... 11

 1.2 Benefits of the Comprehensive Plan 11

Chapter 2: Okanogan County Vision 13

 2.1 What is a Vision Statement? 13

 2.2 Vision Statement 13

 2.3 How was the County’s Vision Statement Prepared?..... 15

Chapter 3: Comprehensive Plan Process..... 16

 3.1 Authority for Planning..... 16

 3.2 Why Update the Plan Now? 16

 3.3 Comprehensive Plan Elements..... 17

 3.4 Localized Planning 18

 3.5 Plan Format and Organization..... 19

 3.6 Relationship to Other Planning Efforts 20

 3.7 Public Involvement..... 21

 3.8 Future Plan Amendments 21



Chapter 4: Description of Okanogan County 23

Chapter 5: Description of Planning Areas..... 26

 5.1 Upper Okanogan Valley..... 26

 5.2 Mid Okanogan Valley (Whitestone)..... 26

 5.3 South Okanogan Valley (Mid-Valley)..... 26

 5.4 Columbia 26

 5.5 Methow Valley 26

 5.6 Colville Reservation 27

Chapter 6: Description of Sub Areas 28

Reserved: 6.1 Oroville: East Lake Osoyoos 28

PART II:..... 29

GOALS & POLICIES 29

Chapter 1: Countywide Planning Policies..... 30

Chapter 2: Land Use Goals & Policies..... 36

 2.1 Resource Lands 36

 2.2 Critical Areas 41

Chapter 3: Fire Planning Goals and Policies..... 50

Reserved: Chapter 4: Housing Goals & Policies 52

Reserved: Chapter 5: Transportation Goals & Policies 52

Reserved: Chapter 6: Capital Facilities Goals & Policies..... 52

Reserved: Chapter 7: Utilities Goals & Policies 52

Reserved: Chapter 8: Economic Development Goals & Policies..... 52

Reserved: Chapter 9: Planning Area Specific Goals & Policies..... 52

Reserved: Chapter 10: Sub Area Specific Goals and Policies 52



PART III:.....	53
BACKGROUND INFORMATION & FINDINGS.....	53
Chapter 1: Intent of Part III.....	54
Chapter 2: Land Use.....	55
2.1 Natural Resource Lands.....	58
2.2 Next Steps – Natural Resource Lands.....	72
2.3 Critical Areas.....	74
2.4 Next Steps – Critical Areas.....	97
Chapter 3: Fire Planning.....	101
3.1 Introduction.....	101
3.2 Existing Conditions.....	103
3.4 History of Fire in the County.....	113
3.5 Fire Protection and Response Responsibility.....	114
3.6 Wildland Urban Interface.....	117
3.7 Next Steps – Fire.....	123
<i>Reserved: Chapter 4: Housing.....</i>	<i>127</i>
<i>Reserved: Chapter 5: Transportation.....</i>	<i>127</i>
<i>Reserved: Chapter 6: Capital Facilities & Utilities.....</i>	<i>127</i>
<i>Reserved: Chapter 7: Economic Development.....</i>	<i>127</i>
<i>Reserved: Chapter 8: Planning Area Plans.....</i>	<i>127</i>
<i>Reserved: Chapter 9: Sub Area Plans.....</i>	<i>127</i>
REFERENCES.....	128
APPENDICES.....	129
Appendix A.....	130



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LIST OF MAPS/FIGURES

- Map 4-1. Columbia Planning Area Distribution of Agricultural Land Use Map
- Map 4-2. Methow Valley Distribution of Agricultural Land Use Map
- Map 4-3. Whitestone and Upper Valley Distribution of Agricultural Land Use Map
- Map 4-4. Mid-Valley Distribution of Agricultural Land Use Map
- Map 4-5. Columbia Distribution of Forest Land Use Map
- Map 4-6. Methow Valley Distribution of Forest Land Use Map
- Map 4-7. Whitestone and Upper Valley Distribution of Forest Land Use Map
- Map 4-8. Mid-Valley Distribution of Forest Land Use Map
- Map 4-9. Columbia Distribution of Mineral Land Use Map
- Map 4-10. Methow Valley Distribution of Mineral Land Use Map
- Map 4-11. Whitestone and Upper Valley Distribution of Mineral Land Use Map
- Map 4-12. Mid-Valley Distribution of Mineral Land Use Map
- Map 4-13. Columbia Wetlands -NWI Map
- Map 4-14. Methow Valley Wetlands -NWI Map
- Map 4-15. Whitestone and Upper Valley Wetlands -NWI Map
- Map 4-16. Mid-Valley Wetlands -NWI Map
- Map 4-17. Columbia Distribution of Priority Species and Habitat
- Map 4-18. Methow Valley Distribution of Priority Species and Habitat
- Map 4-19. Whitestone and Upper Valley Distribution of Priority Species and Habitat
- Map 4-20. Mid-Valley Distribution of Priority Species and Habitat
- Map 4-21. Columbia Water Type Map



- Map 4-22. Methow Valley Water Type Map
- Map 4-23. Whitestone and Upper Valley Water Type Map
- Map 4-24. Mid-Valley Water Type Map
- Map 4-25. Columbia Slopes 30 and greater Map
- Map 4-26. Methow Valley Slopes 30 and greater Map
- Map 4-27. Whitestone and Upper Valley Slopes 30 and greater Map
- Map 4-28. Mid-Valley Slopes 30 and greater Map
- Figure 3-1: Okanogan County Average Precipitation
- Figure 3-2: Okanogan County Lightning Activity
- Figure 3-3: Okanogan County Fuel Model
- Figure 3-4: Okanogan County Crown Fire Potential
- Figure 3-5: Okanogan County Topography
- Figure 3.6: Forest Service Fire Regime Map
- Figure 3-7: Okanogan County Residential Distribution
- Figure 3-8: Okanogan County Recent Subdivisions
- Figure 3-9: Okanogan County Community Facilities (not available)
- Figure 3-10: Okanogan County Roads
- Figure 3-11: Okanogan County Fire History (1993-2003)
- Figure 3-12: Okanogan County Fire Protection Districts
- Figure 3-13: Okanogan County Land Ownership



LIST OF TABLES

To be added as the plan becomes more developed and complete.





Chapter 1: Purpose & Intent of the Comprehensive Plan

It is the land, and the various use of our property that defines the character of our communities and drives the economy of Okanogan County. Planning for future growth and change is important so that we may preserve our rural lifestyles and help ensure the viability of the County's economy into the future. Coordinated and managed growth can maintain our rural character, enhance the local economy, protect the environment, and provide for the health and safety of our County's residents. The Okanogan County Comprehensive Plan outlines the course by which we will accomplish our desired and well-planned future.

1.1 What is a Comprehensive Plan?

The Okanogan County Comprehensive Plan (Plan) is a 20-year guide for the future of Okanogan County. Updates, as appropriate, will occur to the Plan to ensure that the Plan accurately reflects the County's direction. The Plan provides a framework to support growth, development, and public decision-making in the County. It provides the vision of how we want the County to grow and evolve over time. It establishes the goals, policies, priorities, and actions that the County will pursue to allow us to maintain and enhance the quality of our life, preserve our rural character, sustain our agricultural and natural resource industries, provide recreational opportunities for residents and visitors, and protect environmentally sensitive areas.

1.2 Benefits of the Comprehensive Plan

A comprehensive plan is a document that can benefit private property owners, local businesses, County staff, cities and towns in the County, state and federal agencies, Tribes, community organizations and other interested parties. It is an effective management tool for elected officials, empowers community members to help define the future vision and character of the County, guide development patterns of the County, and provide predictability to property owners regarding the future use and enjoyment of their land.

Effective Management Tool

A comprehensive plan can be an effective management tool to help plan for the future; by analyzing current growth and development patterns today, this can determine future growth, patterns and appropriate needs and priorities. The Plan can help the County focus on preserving



the unique character of our communities and encouraging compatible land uses. A comprehensive plan provides a means of managing the public costs by efficiently and effectively providing services to newly developed areas and helps ensure that growth does not overwhelm infrastructure or capacity to provide needed public services. A comprehensive plan also helps determine the level of services that will be provided in the future and identifies potential funding sources. It also provides a framework to continually seek balance between our public and private interests and promote economic development.

A comprehensive plan typically has a 20-year planning horizon and provides continuity for future decision making, despite fluctuations in the local economy or changes in elected officials. The Plan will also help to provide a framework for the County to work cooperatively with the cities and towns and the Colville Confederated Tribes to sustain their own future planning efforts.

Community-Defined Direction

A comprehensive plan allows County residents to direct their future. It enables decisions to be made to the greatest extent possible, in Okanogan County, by Okanogan County, for Okanogan County. It is important for County residents and property owners to have an opportunity to express their concerns and aspirations for the future in order to maintain local control over land use decisions that may affect them. The Plan also provides clear guidance to state and federal agencies so that they can make decisions that support locally determined goals and priorities and to help preserve the characteristics that make Okanogan County unique.

Greater Predictability

A comprehensive plan provides predictability to private property owners, businesses, developers and governing agencies. Implementation of Okanogan County's vision and desired goals offers stable, long-term decisions concerning the future use and enjoyment of property. The plan helps promote compatible land uses and protects private property rights.



Chapter 2: Okanogan County Vision

2.1 What is a Vision Statement?

A vision statement expresses our community values and goals for the future. It depicts, in words, what the County wants to preserve and become—how our communities will look, function, and evolve over time. A vision statement is important to the Comprehensive Plan Process because it provides the foundation on which our planning efforts are based and highlights those topics that are most important to our residents. The Plan helps Okanogan County to focus on this vision by addressing how the County will develop over time and establishes the goals, policies, and programs the County will pursue in order to improve or otherwise maintain the quality of life, preserve and promote the County’s rural assets, and ensure that Okanogan County is a safe and prosperous place to live and work now and into the future to improve the quality of life, preserve and promote the County’s rural assets, and ensure that Okanogan County is a safe and prosperous place to live and work now and into the future.

2.2 Vision Statement

Okanogan County’s vision for the future is founded in our County’s history and it guides the character of growth such that it allows us to maintain and enhance the quality of our life. We recognize the diversity in landscapes, resources, and cultural values throughout the County and we envision a future that supports opportunities for all the people of the County. We envision a future where:

- ◆ We recognize our historical quality-of-life, our way-of-life is improved, and we continually seek balance for our public and private interests;
- ◆ Our County remains an excellent place to raise our families with enhanced and growing employment opportunities, the nature of which enables future generations to raise their families here as well;



- ◆ Our rural and unique landscapes, open spaces, and sensitive habitats provide recreational opportunities, define our rural character, and contribute to maintaining and evolving the County's traditional industries;
- ◆ Countywide growth and new development is integrated with our rural character, way of life, natural resource and agricultural based industries, recreational opportunities, and our natural setting;
- ◆ We identify the need for modern economic development and infrastructure which provides for diversification, complements traditional agriculture, mining and forestry-based industries, and respects our growing tourism and recreational opportunities;
- ◆ Sustainable growth is supported by affordable, quality health care, educational, cultural, and other public/private facilities and services;
- ◆ Public health and safety is a priority and our communities have the tools at hand to prepare for and resolve the impacts from unexpected events and conditions;
- ◆ Local government has streamlined processes that are reasonable and predictable for our residents and businesses.
- ◆ We have identified, honored, and protected our sensitive and valuable cultural resources, historic properties, traditional cultural properties, and customs;
- ◆ A strong partnership has been established and maintained by and between the County, its cities and towns, the Colville Confederated Tribes, our environmental/economic partners in Canada; and other public, and private institutions to achieve our vision for the future.

This vision statement was approved by the Okanogan County Board of County Commissioners April 05, 2005.



2.3 How was the County's Vision Statement Prepared?

The County's Draft Vision Statement was initially developed based on community priorities identified at four public open houses, conducted in January 2004. At these open houses, participants were asked to identify the topics that are most important to include in the County's Vision. Common themes identified from public input include:

- ◆ Community/Rural Character. Focus on the aspects that make the County inherently unique (agriculture, forest lands, and open space).
- ◆ Quality of Life. Preserve our rural quality of life.
- ◆ Land Use. Land Use, Natural Resources, and Economic Development are interrelated in the County.
- ◆ Economic Development. Initiatives should complement and respect the County's existing rural character.
- ◆ Environmental Quality. Promote a clean and healthy environment.
- ◆ Property Rights. Protect private property rights.

In the Fall of 2004 and Spring/Summer of 2005, the County developed a revised draft vision statement to not only reflected the expressed themes from the Spring of 2004 but also that provided at multiple public presentations, Plan coordination meetings, Planning Commission meetings, and Okanogan County Board of Commission meetings. The revised draft vision statement was approved by the Okanogan County Board of Commissioners on April 05, 2005 and became the vision of which this Plan was built upon.



Chapter 3: Comprehensive Plan Process

3.1 Authority for Planning

Washington State Law authorizes Okanogan County to prepare and implement a comprehensive land use plan but affords the County considerable latitude in determining how best to do so. Unlike most communities throughout the State, Okanogan County is not obligated to prepare its comprehensive plan in accordance with the provisions of the Washington State Growth Management Act (GMA), although the County must comply with certain requirements regarding the identification and protection of natural resource lands and environmentally sensitive areas. As a result, Okanogan County otherwise has the freedom to prepare a plan that reflects community values and priorities while using a proactive sense in the use and interpretation of GMA planning principles and practices to guide the process of updating the plan.

3.2 Why Update the Plan Now?

The current Plan was last subjected to a thorough review and update in 1964. Since then, there have been changes in the County- population (growth in some communities and decline in others), residential development, changes in businesses and local industries. The Plan should be updated to reflect these changed conditions and to provide current residents and property owners with the opportunity to affirm what they value in their community.

Although the Plan has not had an overall update since its original adoption, portions of the plan have been updated and supplements have been created, including:

- ◆ Outdoor Recreation Plan, April 22, 2004, an update to the 1993 Comprehensive Parks and Recreation Element;
- ◆ Upper Methow Valley Comprehensive Plan, 2000, an update to the Methow Valley Plan, 1976 and Methow Valley Planning Area Sub-Unit A Plan, 1988;
- ◆ Okanogan County Transportation Plan, 1996;
- ◆ Shoreline Master Program, 1987 & 1996;



- ◆ Trails Plan, 1980, including addenda (Comprehensive Recreation Plan for the Methow Review District, 1990);

A thorough update of the Comprehensive Plan gives the County more current and consistent planning for the future physical development and management of public resources through 2025. This planning effort will update relevant land use, natural resources, critical areas, transportation, housing, and capital facilities data to provide a more accurate picture of the County. It is also an opportunity for the County to work with residents, cities, towns, Colville Confederated Tribes, and other interested parties to support coordination in the County.

3.3 Comprehensive Plan Elements

The Plan will include the following chapters, or elements:

- ◆ Land Use
- ◆ Natural Resources
- ◆ Economic Development
- ◆ Housing
- ◆ Parks and Recreation
- ◆ Transportation
- ◆ Utilities
- ◆ Capital Facilities

These elements will consist to two parts: 1) An analysis that updates information on current conditions in the County and 2) General goals and policies applicable to the County as a whole. Additional goals and policies, applicable to a more localized setting will be achieved through the development of planning area or sub area plans.

GMA Goals

The 14 GMA goals are summarized below:

- *Focus urban growth in urban areas.*
- *Reduce sprawl.*
- *Provide efficient transportation.*
- *Encourage affordable housing.*
- *Encourage sustainable economic development.*
- *Protect property rights.*
- *Process permits in a timely and fair manner.*
- *Maintain and enhance natural resource-based industries.*
- *Retain open space and habitat areas and develop recreation opportunities.*
- *Protect the environment.*
- *Encourage citizen participation and regional coordination.*
- *Ensure adequate public facilities and services.*
- *Preserve important historic resources.*
- *Manage shorelines wisely.*



Washington State passed the Growth Management Act (GMA), RCW Chapter 36.70A, in 1990, and has amended it several times since then. GMA provides a system of state-mandated comprehensive planning for the more populated and fast growing counties in the state. GMA contains state goals, deadlines for compliance, direction on how to prepare local comprehensive plans and regulations, and requirements for early and continuous public participation. Within the GMA framework local governments have many choices regarding the specific content of comprehensive plans and implementation of development regulations.

The County is not subject to most of the provisions of GMA; however, it is required to review and, if needed, revise its policies and/or development regulations regarding critical areas and natural resource lands every 7 years to ensure compliance with RCW 36.70A.060. GMA's requirement to classify, designate and protect natural resource lands (and critical areas) applies to all jurisdictions in the state, in recognition of the essential role of these lands in supporting economic productivity and healthy ecological systems. Okanogan County's first update of the Critical Areas and Natural Resource Lands must be completed by December 1, 2007.

To meet the requirements of the GMA, the County's comprehensive plan must provide a strategy to assure the conservation of these agricultural, forest and mineral resource lands. The Comprehensive Plan should provide direction on achieving the following goals:

- ◆ The identification of natural resource land classification criteria, consistent with the guidelines issued by the Washington State Department of Community, Trade and Economic Development (CTED);
- ◆ The designation of agricultural, forest, and mineral resource lands;
- ◆ The encouragement of productive and sustainable management of natural resource lands; and
- ◆ The prevention of uses on and adjacent to natural resource lands that are incompatible with their conservation.

3.4 Localized Planning

Planning Areas

Due to the size of the County, Planning Areas will be developed in partnership with affected residents to better address unique local circumstances and priorities. The Planning Areas will be roughly based on school district boundaries but may be modified to reflect other service area



boundaries and local conditions. The Planning Areas are shown in Figure 2: Okanogan County Planning Areas. A description of each of the planning areas is described further in the document.

Sub Areas

Within each Planning Area, more localized and smaller sub-areas may be designated to include unincorporated communities and other special rural areas, but primarily used for Urban Growth Areas that identify the logical outer boundary for the extension of city services such as water and sewer utilities. The sub-area plans will be prepared in accordance with the provisions of inter-local agreements executed between the County and the participating cities and towns.

3.5 Plan Format and Organization

The updated Comprehensive Plan includes a Vision Statement, Goals and Policies, and a series of maps that will guide future land use decisions. While some of the goals and policies will be countywide in nature, much of the comprehensive plan will be based on more localized planning areas that reflect the unique character of the different communities within the County. As a result, for instance, the policy direction that is provided for the Methow Valley may differ from the policy direction that is provided to guide new development in the Oroville area or for the communities in the vicinity of Brewster.

The County Comprehensive Plan will focus on the unincorporated areas of the County and the areas off the Colville Reservation. The County will however, work closely with each of the incorporated cities and towns to ensure consistency between their plans and the County's plan for future growth and development. In addition, the Colville Confederated Tribes is preparing a Comprehensive Plan for lands located within the boundaries of their Reservation. The County has executed an agreement with the Colville Tribes to mutually support the coordinated preparation and implementation of their respective plans.

In order to make the most effective use of limited County resources and to comply with the conditions of outside funding sources, a multi-phased approach will be utilized to update the Plan. The first phase of work will focus on the development of a draft Vision Statement, draft Countywide Planning Policies, a draft Natural Resources Element, and the critical areas and wildfire planning portions of the Land Use Element. Subsequent phases will focus on the preparation of planning area plans that reflect the unique character and circumstances facing the various communities throughout the County, as well as completion of the land use element and the establishment of the County's Goals and Policies for economic development, housing, transportation, parks and recreation, utilities, and capital facilities. The final phases will result



in the reconciliation of any inconsistencies between the Chapters and then revising the County Development Regulations to be consistent with the updated Plan.

3.6 Relationship to Other Planning Efforts

The Okanogan County Comprehensive Plan provides the primary guidance for future growth and development in the County. All development regulations (such as the zoning code, subdivision regulations, and critical areas regulations) should be consistent with the Comprehensive Plan. The Comprehensive Plan should also be consistent with other planning efforts throughout the County, such as the comprehensive plans of incorporated cities and towns, in order to give a complete picture of the overall projected growth in the County. Table 1 depicts the Comprehensive Plans for each of the cities and towns in the County.

Table 1: Comprehensive Plans-Cities and Towns in Okanogan County

Jurisdiction	Approval Date
City of Brewster Comprehensive Plan	January 10, 1996
Elmer City Comprehensive Plan	No plan as of the date of this document
Town of Nespelem Comprehensive Plan	1994
City of Okanogan Comprehensive Plan	January 1996
City of Omak Comprehensive Plan	2003 Update
City of Oroville Comprehensive Plan	October 1995.
City of Pateros Comprehensive Plan	2003
Town of Tonasket Comprehensive Plan	With amendments through October 1995.
Town of Twisp Comprehensive Plan	1991
Town of Winthrop Comprehensive Plan	1996
Colville Confederated Tribes General Comprehensive Plan	May 1988



Table 2: Related Community Planning Initiatives

Planning Initiative	Anticipated Approval Date
Community Wildfire Protection Plans	Ongoing
Methow Watershed Plan	Plan approved by MBPU Fall 2004; Commissioner consideration for approval: Summer/Fall 2005
Okanogan Basin Watershed Plan	Summer 2009
Upper Columbia Regional Salmon Recovery Plan	Summer/Fall 2005
Methow Comprehensive Flood Hazard Management Plan	Summer 2005
Okanogan Comprehensive Flood Hazard Management Plan	Summer 2007
Okanogan County Shoreline Master Program Update (including Critical Areas Ordinance)	Summer 2007

3.7 Public Involvement

Community involvement forms the backbone of the comprehensive planning process and is essential to developing a plan that is valued by Okanogan County residents. The Plan should represent the thoughts and aspirations of its residents. Through the public involvement process, County residents help to define the key issues and opportunities in the County, identify community values and perspectives on quality of life, provide their vision for the future of the County, and provide input on how future development should be guided and integrated into the existing development pattern.

3.8 Future Plan Amendments

This Comprehensive Plan should be updated and reviewed periodically to ensure that the plan adequately provides for growth, reflects community sentiment, integrates new data, and addresses changing social, economic, political, and technological conditions. Landscapes evolve over time, and the Comprehensive Plan should be a living document, subject to periodic



updates to reflect changing development patterns, population and employment trends, and increased demand for services. Comprehensive plan updates often address inconsistencies in the document that were not immediately evident at adoption, integrate new baseline data, and responds to revisions to the Capital Facilities Plan as projects are implemented.



Chapter 4: Description of Okanogan County

Okanogan means "rendezvous" and refers to the place where the Okanogan River joins the Columbia River. The Washington Territorial Legislature created the County on February 2, 1888.

The total area of Okanogan County is approximately 3,400,000 acres, of which 953,301 acres is privately owned and about 1,574,262 acres is federally owned. Over 95 percent of the federally owned land is encompassed within the jurisdiction of the United States Forest Service, primarily within the Okanogan National Forest and the Pasayten Wilderness on the western side of the County. Table 4-1 illustrates land ownership in Okanogan County.

Table 4-1. Acres of Land Ownership in Okanogan County

Ownership	Acres
Private	953,301
City	1,343
County	937
Public Utility Districts	1,505
State	357,721
Federal	1,574,262
Tribal	485,695
Water Bodies	36,439
Total:	3,411,203

Source: Okanogan County

Larger than several states, Okanogan Country is bordered on the north by the Canada, on the south by the Columbia River, on the east by Ferry County, and on the west by the 8,000 foot peaks of the North Cascade Mountains. The County covers 5,281 square miles, making it the largest county in Washington. Only 30% of the land within the County is in private ownership due to the amount of state and federal land. The Colville Indian Reservation, located in the



southeast corner of the county, occupies approximately 700,000 acres and is an integral part of the heritage of the County.

Forested highlands and valley's with fertile farmlands comprise Okanogan County (County), which is located east of the Cascades along the Canadian border in the north-central part of Washington. Bordering the County on the west are Whatcom, Skagit, and Chelan Counties, to the east is Ferry County, and to the south is Douglas County.

The western half of the County is comprised of dense, rugged, mountainous terrain, much of which is within Okanogan National Forest. Similar topography also can be found in the northeast corner of the county. From the north part of the County, the land descends into rolling hills, grassy ranges, and fertile valleys that extend through the center of the county. Only 30% of the land within the county is in private ownership due to the amount of state and federal land. The Confederated Tribes of the Colville Reservation (Reservation) occupies approximately 675,000 acres in the County's southeast corner and is an integral part of the County's heritage.

A more detailed description about the physical and natural environment of Okanogan County can be found in the following plans: Methow Basin Watershed Plan, Okanogan Basin Watershed Plan, Okanogan Basin Water Quality Implementation Plan, Methow Comprehensive Flood Hazard Management Plan, Okanogan Comprehensive Flood Hazard Management Plan, Northwest Power Conservation Council Okanogan sub basin plan and Northwest Power Conservation Council Methow sub basin plan.

The 2000 census recorded a county population of 39,564 people. Okanogan, with a population of 2,415, is the second largest city in the county, and the county seat. Omak, the largest city in the county has a population of 4,495. Other cities within the county are: Brewster (2,055), Conconully (177), Coulee Dam (890), Elmer City (310), Nespelem (235), Oroville (1,615), Pateros (595), Riverside (305), Tonasket (1,025), Twisp (1,000), and Winthrop (375). The county has an unincorporated population of 21,764, while the incorporated population is 15,136.

There are 15,027 households and 10,579 families residing in the county. The population density is 8 per square mile. There are 19,085 housing units at an average density of 4 per square mile.

Agriculture and forestry have historically been and continue to be major economic generators for the County, shaping the character of the community and employing approximately 5,756 people. According to 2000 U.S. Census data, approximately 2,464 people in the County worked in natural resource-based industries (agriculture, forestry, fishing, hunting, and mining), 222 people less than reported in 1990.

Government, retail trade, services, and manufacturing are a few of the major employers within the County. Omak, the regional center for services and trade, is experiencing a great deal of



growth. There is also increasing commercial development pressure in the area between the Canadian border and Oroville. The City of Coulee Dam is the location of Grand Coulee Dam, one of the largest concrete structures in the world, and largest electricity producer in the United States.



Chapter 5: Description of Planning Areas

5.1 Upper Okanogan Valley

The Upper Okanogan Valley Planning Area is defined by the Oroville School District boundaries. The area comprises roughly 350 square miles or roughly 223,300 acres. The City of Oroville, and the communities of Nighthawk, Molson and Chesaw are located within the Upper Okanogan Valley Planning Area.

5.2 Whitestone

The Whitestone Planning Area is generally defined by the Tonasket School District boundaries. The planning area is roughly 1,315 square miles in size and includes the Town of Tonasket and the communities of Loomis, Ellisford, Wauconda, and Havillah.

5.3 Mid-Valley

The Mid-Valley Planning Area is generally defined by the Omak and Okanogan School District boundaries. The planning area is roughly 520 square miles in size and includes the Cities of Omak and Okanogan and the communities of Conconully, Riverside, and Malott.

5.4 Columbia

The Columbia Planning Area is located along the Columbia River, the southern boundary of Okanogan County. The planning area is roughly 370 square miles in size and is generally defined by the limits of the Brewster and Pateros School Districts. The planning area includes the cities of Brewster and Pateros, and the communities of Monse and Methow.

5.5 Methow Valley

The Methow Valley Planning Area is generally defined by the Methow Valley School District boundaries and includes the Methow Valley Comprehensive Plan Subunits A-D. The planning area is roughly 1,710 square miles in size in area. The Methow Valley has had to date, the



greatest amount of planning work achieved within the County. The Methow Valley Planning area includes the towns of Winthrop and Twisp and the communities of Carlton and Mazama.

5.6 Colville Reservation

The Colville Reservation Planning Area is defined by the Colville Confederated Tribes Reservation boundaries and includes the towns of Nespelem, Elmer City, and Coulee Dam. The planning area is roughly 1,055 sq. miles in size.



Chapter 6: Description of Sub Areas

Reserved: 6.1 Oroville: East Lake Osoyoos

PART II:

GOALS & POLICIES





Chapter 1: Countywide Planning Policies

The process of updating the Comprehensive Plan will be guided by a series of Countywide Planning Policies that will provide interim guidance as portions of the Comprehensive Plan are completed. These policies are process oriented and will address how the plan will be updated. The policies will identify key planning principles, and provide direction to County staff in the drafting of the updated plan. The Countywide Planning Policies also provide a framework for actively involving local residents, business and property owners, the cities and towns, local service providers, and the Colville Confederated Tribes. The Countywide Planning Policies have been developed and refined through a series of intergovernmental coordination meetings, as well as several opportunities for public review. They will be additionally commented on during future public outreach and involvement opportunities.

County Wide Planning Policy 1

The revised Okanogan County Comprehensive Plan will be based on a Vision Statement approved by the Board of County Commissioners

County Wide Planning Policy 2

It is the intent of Okanogan County to promote the coordination of all local planning initiatives and to integrate as appropriate other plans and priorities into the County Comprehensive Plan including, but not limited to: approved Watershed Plans, Economic Development Strategies, approved Salmon Recovery Plans, Trail Plans, Comprehensive Flood Hazard Management Plans, Shoreline Master Programs, Community Wild Fire Protection Plans, and Transportation Plans.

County Wide Planning Policy 3

Although Okanogan County is not required to fully comply with the provisions of the Washington State Growth Management Act (GMA), it is the intent of the County to be proactive in the use and interpretation of GMA planning principles and practices to guide the process of updating the County Comprehensive Plan.



County Wide Planning Policy 4

The County will develop and implement a public involvement strategy to ensure the opportunity for early and continuous citizen participation throughout the Comprehensive Plan Update process.

County Wide Planning Policy 5

The updated Comprehensive Plan will include County-wide Goals and Policies that address land use, natural resource lands, environmentally sensitive areas, natural hazards, community safety, economic development, transportation, housing, parks and recreation, utilities, essential public facilities, and capital facilities needs and priorities.

County Wide Planning Policy 6

It is the intent of the County to ensure that the updated County Comprehensive Plan be sensitive to the diversity of unique landscapes and demography within the County. To allow for resident and geographic specific planning, the County will be divided into the following planning areas:

- ◆ Upper Okanogan Valley
- ◆ White Stone
- ◆ Mid-Okanogan Valley
- ◆ Colville Reservation (Okanogan County portion only)
- ◆ Columbia
- ◆ Methow Valley

The planning areas will be primarily based on school district boundaries, but modified slightly to reflect other service area boundaries and local conditions.



County Wide Planning Policy 7

Each of the identified planning areas will develop a plan that will address unique local circumstances and priorities and be consistent with the County-wide and the Comprehensive plan element Policies.

County Wide Planning Policy 8

It is the intent of Okanogan County to prepare separate sub-area plans within the planning areas. The sub-areas plans will be developed, in partnership with the appropriate incorporated cities and towns, for their Urban Growth Area (UGA) boundaries. Other sub-area plans can be developed to address unique local circumstances and priorities. Sub area plans for the UGAs within the County, may include provisions to guide shared decision-making within designated UGAs. These plans will be prepared in accordance with the provisions of inter-local agreements executed between the County and the participating communities.

County Wide Planning Policy 9

The County will consult with adjacent counties, the Colville Confederated Tribes, and State and Federal organizations with interests within the County throughout the County Comprehensive Planning Process as appropriate and applicable.

County Wide Planning Policy 10

It is the expectation of Okanogan County that State, Federal, and Regional Agencies will prepare, implement, and update plans and regulations consistent with the County's Vision Statement and Comprehensive Plan.

County Wide Planning Policy 11

It is the intent of Okanogan County to actively involve and coordinate with the incorporated cities and towns throughout the County Comprehensive Planning process.

County Wide Planning Policy 12

In partnership with the incorporated cities and towns, the County will establish criteria for the allocation of projected population growth in order to identify and map parcel specific Urban Growth Areas (UGA) that will provide adequate land to meet projected population allocations



at urban densities. Additionally, the UGA will reflect a realistic assessment of the logical outer boundaries for the cost-effective provision of urban services. These UGAs shall remain interim until adopted by the cities and towns.

County Wide Planning Policy 13

The County will actively consult with the Colville Confederated Tribes in updating the County Comprehensive Plan and will establish a protocol for integrating the updated plan with the Comprehensive Plan prepared by the Tribes for the Colville Reservation and Trust Lands as appropriate and applicable.

County Wide Planning Policy 14

Okanogan County will establish criteria to identify and map environmentally sensitive areas and will prepare regulations to preserve and protect these areas utilizing the provisions of Best Available Science.

County Wide Planning Policy 15

Okanogan County will establish criteria to identify and designate natural resource areas including mining, timber, and agricultural lands and will provide opportunities within County policy to sustain the traditional natural resource industries in the County.

County Wide Planning Policy 16

Okanogan County, in partnership with incorporated cities and towns, will establish housing goals and policies that encourage a range of housing stock to meet housing demand for all economic segments of the County's population.

County Wide Planning Policy 17

Okanogan County will establish diverse and sustainable economic development goals and policies, which support economic prosperity, enhance the quality of life for County residents, and promote employment and economic opportunity for all citizens.



County Wide Planning Policy 18

Okanogan County will evaluate current and anticipated transportation opportunities to ensure the development of a transportation system that is efficient, safe, environmentally sensitive, serves a diverse population, and improves facilities concurrent with new land development.

County Wide Planning Policy 19

Okanogan County will identify capital facilities necessary to support planned levels of growth and will identify funding sources and strategies that make effective use of limited County resources.

County Wide Planning Policy 20

Okanogan County will inventory Essential Public Facilities in the County, and shall establish criteria for the citing of Essential Public Facilities of regional and statewide significance.

County Wide Planning Policy 21

It is the intent of Okanogan County to establish policies, which address the protection of people and property from wildfires, identifies facilities and services needed for safe and coordinated land management in case of wildfire and guides future development in a direction which is proactive in the attempt to reduce the adverse effects of wildfire.

County Wide Planning Policy 22

It is the intent of the County to provide a streamlined and predictable planning and permitting process. Okanogan County will define the interrelationships between the multiple policies and regulations as well as develop a mechanism to provide for intra-County and intergovernmental coordination.

County Wide Planning Policy 23

To the greatest extent possible, Okanogan County will recognize and integrate existing plans during the development of planning area and subarea plans.



County Wide Planning Policy 24

It is the intent of Okanogan County to establish protocols to identify and protect cultural resources throughout the county.



Chapter 2: Land Use Goals & Policies

2.1 Resource Lands

The following draft Goals and Policies will provide interim guidance and direction through the duration of the process to revise the Okanogan County Comprehensive Plan. It is anticipated that more detailed Goals and Policies will be formulated during the ensuing sub-area planning process. The County's Development Regulations will subsequently be updated to be consistent with the provisions of the approved Comprehensive Plan.

Natural Resource Goal 1:

Designate and maintain mineral resource lands of long-term commercial significance. In doing so, the County will develop policies for the integration of mineral extraction activities into surrounding areas.

Natural Resource Policy 1.1: Okanogan County should, utilizing readily available information, identify and map active mining sites, current mining activities and lands that may be suitable for future commercial mining activities.

Natural Resource Policy 1.2: The designation of specific mineral lands of long-term commercial significance will occur during the sub-area planning process, in consultation with affected private property owners.

Natural Resource Policy 1.3: Okanogan County will encourage incorporated cities and towns to exclude current commercial mining operations and lands suitable for future commercial mining operations from Urban Growth Areas.

Natural Resource Policy 1.4: Mineral resource extraction operations existing at the time of adoption of the comprehensive plan, that are operating, legally established, within the provisions of the development permit, and meeting the criteria for mineral resource lands of long-term commercial significance, should be designated on the land use maps as mineral resource lands of long-term commercial significance.

Natural Resource Policy 1.5: Okanogan County recognizes and supports the development, maintenance and retention of mining sites having commercial grade aggregate which provide



necessary materials for new development, roads, structures and other projects, provided such sites can be located and developed consistent with guiding policies.

Natural Resource Policy 1.6: Okanogan County should inventory mineral resource lands periodically to determine the adequacy of available resources. Evaluations should be conducted in consultation with State agencies, mining industries, County representatives and citizens.

Natural Resource Policy 1.7: Okanogan County should periodically review and revise the standards for the permitting and operation of commercial mining activities.

Natural Resource Policy 1.8: Okanogan County should establish procedures to notify current and future property owners of their proximity to commercial mining activities.

Natural Resource Policy 1.9: All mining sites shall be served by roadways, which are adequate to handle industrial traffic and do not endanger public health and safety.

Natural Resource Policy 1.10: New development activities should be sited and designed to prevent conflicts with existing or future mining operations. Screening, buffers, the provision of open space, and other mitigation measures should be considered and required where necessary.

Natural Resource Policy 1.11: Mining and extraction operations shall be sited and designed to avoid and mitigate conflicts with surrounding land uses. Mineral extraction sites will use existing topography to screen and minimize blasting, noise, dust, vibration, and visual impacts. Where heavy equipment, mines, and pits cannot be effectively screened from residential and/or commercial areas, shorelines of the state and major highways, a combination of existing topography, open space, berms and landscaping may be utilized to screen the site.

Natural Resource Policy 1.12: Mining sites will be encouraged to first locate in rural designated areas where impacts can be minimized to critical areas, archaeological sites and agriculturally designated lands.

Natural Resource Policy 1.13: Reclamation of mining and extraction sites is an integral part of all mining operations, and will be required and completed in a manner that will encourage future lands uses that are compatible with local comprehensive plans.

Natural Resource Policy 1.14: Commercial mining and extraction operations will be sited and designed to have a minimal impact on adjacent land uses, critical areas, natural vistas, cultural resources and the environment. Approval of new mining and extraction operations shall include conditions to guide the reclamation of the site.

Natural Resource Policy 1.15: All mining operations shall include provisions for the protection of water quality and prevention of sedimentation through the use of settling ponds, retaining basins, ditches, diking and re-vegetation of slopes and other measures.



Natural Resource Policy 1.16: Mining activities must not cause the lowering of the ground water table of surrounding properties in a manner that directly impacts their use.

Natural Resource Policy 1.17: Mining sites and associated off-site stockpiles shall be maintained during the life of the operation in regard to the control of noxious weeds and dust.

Natural Resource Goal 2:

Designate and maintain forest lands of long-term commercial significance. In doing so, the County will develop policies for the integration of forest activities into surrounding areas and the protection of privately owned lands from catastrophic wildfires.

Natural Resource Policy 2.1: Okanogan County will identify and map private forestlands currently used, as well as suitable for future commercial production of timber.

Natural Resource Policy 2.2: The designation of forest lands of long-term commercial significance will include parcels assessed by the County as timber lands.

Natural Resource Policy 2.3: The designation of specific timber lands of long-term commercial significance should occur during the sub-area planning process, in consultation with affected private property owners.

Natural Resource Policy 2.4: Okanogan County supports and encourages the establishment and maintenance of forest lands in timber and current use property tax classification.

Natural Resource Policy 2.5: Commercial timber activities should be permitted in all rural areas of the county.

Natural Resource Policy 2.6: Okanogan County will encourage the conservation of forest lands for productive economic use by identifying and designating forest resource lands where the principle and preferred land use is commercial timber management.

Natural Resource Policy 2.7: Okanogan County will require the implementation of forest management practices on public and private lands to reduce the risks of catastrophic wildfires.

Natural Resource Policy 2.8: Land use activities within or adjacent to designated forest resource lands should be sited and designed to avoid and/or mitigate potential conflicts with forest resource management and potential wildfire hazards.

Natural Resource Policy 2.9: All residential development plats, binding site plans and planned developments, and commercial and industrial development should be located within fire districts.



Natural Resource Goal 3:

Designate and maintain agricultural lands of long-term commercial significance.

Natural Resource Policy 3.1: Okanogan County should identify and map lands used for commercial agricultural production and grazing.

Natural Resource Policy 3.2: The designation of agricultural lands of long-term commercial significance should include parcels assessed by the County as agricultural lands.

Natural Resource Policy 3.3: The designation of specific agricultural lands of long-term commercial significance should occur during the sub-area planning process in consultation with affected private property owners.

Natural Resource Policy 3.4: The County fully supports those lands designated as agricultural lands of long-term commercial significance, however this should not preclude property owners from converting their land to non-agricultural uses in accordance with the provisions of the County Vision Statement, this Comprehensive Plan, and the County Development Regulations.

Natural Resource Policy 3.5: Agricultural lands considered for acquisition for public, recreational, scenic and/or park purposes, or for wildlife habitat, will first be evaluated for their impact on commercial agricultural and socioeconomic structure of the immediate area, and the County as a whole.

Natural Resource Policy 3.6: Okanogan County supports efforts in the public and private sectors, which ensure the viability of the agricultural industry.

Natural Resource Policy 3.7: Encourage farm-based businesses as an accessory use in agriculturally designated areas. A farm-based business is an on-farm enterprise devoted to the direct marketing of unprocessed and/or value-added agricultural products that are produced, processed and sold on-site as the primary activity. Farm based businesses are intended to supplement farm income, provide employment for farm family members and may include other limited secondary services and/or retail activity.

Natural Resource Policy 3.8: Okanogan County encourages the maintenance of agricultural lands in current use property tax classifications, open space designations, and/or other tax benefits that help retain the economic viability of farming practices.

Natural Resource Policy 3.9: Agricultural activities should be permitted in all areas of the County including those areas which are not designated primarily for agricultural purposes.

Natural Resource Policy 3.10: Farm practices should be consistent with best management practices for the industry.



Natural Resource Policy 3.11: Okanogan County will encourage the retention of agricultural lands of long-term commercial significance and will work to prevent haphazard growth into these areas.

Natural Resource Policy 3.12: Okanogan County will encourage continued agricultural activities within areas designated as agricultural and develop right-to-farm policies to minimize disruption to agricultural activity.

Natural Resource Policy 3.13: All farmers shall have the right to farm, consistent with appropriate local, state and federal requirements.

Natural Resource Policy 3.14: Okanogan County should establish procedures to inform current and future property owners of their proximity to lands used for commercial agricultural activities.

Natural Resource Policy 3.15: All plats, planned developments and binding site plans on, within or near to lands designated as agricultural resource lands, shall contain a notice that the subject property is on, within or near designated agricultural resource lands.

Natural Resource Policy 3.16: Facilities and services for the maintenance, operation and support of the agricultural industries within the County, should be permitted within agricultural areas, rural service centers and industrial areas, where such facilities are not found to be incompatible with surrounding uses. Potential impacts to surrounding land uses and public facilities and services should be mitigated and addressed.

Natural Resource Policy 3.17: New development activities should be sited and designed to avoid conflicts with agricultural lands.

Natural Resource Policy 3.18: Land use activities within or adjacent to designated agricultural resource lands should be sited and designed to avoid and mitigate potential conflicts with agricultural practices and productivity.

Natural Resource Policy 3.19: Development within, or adjacent to, designated agricultural resource lands, including but not limited to plats, binding site plans and planned developments, shall be required to provide for mitigation, such as fencing, planting of trees as buffers, landscaping, dust control, and appropriate spraying for pest control or the removal of fruit bearing trees to the address impacts to agricultural operations.

Natural Resource Policy 3.20: Non-farm development in rural areas, which is adjacent to an existing orchard operation, shall provide appropriate buffers and/or mitigation measures to minimize potential conflicts.



Natural Resource Policy 3.21: Encourage the control of noxious weeds in all affected areas of construction and development projects.

2.2 Critical Areas

The following draft Goals and Policies will provide interim guidance and direction through the duration of the process to revise the Okanogan County Comprehensive Plan. It is anticipated that more detailed Goals and Policies will be formulated during the ensuing planning area process. The County's Development Regulations will subsequently be updated to be consistent with the provisions of the approved Comprehensive Plan.

Critical Area Goal 1:

It is a goal of Okanogan County to classify, designate and protect critical areas in Okanogan County.

Critical Area Policy 1.1: In designating and protecting critical areas, the County shall include best available science in developing policies and development regulations to protect the functions and values of critical areas.

Critical Area Policy 1.2: Okanogan County should, in partnership with its cities and towns, revise its Shoreline Master Plan and critical areas ordinance.

Critical Area Policy 1.3: In circumstances where critical areas are not mapped, Okanogan County will establish performance standards or definitions, so these critical areas are identified during the processing of a permit or development authorization.

Critical Area Policy 1.4: Okanogan County should incorporate the recommendations of the Watershed Plans approved by the Board of County Commissioners (authorized under RCW 90.82) into the County Development Codes and permit review procedures.

Critical Area Policy 1.5: Allow for open space and recreational use of critical areas where such use does not negatively impact critical areas.

Critical Area Policy 1.6: Encourage the restoration and enhancement of critical areas. To the greatest extent possible, this should be consistent with County plans, policies and regulations such as the County's current Shoreline Master Program.



Critical Area Policy 1.7: The goals and policies of the Okanogan County Shoreline Master Program, as amended, should be considered an element of the comprehensive plan, and are included by reference as if fully set forth herein.

Critical Area Goal 2:

Ensure that development activities avoid or have minimal impacts upon significant natural, historic and cultural features and to preserve their integrity.

Critical Area Policy 2.1: Encourage development that is compatible with the natural environment and minimizes impacts to significant natural and scenic features.

Critical Area Policy 2.2: Okanogan County should evaluate the cumulative impacts of development proposals in critical areas.

Critical Area Policy 3.2: Appropriate conditions shall be placed on development to ensure that negative impacts to critical areas are avoided or mitigated.

Critical Area Policy 2.3: The County should work closely with private organizations and those agencies that manage public lands to ensure that local interests are emphasized and reflected in approved plans.

Critical Area Policy 2.4: Okanogan County should continue to identify and map archeological and significant historic sites and structures within the County.

Critical Area Policy 2.5: Encourage the preservation of lands, sites and structures that have historical or archaeological significance.

Critical Area Goal 3:

Protect and maintain water quality and quantity.

Critical Area Policy 3.1: Adopt and implement storm water and drainage standards that protect water resources from impacts caused by development, utilizing, where appropriate: source control, on-site detention, and treatment of storm water. Where storm drain systems do not exist, storm water shall be disposed of without increasing the rate of run-off.

Critical Area Policy 3.2: Encourage and support future and ongoing water quality monitoring programs.

Critical Area Policy 3.3: Support water quality education programs which inform local citizens and visitors about water quality issues and ramifications.



Critical Area Policy 3.4: Support the implementation of the Okanogan Watershed Water Quality Implementation Plan, May 2001.

Critical Area Policy 3.5: Support ongoing health department efforts to adequately monitor on-site septic systems, and require the repair of failing on-site septic systems.

Critical Area Policy 3.6: Encourage existing and future public boat launches to incorporate wash-off stations. Vessel sewage pump-out facilities, and fueling provisions shall be sited to implement best management practices for the protection of water quality.

Critical Area Policy 3.7: Protect the availability of potable water by minimizing the potential for contamination of ground water sources from residential, commercial and industrial activities.

Critical Area Policy 3.8: Encourage the restoration of contaminated ground water sources

Critical Area Policy 3.9: Classify, designate and protect areas with a critical recharging effect on aquifers used for potable water. To the greatest extent possible, this effort should be coordinated with active watershed planning units authorized under RCW 90.82

Critical Area Policy 3.10: Support ongoing watershed planning efforts authorized under RCW 90.82.

Critical Area Policy 3.11: Okanogan County should establish standards so that the use, storage, and disposal of hazardous materials and generation of hazardous wastes do not adversely affect water quality.

Critical Area Policy 3.12: Grading and construction activities shall implement erosion control best management practices and other development controls as necessary to reduce sedimentation and pollution discharge.

Critical Area Policy 3.13: Ensure that dredging and filling activities are conducted in a manner which minimizes the introduction of suspended solids, leaching of contaminants or disturbance to habitats.

Critical Area Policy 3.14: Encourage treatment of storm runoff of surface water from developed areas to prevent pollution materials, such as motor oils, paper, sand, salt and other debris, garbage, and foreign materials from being carried directly into natural streams, lakes or other public water.

Critical Area Goal 4:

Protect and maintain air quality.



Critical Area Policy 4.1: Encourage and support air quality monitoring programs.

Critical Area Policy 4.2: Recognize the potential benefits of public water, rail, electric, alternative fuels, non-motorized and air transportation in helping maintain local air quality.

Critical Area Policy 4.3: Work with local industries to meet air quality standards and to avoid significant impacts on adjacent properties.

Critical Area Policy 4.4: Okanogan County should establish standards so that the use, storage, and disposal of hazardous materials and generation of hazardous wastes do not adversely affect air quality.

Critical Area Goal 5:

Okanogan County's wetlands, river corridors and floodplains will be protected to the greatest extent reasonable.

Critical Area Policy 5.1: The County shall use minimum standards the Washington State Wetlands Identification and Delineation Manual, 1997, or its successor, which is adopted by Okanogan County, and is the scientifically accepted replacement methodology based on better technical criteria and field indicators. Wetlands will be rated consistent with the Washington State Department of Ecology's (Ecology) Wetlands Rating System for Eastern Washington (Publication Nos. 91-058 and 02-06-019, as amended), or its successor.

Critical Area Policy 5.2: When classifying and/or assessing a wetland area, historical information on the area in question, as well as the dynamic nature of wetlands, will be recognized and considered.

Critical Area Policy 5.3: Wetlands will be protected as much as reasonable from alterations due to land use changes that may create adverse impacts to the wetland.

Critical Area Policy 5.4: Whenever feasible, innovative techniques that enhance a wetland and promote it as a useful, functioning part of the development will be encouraged during the development review process.

Critical Area Policy 5.6: Coordinate wetland preservation strategies and efforts with appropriate local, state and federal agencies and private conservation organizations to take advantage of both technical and financial assistance, and to avoid duplication of efforts.

Critical Area Policy 5.7: Development proposals that encompass wetland areas will have a site-specific review process required to determine the classification.



Critical Area Policy 5.8: Projects containing a wetland should submit a comprehensive wetland mitigation plan that includes sufficient monitoring and contingencies to ensure natural wetland persistence.

Critical Area Policy 5.9: Activities or uses that would strip a shoreline of vegetative cover, cause substantial erosion or sedimentation, or significantly, adversely affect aquatic life will be prohibited or mitigated.

Critical Area Policy 5.10: A wetland buffer area of adequate width will be maintained between wetlands and adjacent new development to protect the functions and integrity of the wetland. The ultimate width of the established buffer should be based on the function and sensitivity of the wetland, the characteristics of the existing buffer, the potential impacts associated with the adjacent and proposed land use, as well as other existing regulations which may control the proposed activity.

Critical Area Policy 5.11: Classify, designate and protect frequently flooded areas. This effort should be coordinated with County's development of the County-wide Comprehensive Flood Hazard Management Plan.

Critical Area Policy 5.12: Regulate development activities in floodplains in order to help mitigate the loss of floodplain storage capacity. This effort should be coordinated with the County's development of the County-wide Comprehensive Flood Hazard Management Plan.

Critical Area Policy 5.13: Okanogan County should work with other agencies to provide public access to lakes, rivers, and streams where such access is needed.

Critical Area Goal 6:

Protect fish and wildlife habitat areas as an important resource for Okanogan County, particularly in regard to economic, aesthetic and quality of life values.

Critical Area Policy 6.1: Identify and map critical fish and wildlife habitat conservation areas within the County and maintain a database of independent studies conducted in conjunction with projects, such as development proposals, road construction, watershed plans and habitat conservation plans. Update maps, databases, and plans as new information is received.

Critical Area Policy 6.2: Impacts of new development on the quality of land, wildlife and vegetative resources will be considered as part of the environmental review process and require any appropriate mitigating measures. Such mitigation may involve the retention and/or enhancement of habitats.



Critical Area Policy 6.3: Vegetation in designated habitat areas should be maintained in its natural state and be disturbed only as minimally necessary for the development. Disturbed areas should be re-vegetated with native vegetation as soon as possible. Re-vegetation will be maintained in good growing conditions, as well as being kept free of noxious weeds.

Critical Area Policy 6.4: Potential impacts on fish and wildlife habitat conservation areas should be considered during the development review process. Preservation of blocks of habitat and connectivity between them and restoration of damaged habitat should be included as part of the review. Where a development proposal involves more intense uses, such as Master Planned Resorts (MPRs), all or part of the required open space (common and/or private) will be dedicated to fish and wildlife habitat conservation based on the extent and importance of the habitat.

Critical Area Policy 6.5: Riparian management activities that maintains existing riparian habitat and is consistent with best agricultural management practices should be encouraged.

Critical Area Policy 6.6: Ensure that land uses adjacent to naturally occurring wetlands and other fish and wildlife habitat areas will not negatively impact the habitat areas. If a change in land use occurs, adequate buffers will be provided to the habitat areas.

Critical Area Policy 6.7: Activities allowed in fish and wildlife habitat conservation areas and open space will be consistent with the species located there, including all applicable state and federal regulations and/or best management practices for the activity regarding that species.

Critical Area Goal 7:

Okanogan County will manage groundwater resources and aquifer recharge areas to protect the quantity and quality of potable water.

Critical Area Policy 7.1: Okanogan County should consider designating and classifying aquifer recharge areas as set forth in WAC 365-190-080 (2).

Critical Area Policy 7.2: Identify and map critical groundwater supply areas, aquifer recharge areas with a high groundwater table and/or unconfined aquifers used for potable water. To the greatest extent possible, this effort should be coordinated with active watershed planning units authorized under RCW 90.82.

Critical Area Policy 7.3: If aquifer recharge areas are identified, they will be considered for classification as environmentally sensitive areas, and will be encouraged to be incorporated as Groundwater Management Areas.



Critical Area Policy 7.4: Okanogan County encourages the establishment of land use intensity limitations in accordance with state and federal standards. Some types of developments, such as clustered, may be encouraged to utilize community sewage disposal systems instead of dispersed individual septic systems depending on the type and potential impacts to the aquifer.

Critical Area Policy 7.5: The County should establish and enforce standards to prohibit the disposal of hazardous materials.

Critical Area Policy 7.6: Agricultural activities, including commercial and hobby farms, are encouraged to incorporate best management practices concerning animal keeping, animal waste disposal, fertilizer use, pesticide use and stream corridor management.

Critical Area Policy 7.7: Fertilizer and pesticide management practices of schools, parks, golf courses and other non-residential facilities that maintain large landscaped areas will be evaluated at the time of development in relation to Best Management Practices (BMPs) as recommended by the Cooperative Extension Service. Existing facilities are strongly encouraged to also incorporate these BMPs.

Critical Area Policy 7.8: It is the responsibility of the developer(s) to prove that their proposal would not adversely affect the recharge of an aquifer. To the greatest extent possible, this effort should be coordinated with active watershed planning units authorized under RCW 90.82

Critical Area Policy 7.9: Within aquifer recharge areas, short and long subdivision and other divisions of land will be evaluated for their impact on groundwater quality.

Critical Area Policy 7.10: Development which could substantially and negatively impact the quality of an aquifer will not be allowed unless it can be demonstrated conclusively that these negative impacts would be overcome in such a manner as to prevent the adverse impacts. Alternative site designs, phased developed and/or groundwater quality monitoring may be required to reduce contaminant loading where site conditions indicate that the proposed action will measurably degrade groundwater quality.

Critical Area Policy 7.11: Reduce danger to health by protecting surface and ground water supplies from the impairment that results from incompatible land uses by providing safe and sanitary drainage.

Critical Area Policy 7.12: Community/public sewage disposal and water systems are encouraged and may be required where site conditions indicate a high degree of potential contamination to groundwater resources.

Critical Area Policy 7.13: When wells are required to be abandoned, the applicant shall ensure that they are abandoned according to the Washington State Department of Ecology requirements.



Critical Area Goal 8:

Protect the frequently flooded areas of Okanogan County that are know to be critical parts of the natural drainage system by limiting and controlling potential alterations and/or obstructions to those areas.

Critical Area Policy 8.1: Map flood hazard areas that are currently part of the Federal Emergency Management Act or Flood Insurance Rate Maps or depicted by other historical evidence, as appropriate. Regulate areas of flood hazard by maintaining compliance with FEMA Model Ordinance required by FEMA and the State of Washington to be adopted by Okanogan County. This effort should be in coordinated with the County-wide Comprehensive Flood Hazard Management Plan.

Critical Area Policy 8.2: Continue the development of a County-wide Comprehensive Flood Hazard Management Plan.

Critical Area Policy 8.3: Permit and encourage land uses compatible with the preservation of the natural vegetation to promote the maintenance of constant rates of water flow through the year and that sustains many species of wildlife and plant growth.

Critical Area Policy 8.4: Priority consideration should be given to develop strategies for acquisition and demolition and relocation of properties in flood-prone areas.

Critical Area Goal 9:

Okanogan County will provide appropriate measures to either avoid or mitigate significant risks that are posed by geologic hazard areas to public and private property and to public health and safety.

Critical Area Policy 9.1: Develop criteria to explore the opportunity to classify, designate and protect geologically hazardous areas.

Critical Area Policy 9.2: Discourage development in areas of natural hazard such as those susceptible to landslide, flood, avalanche, unstable soils and excessive slopes.

Critical Area Policy 9.3: Potential impacts and alternative mitigation measures to eliminate or minimize the impacts in identified geologic hazard areas shall be documented during the review of development applications.



Critical Area Policy 9.4: Development proposals should be evaluated to determine 1) whether the proposal is located in a geologic hazard area, 2) the project's potential impact on geologic hazard areas, and 3) the potential impact of geologic hazards on the proposed project.

Critical Area Policy 9.5: Where feasible, an adequate buffer of existing vegetation should be maintained around all sides of geologic hazard areas to maintain the natural integrity of the site and to protect the environment, and the public health and safety.

Critical Area Policy 9.6: Identify and map all potential geologic hazard areas based on available information from the U.S. Geological Survey, Natural Resource Conservation Service Soil Survey of Douglas County and other agencies, as appropriate.

Critical Area Policy 9.7: Applications for development within, or in close proximity of a geologically hazardous area, shall include preliminary information to assist the County in determining the need for any specialized reports from a geologist or geo-technical engineer. Review criteria will be established to assist county staff in making said determination.

Critical Area Policy 9.8: Proposed development projects located within a geological hazard area, or that have the potential to adversely affect the stability of one of these areas, may be required to provide studies performed by qualified consultants describing the existing nature of the hazard and necessary safety precautions. The subsequent report from the geo-technical engineer and/or geologist should clearly identify the risk of damage from the project, both on-site and off-site, whether the proposal increases the risk of occurrence of the hazard, and whether the proposal has incorporated measures to eliminate or reduce the risk of damage due to the hazard.

Critical Area Policy 9.9: Any new residential subdivision or short plat that is determined to be in a geologically hazardous area shall have a note placed on the face of the plat and on the title report stating that the hazard is present.



Chapter 3: Fire Planning Goals and Policies

The following draft Goals and Policies will provide interim guidance and direction through the duration of the process to revise the Okanogan County Comprehensive Plan. It is anticipated that more detailed Goals and Policies will be formulated during the ensuing planning area process. The County's Development Regulations will subsequently be updated to be consistent with the provisions of the approved Comprehensive Plan.

Fire Goal 1:

Protect against potential losses to life, property and natural resources from wildfire.

Fire Policy 1.1: Ensure that the land development ordinances and building codes in Okanogan County support the mitigation of wildland urban interface fire danger.

Fire Policy 1.2: Develop a countywide road and street system that provides efficient access for fire fighting and clear evacuation routes.

Fire Policy 1.3: Monitor the changing conditions of wildfire risk and citizen action over time.

Fire Policy 1.4: Advocate responsible practices for land development, recreational activities, and commercial operations to reduce loss from wildland urban interface fire on public and private land in Okanogan County.

Fire Policy 1.5: Promote effective fuel treatment programs for homeowners and businesses that are carried out on an ongoing basis in all wildland urban interface areas in Okanogan County.

Fire Policy 1.6: Continue working across jurisdictions to lessen the chances of catastrophic wildland fires with the wildland urban interface.

Fire Goal 2:

Identify and prioritize areas for fire protection.

Fire Policy 2.1: Continue to refine criteria for determining/delineating/mapping WUI areas

Fire Goal 3:

Enhance community education and community land stewardship.



Fire Policy 3.1: Promote visible projects and program successes

Fire Policy 3.2: Access and utilize federal and other grant dollars

Fire Policy 3.3: Identify incentives for fire protection and community participation

Fire Policy 3.4: Increase community preparedness

Fire Goal 4:

Effectively assist in the coordination of fire related efforts.

Fire Policy 4.1: Develop ordinances and/or policies to reduce the occurrence of wildfire

Fire Policy 4.2: Institutionalize fire-related programs and sustain community efforts for fire protection;

Fire Policy 4.3: Emphasize prevention of wildland urban interface fires using a proactive, cooperative approach with incentive measures.

Fire Policy 4.4: Build and maintain active participation from each Fire Protection District

Fire Policy 4.5: Set realistic expectations for reducing wildfire risk

Fire Policy 4.6: Provide the appropriate resources to maintain an effective emergency response system to wildland urban interface fires in Okanogan County.

Fire Policy: 4.7: Sustain a coordinated and cooperative program, with appropriate fire response agencies, of timely information and educational programs for county residents, businesses, and recreation homeowners.



Reserved: Chapter 4: Housing Goals & Policies

Reserved: Chapter 5: Transportation Goals & Policies

Reserved: Chapter 6: Capital Facilities Goals & Policies

Reserved: Chapter 7: Utilities Goals & Policies

Reserved: Chapter 8: Economic Development Goals & Policies

Reserved: Chapter 9: Planning Area Specific Goals & Policies

Reserved: Chapter 10: Sub Area Specific Goals and Policies

PART III:

BACKGROUND INFORMATION & FINDINGS





Chapter 1: Intent of Part III

The intent of Part III is to provide technical information and analysis to assist in the development of the Comprehensive plan, goals, policies and future potential regulation changes.



Chapter 2: Land Use

Forested highlands and fertile river valleys characterize Okanogan County (County), which is located east of the Cascades along the Canadian border in the north-central part of Washington. Bordering the County on the west are Whatcom, Skagit, and Chelan Counties, to the east is Ferry County, and to the south is Douglas County.

The western half of the County is comprised of dense, rugged, mountainous terrain, much of which is within Okanogan National Forest. Similar topography also can be found in the northeast corner of the county. From the north part of the County, the land descends into rolling hills, grassy ranges, and fertile valleys that extend through the center of the county. The Colville Indian Reservation (Reservation) occupies approximately 675,000 acres or around 20% of the County's total land area.

The County has been in existence since 1888 when it was created by the Washington Territorial Legislature. Okanogan County has the largest total land area of all counties in the State. Agriculture and forestry have historically been, and continue to be, major economic generators for the County, shaping the character of the community. According to 2000 U.S. Census data, approximately 2,464 people in the County (or 16%) worked in natural resource-based industries (agriculture, forestry, fishing, hunting, and mining), 222 people less than reported in 1990.

The purpose of the Natural Resources and Critical Areas Element is to identify specific strategies and goals that respond to the priorities articulated by the citizens of the County. This will allow the County to achieve full compliance with the Growth Management Act's (GMA) planning goals for the conservation of natural resource lands. This report will help provide a framework for determining:

The appropriate criteria and methodology for designating natural resource lands in the County; and

How growth should be guided by regulations to conserve natural resource land and enhance and maintain natural resource industries.

Planning Areas

For the purposes of planning, the County is divided into six planning areas. However, since the Colville Confederated Tribes are currently in the process of preparing a comprehensive plan for



the lands in their jurisdiction, this plan does not analyze natural resource lands and critical areas within the Reservation. Furthermore, much of the data reported by planning area is related only to privately owned lands and does not include land owned by state and federal agencies. Each of the planning areas is described below.

Upper Valley Planning Area

The Upper Okanogan Valley Planning Area is defined by the limits of the Oroville School District boundaries. The area comprises approximately 350 square miles. The City of Oroville and the communities of Nighthawk, Molson, and Chesaw are located within this planning area.

Whitestone Planning Area

The Whitestone Planning Area is defined by the Tonasket School District boundaries. The planning area is approximately 1,315 square miles and includes the Town of Tonasket and the communities of Loomis, Ellisford, Wauconda, and Havillah.

Mid-Valley Planning Area

The Mid-Valley Planning Area is defined by the Omak and Okanogan School District boundaries. The planning area is approximately 520 square miles and includes the cities and towns of Omak, Okanogan, Conconully, and Riverside, and the community of Malott.

Columbia Planning Area

The Columbia Planning Area is located along the Columbia River, in the southern portion of Okanogan County. The planning area is approximately 370 square miles and is defined by the limits of the Brewster and Pateros School Districts. The planning area includes the cities of Brewster and Pateros and the communities of Monse and Methow.

Methow Valley Planning Area

The Methow Valley Planning Area is defined by the Methow Valley School District boundaries and includes the Methow Valley Comprehensive Plan Sub-units A-D. The planning area is approximately 1,710 square miles and includes the towns of Winthrop and Twisp and the communities of Carlton and Mazama. The Methow Valley has conducted the most amount of planning work in the County to date.

Reservation Planning Area

The Reservation Planning Area is defined by that portion of Colville Reservation, which is located within Okanogan County and includes the towns of Nespelem, Elmer City, and Coulee Dam. The planning area is approximately 1,055 square miles.



Growth Management Act

The Washington State Legislature passed the Growth Management Act (GMA), RCW Chapter 36.70A, in 1990, and has amended it several times since then. GMA provides a system of state-mandated comprehensive planning for the more populated and fast-growing counties in the state. GMA contains state goals, deadlines for compliance, guidance on how to prepare local comprehensive plans and regulations, and requirements for early and continuous public participation. Within the GMA framework, local governments have many choices regarding the specific content of comprehensive plans and implementation of development regulations.

Okanogan County is not subject to most of the provisions of GMA. However, it is required to review and, if needed, revise its policies and/or development regulations regarding critical areas and natural resource lands every 7 years to ensure compliance with RCW 36.70A.060. GMA's requirement to classify, designate natural resource lands and classify, designate and protect and critical areas applies to all jurisdictions in the state, in recognition of the essential role of these lands in supporting economic productivity and healthy ecological systems. Okanogan County's first update of its Critical Areas and Natural Resource Lands Element must be completed by December 1, 2007. The information in this section of the plan will provide the foundation for the County's updated Critical Areas and Natural Resource Lands Element.

To meet the requirements of GMA, the County's Comprehensive Plan must prepare and

implement a strategy to designate agricultural, forest, and mineral resource lands of long-term commercial significance. The Plan should provide direction on achieving the following goals:

Notification of Designated Resource Lands

GMA requires notices on all plats, short plats, development permits, and building permits issued for development on, or within 500 feet of, designated resource lands. These notices must state that the subject property is within or near designated resource lands, on which a variety of commercial activities may occur that are not compatible with residential development for certain periods of limited duration. Any notices specific to mineral resource lands must also state the possibility of an application being made for mining-related activities, like blasting, crushing, recycling, stockpiling, transporting, and washing of minerals.

Designating forest or agricultural lands of long-term commercial significance within urban growth areas requires a jurisdiction to establish a program authorizing purchase or transfer of development rights.

The identification of natural resource land classification criteria, consistent with the guidelines issued by the Washington State Department of Community, Trade and Economic Development (CTED);

The designation of agricultural, forest, and mineral resource lands;

The encouragement of productive and sustainable management of natural resource lands; and

The prevention of uses on and adjacent to natural resource lands that is incompatible with their conservation.



2.1 Natural Resource Lands

What are Natural Resource Lands?

The Washington State Growth Management Act defines Natural Resource Lands as:

Agricultural lands – Lands not already characterized by urban growth that have long-term significance for the commercial production of food or other agricultural products;

Forest lands – Lands not already characterized by urban growth that have long-term significance for the commercial production of timber; and

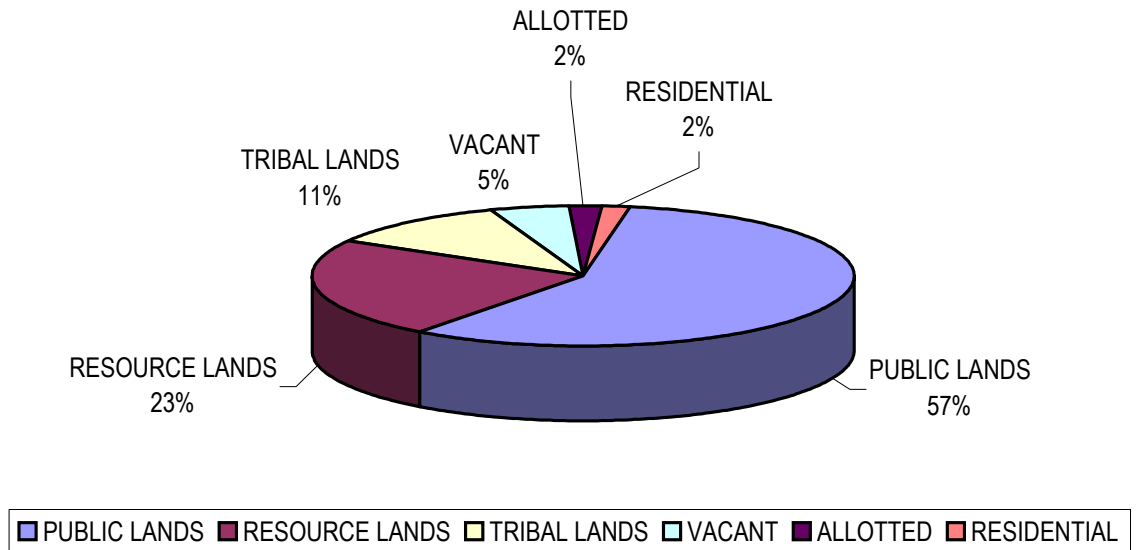
Mineral resource lands – Lands not already characterized by urban growth that have long-term significance for the extraction of minerals.

GMA requires the County to designate lands possessing long-term commercial significance for forestry, agriculture, fisheries, and mineral extraction, as natural resource lands, and to adopt development regulations to ensure their conservation (RCW 36.70A.170). To maintain and enhance these natural resource-based industries, the County must determine where they can productively operate, implement land-use controls to designate and conserve the lands necessary for them, and avoid conflicts with other land uses, such as residential housing.

The land use breakdown, for the entire Okanogan County is shown in Figure 0-1. The land use categories in Figure 0-1 are based on County Assessor Land Use Codes. County Assessor data indicates the predominant land use types in the County include public lands and resource lands. Resource lands include agricultural uses, timberlands, and mines and mining related activities as designated by the County Assessor. Public lands generally include federal and state managed lands, public utility district (PUD) lands, parks and recreation areas.



Figure 0-1. Okanogan County Land Use Distribution (includes Reservation)



Source: Okanogan County Assessor data, 2005.

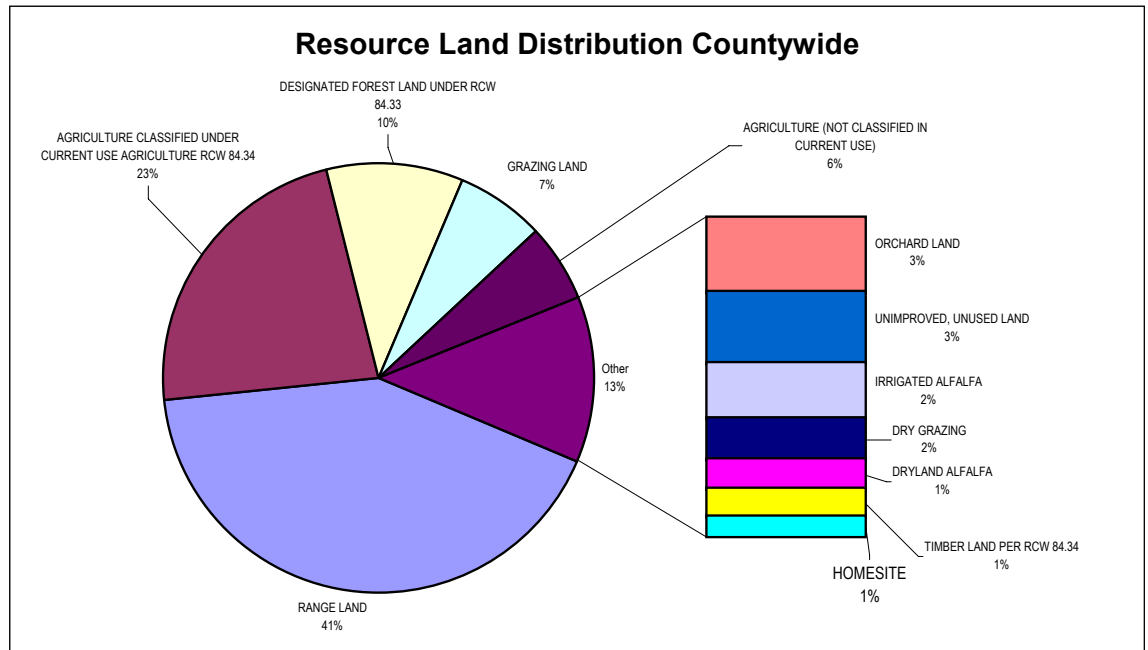
Figure 0-2 displays information provided by the County Assessor related to the distribution of Resource Lands throughout the county (including land within the Reservation i.e. tribal and allotted lands). Rangeland accounts for over 40% of the land classified by the County Assessor as resource lands. Resource lands account for approximately 23% of the land in Okanogan County. The designation of resource land is based on land use designations done by the County Assessor.

What are allotted lands?

Allotted land refers to the federal trust lands that have been parceled out to individual tribal members in 160-acre units as part of a 1920s and 1930s federal policy. The legal title to existing allotments is held by the United States in trust, with the entire beneficial interest being in the individual allottees.



Figure 0-2. Resource Land Distribution Countywide (includes Reservation)



Source:

Agricultural Lands

Existing Conditions

For the purposes of this report, information on the existing condition of agricultural land on private property in Okanogan County was obtained using 2005 County Assessor’s data. Approximately 740 square miles (473,215 acres) of privately owned land within the County (not including the Reservation) are potentially suitable for designation as “agricultural land of long-term significance for the production of food or agricultural products”. The criteria used to identify agricultural lands for this preliminary analysis include:

Parcels currently designated with the County’s Assessor’s Land Use Codes 81, 82, or 83;

Parcels that are in the Open Spaces Taxation Program as Farm Lands; and

Omit land within city limits and the Reservation.

WAC 458-53-030(5)
Standard two-digit land use code.

81: *Agriculture (not classified under current use law)*

82: *Agriculture related activities*

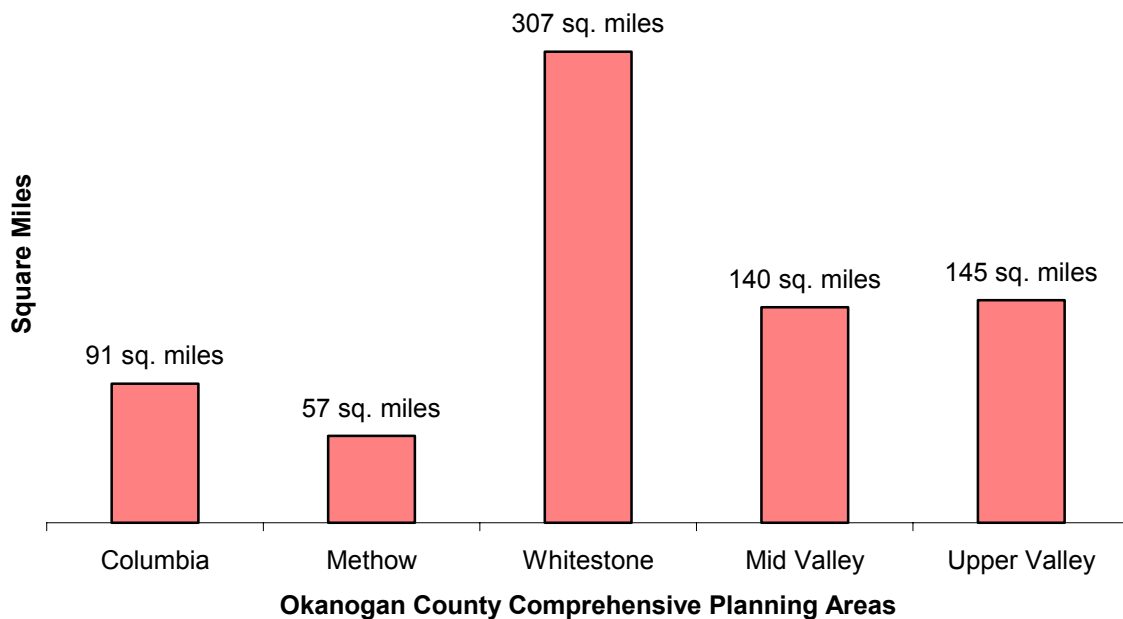
83: *Agriculture classified under current use chapter 84.34 RCW*



Planning Areas

Of the five planning areas examined for this plan, the Whitestone Planning Area has the most private land, approximately 307 square miles, in agricultural use. The Upper Valley and Mid-Valley Planning Areas have the next highest amount of agricultural lands, 145 square miles and 140 square miles, respectively. Figure 0-3 shows the total privately owned agricultural land by planning area.

Figure 0-3. Privately Owned Agricultural Lands in Okanogan County by Planning Area



Source: Okanogan County Assessor, April 14, 2005.

Columbia Planning Area

Approximately 91 square miles (58,001 acres), or 25%, of privately owned land within the Columbia Planning Area is in agricultural use. Most of this agricultural land is located north of Brewster and along the Columbia and Methow Rivers (See Map 4-1).

Methow Valley Planning Area

Approximately 57 square miles (36,251 acres), or 3%, of privately owned land in the Methow Valley Planning Area is land in agricultural use. Agricultural land in this planning area is scattered with large blocks west and south of Winthrop, north and east of Twisp, and north of Carlton. Map 4-2 shows the distribution of agricultural lands in the Methow Valley.

Whitestone Planning Area



Approximately 307 square miles (196,406 acres), or 23%, of privately owned land is in agricultural use in the Whitestone Planning Area, including most of the privately owned land west of SR-97. Map 4-3 shows the distribution of agricultural lands in the Whitestone Planning Area.

Mid-Valley Planning Area

Approximately 140 square miles (89,823 acres), or 27%, of privately owned land in the Mid-Valley Planning Area is land in agricultural use. Map 4-4 shows the distribution of the agricultural land in this planning area.

Upper Valley Planning Area

Approximately 145 square miles (92,734 acres), or 42%, of privately owned land is land in agricultural use. Map 4-3 shows the distribution agricultural land in this planning area.

Okanogan County 2002 Census of Agriculture¹

Agriculture plays a significant role in the history, culture, and economy of the County and Washington State. Conserving agricultural resource lands and maintaining and enhancing the agricultural industry is important to the citizens of Okanogan County and is consistent with one of the goals of GMA.

In 2002, there were 1,486 farms in Okanogan County, 133 farms less than in 1997. The average area per farm was 835 acres in 2002, 102 acres more than in 1997, and the total acres in farmland were 1.24 million in 2002, compared with 1.18 million in 1997. The top five crop items in terms of acres were:

Forage (land used for all hay and haylage, grass silage and greenchop) – 34,112 acres;

Apples – 17,1752 acres;

Wheat (for grain) – 9,763 acres;

Pears – 4,045 acres; and

Sweet cherries – 2,581 acres.

In 2002, the value of Okanogan County's agricultural production was \$137,418,000. The value of crops constituted \$116,551,000 of this total, while the value of livestock poultry and their products constituted \$20,867,000.

¹ 2002 Census of Agriculture, Okanogan County Profile, [United States Department of Agriculture - National Agricultural Statistics Service](#) accessed online on March 1, 2005.



GMA requirements

Conserving agricultural land and maintaining and enhancing the agricultural industry comprise one of the planning goals of GMA. GMA requires counties and cities to designate “agricultural lands that are not already characterized by urban growth and that have long-term significance for the commercial production of food or other agricultural products” (RCW 36.70A.170).

GMA defines agricultural land as “land primarily devoted to the commercial production of horticulture, silviculture, floriculture, dairy, apiary, vegetable or animal products or of berries, grain, hay, straw, turf, seed, Christmas trees, or livestock and that has long-term commercial significance for agricultural land” (WAC 365.19.050). Long-term commercial significance includes the growing capacity, productivity, and soil composition of the land for long-term commercial production.

The quality of the soil is a major factor in classifying agricultural resource lands. The Washington state Department of Community Trade and Economic Development (CTED) requires the use of the land capability classification system of the U.S. Department of Agriculture Soil Conservation Service (SCS) to classify agricultural resource land. This system includes eight soil classes published in soil surveys. The proximity to populated areas and the possibility of more intense uses of the land are also important factors in classifying agricultural lands.

CTED provides 10 indicators to assess whether land should be classified as agricultural resource lands of long-term commercial significance:

1. Availability of public facilities;
2. Tax status;
3. Availability of public services;
4. Relationship or proximity to urban growth areas;
5. Predominant parcel size;
6. Land use settlement patterns and their compatibility with agricultural practices;
7. Intensity of nearby land uses;
8. History of land development permits issued nearby;
9. Land values under alternative uses; and
10. Proximity of markets.



Okanogan County 1993 Growth Management Committee Report

The 1993 Growth Management Committee Report (Resolution 13-94) determined that to be designated “agricultural lands of long-term commercial significance” lands must meet four of the following six criteria:

Currently in agricultural use;

One or more of the following improvements in place;

- Irrigation facilities (public or private);
- Drainage facilities (public or private);
- Fencing, stock watering or other physical improvements that enhance the lands suitability for commercial agricultural production;

Enrolled in Agricultural Open Space taxation program;

Surrounded by lands primarily in agricultural use with few non-farm commercial, industrial or residential uses and is not located in areas with clear potential for more intense uses of the land;

Not located within areas identified for urban or suburban growth (or similar designation) in approved city, town or County comprehensive plans; and

Not located within an area served by domestic sewer or domestic water service districts.

While the 1993 Growth Management Committee and subcommittees provided these designation criteria, specific land designation or mapping was not completed.

Forest Resource Land

Existing Conditions

For the purposes of this report, information on the existing condition of forest land on private property in Okanogan County was obtained using 2005 County Assessor data. A total of 130 square miles (82,265 acres) of privately owned land within the County was identified for this preliminary analysis as forest land utilizing the following criteria:

Parcels currently designated with County Assessor’s Office Land Use Codes 86, 87, 88, 95, 913 or 897A; and

Standard two-digit land use code.

86: Reforestation under RCW 84.28

87: Classified forest land chapter 84.33 RCW

88: Designated forest land under chapter 84.33 RCW

95: Timberland classified under chapter 84.34 RCW

913: Land With Timber

897A: Perpetual Timber

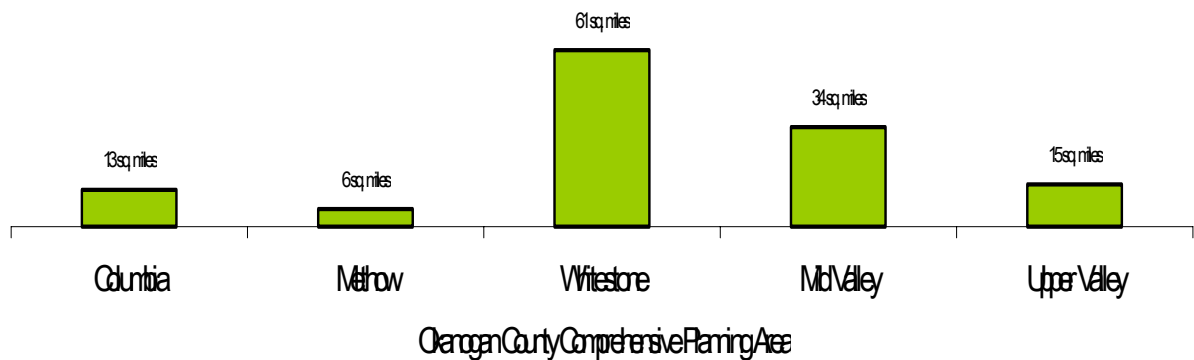


Parcels currently designated with secondary County Assessor’s Office Land Use Codes 86, 87, 88, 95, 913 or 897A.

Planning Areas

Of the five planning areas examined for this report, the Whitestone Planning Area has the most private land designated as forest, approximately 61 square miles. Mid-Valley has the next highest amount with 34 square miles. Figure 0-1 highlights the distribution of privately owned forest land.

Figure 0-4. Privately Owned Forest Lands in Okanogan County by Planning Area



Source: Okanogan County Assessor, April 14, 2005

Columbia Planning Area

Approximately 13 square miles (8,111 acres), or 3%, of privately owned land in the Columbia Planning Area is forest land. Map 4-5 shows the distribution of these lands.

Methow Valley Planning Area

Approximately 6 square miles (2,948 acres), less than 1%, of privately owned land in the Methow Valley Planning Area is forest land. Map 4-6 shows the distribution of these lands.

Whitestone Planning Area

Approximately 61 square miles (3,948 acres), or 5%, of privately owned land in the Whitestone Planning Area is forest land. This planning area has the largest amount of private forest land. Map 4-7 shows the distribution of these lands.

Mid-Valley Planning Area



Approximately 34 square miles (21,948 acres), or 7%, of privately owned land in the Mid-Valley Planning Area is forest land. Map 4-8 shows the distribution these lands. Most of the forest land is scattered throughout the planning area; however, there is a large area in the southwest corner of the planning area, abutting the Okanogan National Forest.

Upper Valley Planning Area

Approximately 15 square miles (9,352 acres), or 4%, of privately owned land is forest land in the Upper Valley Planning Area. Map 4-7 shows the distribution of these lands.

Timber Harvest²

The total acres of timberland harvested in Okanogan County are difficult to obtain for all “ownership” groups, particularly from private timber harvesters. Due to this difficulty, the Washington Department of Natural Resources (DNR) discontinued reporting acreage information in 1987. Instead, DNR provides timber volume data in thousand board feet (MBF)³.

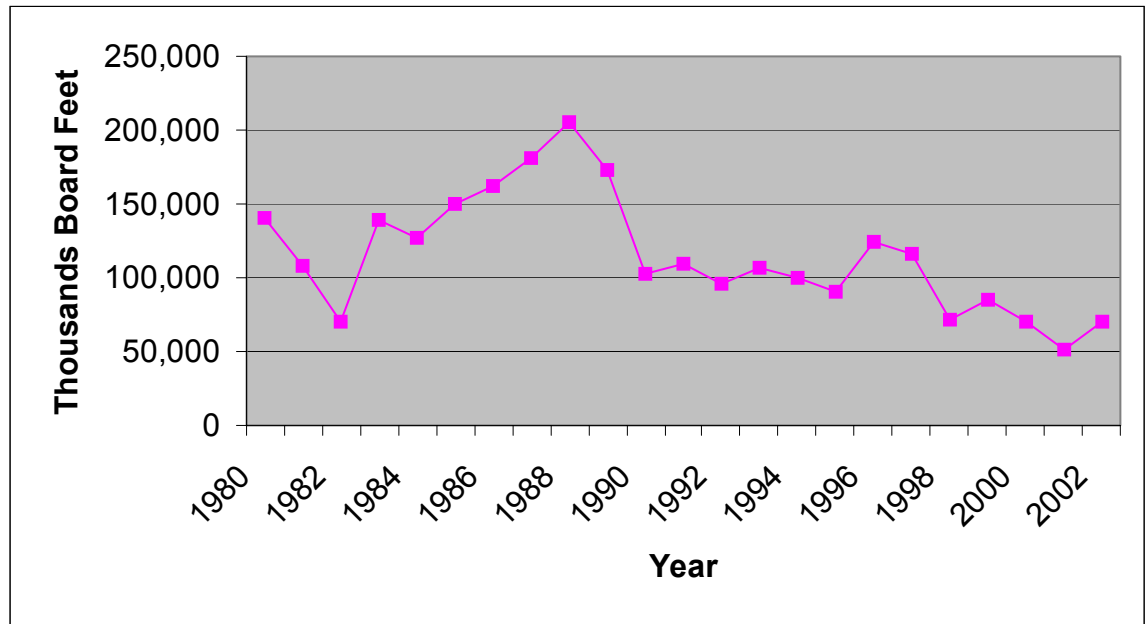
Figure 0-5 shows the change in total annual timber harvest for Okanogan County between 1980 and 2002, as reported by DNR. It reflects a high point of 205,790 MBF in 1988 and a low of 51,577 MBF in 2001.

² Timber harvests from private timberlands are included within four ownership classes: Native American, Forest Industry, Private Land and Private Small. Source: *Washington Timber Harvest 2002*. Washington Department of Natural Resources, March 2004.

³ Timber volume data are reported in thousand board feet (MBF), Scribner scale.



Figure 0-5. Okanogon County Timber Harvest (1980-2002)



Source: DNR

Table 0-1 provides information on the 2002 timber harvest. Total timber harvest in the County represented approximately 2% of the statewide timber harvest and 7% of the total Eastern Washington timber harvest in 2002. Of the total board feet of timber harvested in Okanogon County in 2002, approximately 69% was from tribal and allotted lands. Fewer than 20% of the timber harvested in the County in 2002 was on public lands, including the Okanogon National Forest and State-owned lands managed by DNR.



Table 0-1. Okanogan County Timber Harvest 2002

Ownership Class	Timber Harvest (MBF)^{***}
Native American	48,034
Forest Industry- Companies and individuals operating wood-using plants.	508
Private Large--Industrial companies and individuals not operating wood-using plants but with statewide holdings totaling 1,000 or more acres.	2,956
Private Small- Non-industrial companies and individuals not operating wood-using plants and having statewide holdings totaling less than 1,000 acres.	4633
Total Private	56,131
State	6,903
National Forest	6,867
Total Public	13,770
Total All Ownerships in Okanogan County	69,901
Eastern Washington* Total	877,969
Western Washington** Total	2,704,101
Statewide Total	3,582,070

* Asotin, Chelan, Columbia, Douglas, Ferry, Garfield, Kittitas, Klickitat, Lincoln, Okanogan, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman, Yakima

** Clallam, Clark, Cowlitz, Grays, Harbor, Island, Jefferson, King, Kitsap, Lewis, Mason, Pacific, Pierce, San Juan, Skagit, Skamania, Snohomish, Thurston, Wahkiakum, Whatcom

*** Timber volume data are reported in thousand board feet (MBF), Scribner scale.

Source: Washington Timber Harvest 2002, Washington Dept. of Natural Resources, March 2004.

GMA Requirements

GMA defines forest land as “land primarily devoted to growing trees for long-term commercial timber production on land that can be economically and practically managed for such production, including Christmas trees subject to the excise tax imposed under RCW 84.33.100 through 84.33.140 and that has long-term commercial significance.” (RCW 36.70A.030).



In addition to the growing capacity and productivity of the land, RCW 365-190-060 provides guidelines to consider the effects of proximity to population areas and the possibility of more intense uses of the land as indicated by:

The availability of public services and facilities conducive to the conversion of forest land;

The proximity of forest land to urban and suburban areas and rural settlements: Forest lands of long-term commercial significance are located outside the urban and suburban areas and rural settlements;

The size of the parcels: Forest lands consist of predominantly large parcels;

The compatibility and intensity of adjacent and nearby land use and settlement patterns with forest lands of long-term commercial significance;

Property tax classification: Property is assessed as open space or forest land pursuant to chapter 84.33 or 84.34 RCW;

Local economic conditions which affect the ability to manage timberlands for long-term commercial production; and

History of land development permits issued nearby.

Mineral Resource Lands

Existing Conditions

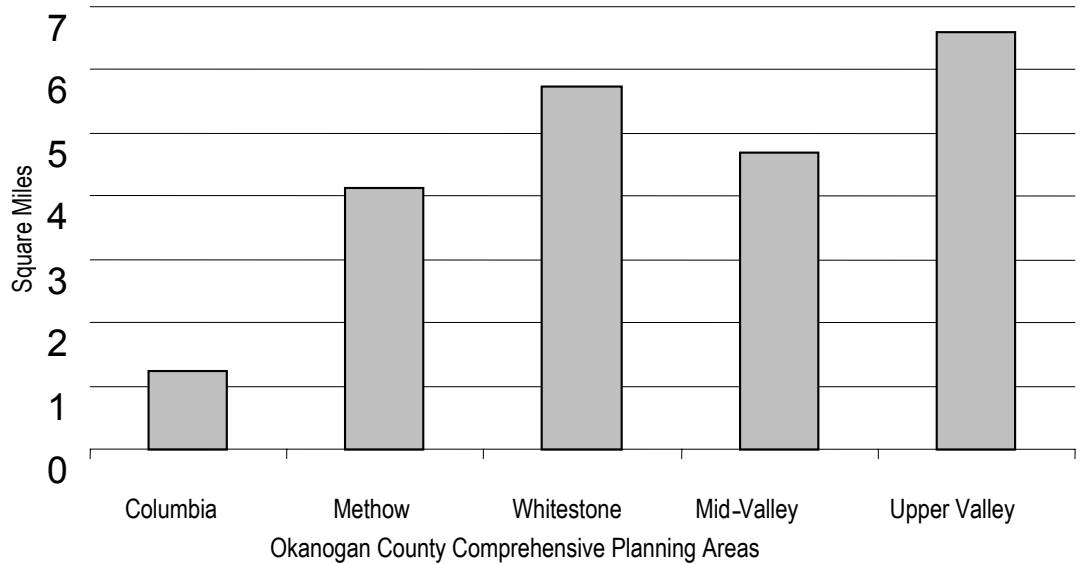
For the purposes of this report, information on the existing condition of mineral resource lands and mining on private property in the County was obtained using 2005 County Assessor and DNR data. Approximately 22 square miles of land in the County has mining activity, or is likely to have it in the future. Figure 0-6 shows the amount of privately owned land in each planning area that was identified by the County as potential mineral resource lands utilizing the following criteria:

Parcels currently designated with County Assessor's Office Land Use Code 85 (mining activities and related services); and

Parcels with current mines or mining claims; using DNR surface mines (active or inactive) and public work pit sites to select underlying parcel.



Figure 0-6. Mineral Lands



Source: Okanogan County Assessor, April 14, 2005.

Planning Areas

Columbia Planning Area

Approximately one square mile (789 acres) of privately owned land within the Columbia Planning Area is mineral lands. Most of the mining activity in this planning area is associated with County Public Works Pit Locations. One active sand and gravel surface mine was identified, as were several inactive ones. Several parcels identified as having mines are located in the vicinity of Road 153. Map 4-9 shows the location of surface mines in this planning area.

Methow Valley Planning Area

Approximately 4 square miles (2,643 acres) of privately owned land within the Methow Valley Planning Area are mineral lands. The majority of DNR surface mines identified in this planning area are inactive sand and gravel surface mines. There are also numerous County Public Works Pit Locations. The only parcels identified with mines by the County Assessor are located off Kumm Road between Mazama and Winthrop. Map 4-10 shows the location of surface mines in this planning area.



Whitestone Planning Area

Approximately 6 square miles (3,676 acres) of privately owned land within the Whitestone Planning Area are mineral lands. There are numerous County Public Work Pit mine locations distributed throughout this planning area. Map 4-11 shows the location of surface mines in this planning area. Active and inactive sand and gravel, lime, and metal surface mines are identified. In addition, several clusters of parcels identified as mines are located west and north of Loomis.

Mid-Valley Planning Area

Approximately 5 square miles (2,996 acres) of privately owned land within the Mid-Valley Planning Area are mineral lands. Several parcels with surface mines identified on them are located off Salmon Creek Road, Buzzard Lake Road, and Loup Loup Canyon Road, including Last Chance Mine, Houghs Mine, and Arlington Mine. North of the Conconully Reservoir off Mineral Hill Road and Salmon Creek N Fork Road, the map indicates a large cluster of parcels with mines. Map 4-12 shows the location of surface mines in this planning area.

Upper Valley Planning Area

Approximately seven square miles (4,214 acres), almost 2%, of privately owned land within the Upper Valley Planning Area are mineral lands. Numerous mines and mine claims are located in the vicinity of the Similkameen River. A few mines and mine claims also are located near Little Chopaka Mountain, along the Similkameen near Nighthawk, and west of Wannacut Lake Road. Numerous mines and mineral claims are mapped near Chesaw. Map 4-11 shows the location of surface mines in this planning area.

GMA Requirements

GMA (RCW 36.70A.040 (3)(b)) requires Okanogan County to designate mineral resource lands and to adopt development regulations to conserve resource lands where the extraction of minerals occurs or may occur in the future. GMA specifically requires the designation of “mineral resource lands that are not already characterized by urban growth and that have long-term significance for the extraction of minerals.”

The three key issues to the designation and conservation of mineral resource lands are:

- Defining what types of mineral resources are potentially significant to the County;
- Defining the extent and long-term significance of aggregate needed to meet the demand of the County’s projected population; and
- Determining how to balance a variety of land uses within mineral resource areas.



Okanogan County 1993 Growth Management Committee Report

The 1993 Growth Management Committee Report (Resolution 13-94) indicates that mineral resource lands should be mapped based on information from the following:

United States Forest Service;

United States Bureau of Mines;

Landsat; wonder why they included this (TM)

Colville Confederate Tribes Geology Department;

Washington State Department of Natural Resources (DNR); and

Personal knowledge of the members of the Mineral Resources Lands Subcommittee.

The GMA Mineral Resources Lands Subcommittee designated areas of very good, good, moderate, low, and poor potential for mineral development;

Area I has very good potential for development of minerals of long-term commercial significance. These areas will see continued exploration, active [mining] and included areas which have historic mineral resources, which include some identified and demonstrated reserves, with a very good potential for undiscovered reserves;

Area II has good potential and includes areas geologically favorable with some identified reserves and good potential for undiscovered reserves;

Area III has moderate potential and includes areas geologically favorable with some identified reserves and moderate potential for undiscovered reserves. Also included are areas where rock units of poor potential obscure underlying areas of good and very good potential;

Area IV has fair potential and includes areas geologically unfavorable overall, but includes certain areas that require additional geologic investigation. Also included are areas where rock units of poor potential obscure underlying areas of moderate, good, and very good potential; and

Area V has poor potential and includes areas that are geologically unfavorable with poor potential for undiscovered reserves.

While the 1993 Growth Management Committee and subcommittees provided classification criteria, it does not appear any land designation or mapping was completed at that time to identify County mineral resource lands.

2.2 Next Steps – Natural Resource Lands

Okanogan County has identified and mapped, utilizing a very broad set of criteria, the lands that may be suitable for formal designation and protection as a Natural Resource Land. The next



step will be to provide affected property owners with the opportunity to review these maps and to determine which lands are most appropriately considered to be of long term commercial significance. In light of the downturns in both the timber and the agricultural industry, careful consideration will be required in order to find an appropriate balance between the desire to preserve and protect traditional agriculture, timber harvesting, and mining activities and practices, with the reality that certain agriculture and timber harvesting activities may no longer be economically viable and that previously discontinued mining practices may become profitable once again. As a result, care must be given so that efforts to preserve and protect these land uses do not prevent property owners from exercising their private property rights. Given the sensitive nature of these discussions, the review and designation of natural resource lands will be undertaken during the preparation of plans for the six designated County Comprehensive Planning Areas. This approach will enable the County to more effectively consider local conditions and circumstances when designating areas to be protected as well as to establish more customized protection strategies

Specific policies that Okanogan County should consider in its next steps are as follows:

The County shall promote and support forestry, agriculture, mining and other resource-based industries as part of its diverse, and sustainable economy.

The County shall protect agricultural and forest lands and activities from conflicting non-farm or forestry uses and influences.

Land uses, utilities and transportation facilities adjacent to natural resource lands shall be sited and designed to ensure compatibility with the management of that resource.

The County should facilitate resource-based industries in areas that have poor soils or are not otherwise suitable for agriculture or forestry and that minimize the conflicts with adjacent resource lands.

The County should promote forest management that achieves long-term forest health, protection of watersheds, critical areas such as fish and wildlife habitat, protection of threatened and endangered species and the preservation and economic viability of working forests.

The County should develop incentives, educational programs and other methods to encourage agricultural practices, which maintain water quality, protect public health, protect fish and wildlife habitat, protect historic resources and prevent erosion of valuable agricultural soils.

The County should consider developing regulations to allow clustering of residential development in agricultural lands. The intent of cluster development is to allow limited opportunities for residential development at non-urban densities.



2.3 Critical Areas

The Washington State Growth Management Act requires that Okanogan County designate and protect those lands that may be considered as environmentally sensitive, or Critical Areas. These actions must be based on the principles of Best Available Science, as defined in the GMA, and may include a variety of strategies and techniques to reflect local conditions and priorities.

What are Critical Areas?

Critical areas provide a variety of benefits, including clear drinking water, enhanced water quality, wildlife habitat, and managed flood risks. Protection of critical areas is necessary to preserve these benefits and to reduce the hazards associated with some critical areas. The functions and values of critical areas, once lost, can be costly or even impossible to replace.

Growth Management Act

The Washington State Growth Management Act identifies five categories of critical areas (RCW 36.70A.030(5)):

Wetlands;

Areas with a critical recharging effect on aquifers used for potable water;

Frequently flooded areas;

Geologically hazardous areas; and

Fish and wildlife habitat conservation areas.

GMA requires all counties and cities to designate and protect critical areas functions and values. (RCW 36.70A.170(1))

All critical areas must be protected, but not in the same manner or to the same degree. To “protect” critical areas generally means to preserve their functions and values, preventing or, at the very minimum, mitigating potential adverse impacts.

Okanogan County is required by GMA to classify (define or determine) what their critical areas are and to establish classes or categories for each kind of critical area. Establishing categories is a process of rating the value or hazard of these areas. Next, the County is required to designate their critical areas, which means to determine where they are. At a minimum, this involves formally adopting a classification system. As part of this, the County should establish the general distribution and location of the different types of critical areas, while not required the Washington State Department of Community, Trade and Economic Development (CTED) strongly encourages inventorying and mapping of the critical areas.

What is Best Available Science?

It is the locally applicable scientific data that is relied upon when assessing how critical areas function and how best to protect them from existing or future development. This includes research and assessment data, monitoring data, inventory, and survey data for each critical area. Where this level of information has not been developed, relying on expert opinion or synthesis literature may be helpful in understanding how critical areas function and how land use decisions should be made.



The County must incorporate Best Available Science when developing policies and development regulations to protect the functions and values of critical areas. Furthermore, the County will give special consideration for conservation or protection measures necessary to preserve or enhance anadromous fisheries. The inclusion of the best available science in the development of critical area policies and regulations is especially important to salmon recovery efforts, and to other decision-making affecting threatened or endangered species.

Okanogan County 1993 Growth Management Committee Report History

The Growth Management Committee, consisting of 63 citizens, was charged with the responsibility to classify, designate, and develop regulations for protection of critical areas. One outcome of the final report prepared by this committee was the subsequent adoption of the County’s critical areas regulations in 1994. These regulations defined critical areas to include the following areas and ecosystems:

Resource critical areas are regulated for the purpose of protecting these resources from human activity that would cause undue damage to wetlands, wildlife habitat or wildlife movements, or would endanger public safety or health by adversely affecting aquifer recharge areas. Resource critical areas include:

Wetlands

Areas with critical recharging effect on aquifers used for potable water

Fish and wildlife habitat conservation areas

Hazard critical areas are regulated for the purpose of protecting the public from human activities that would affect public safety because it would place residential or other permanent human structures in the hazard critical area. Hazard critical areas include:

Frequently-flooded areas

Geologically hazardous areas

Wetlands

Wetlands assist in the reduction of erosion, siltation, flooding, ground and surface water pollution and provide wildlife, plant, and fisheries habitats. Wetland destruction or impairment may result in increased public and private costs or property losses.

Designation

What are Wetlands?

Wetlands are areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas created to mitigate conversion of wetlands.

(RCW36.70A.030 (20))



The best available data on wetlands in the County is derived from the National Wetlands Inventory (NWI). (See Maps 4-13 through 4-15) NWI has developed maps of wetlands nationwide, based primarily on interpretation of aerial photographs. Identifying wetlands from aerial photographs typically underestimates forested wetlands because the canopy of trees often obscures them. NWI wetland systems in the County are broadly classified as riverine, lacustrine, or palustrine:

Riverine systems include wetlands not dominated by trees, shrubs, or persistent emergents that are contained within a river channel.

Lacustrine systems include wetlands with less than 30 % coverage of trees, shrubs, or persistent emergents that extend for over 20 acres or occur in basins that include water deeper than 6.6 feet; and

Palustrine systems include wetlands dominated by trees, shrubs, and persistent emergent plants associated with water bodies that cover less than 20 acres or with water less than 6.6 feet deep.

The County's current wetland classification and rating system is based on Washington State Department of Ecology (Ecology) publication (#91-58), *Washington State Wetland Rating System for Eastern Washington*, which the County further amended pursuant to Ord. 94-2. This Ecology publication has been updated by Publication 04-06-15, August 2004. The County has not mapped wetlands according to this updated classification system and therefore requires individual wetland delineations to be completed at the time a development application is submitted pursuant to Okanogan County Code (OCC) 14.12.620 (which is based on the Ecology wetland rating system and the 1989 Federal Wetlands Manual).

Existing Conditions

Planning Areas

Columbia Planning Area

Map 4-13 shows the distribution of wetlands identified in the NWI within the Columbia Planning Area. Lacustrine wetlands are associated with the Columbia River, Okanogan River Alta Lake and Rat Lake. Riverine wetlands can be found along the Methow River. Palustrine Wetlands are found throughout the planning area frequently near small creeks and streams, ponds and small lakes, such as Indian Dan Lake, Swamp Creek, Whitestone Creek and Gold Creek.

Methow Valley Planning Area

Map 4-14 shows the distribution of wetlands identified in the NWI within the Methow Planning Area. Lacustrine wetlands are associated with Patterson Lake Pearrygin Lake, Davis Lake and



the Twin Lakes among others. Riverine wetlands are identified along the Methow River and Chewack River. Palustrine wetlands are found in many of the river valleys such as the Methow Valley or associated with small creeks and rivers through out the planning area.

Whitestone Planning Area

Map 4-15 shows the distribution of wetlands identified in the NWI within the Whitestone Planning Area. Lacustrine wetlands can be found in this planning area associated with Palmer Lake, Spectacle Lake, and Whitestone Lake among others. Riverine wetlands are located along the Okanogan and Simikameen Rivers. Palustrine wetlands are found throughout the Sinahekin Valley, in the Okanogan River Valley, in Antoine Valley, and along Whiskey Cache Creek and Aeneas Creek as well as many other areas in the planning area as shown on Map 4-18.

Mid-Valley Planning Area

Map 4-16 shows the distribution of wetlands identified in the NWI within the Mid-Valley Planning Area. Lacustrine wetlands in this planning area are associated with Leader Lake, Green Lake, Conconully Reservoir and Lake, as well as Alkali and Evans Lakes. Riverine wetlands are identified along the Okanogan River. Palustrine wetlands can also be found around Leader Lake, in the Chiliwist Valley and along many of the creeks and streams in the planning area such as, Johnson Creek and Salmon Creek.

Upper Valley Planning Area

Map 4-15 shows the distribution of wetlands identified in the NWI within the Upper Valley Planning Area. There are lacustrine wetlands associated with Lake Osoyoos, Wannacut, Blue, Lost, Beth, Mud, and Sidley Lakes as well as Muskrat & Fields Lakes. Riverine wetlands are found along the Similkameen and Okanogan Rivers. There are many palustrine wetlands located in the Okanogan River Valley as well as adjacent to named and unnamed creeks, ponds and small lakes throughout this planning area, which are visible on Map 4-15.

Critical Aquifer Recharge Areas

Most of the drinking water in unincorporated Okanogan County comes from ground water supplies. The quality of ground water in an aquifer is linked to its recharge area. In general terms, if the soil and underlying ground are very permeable⁴ and the ground water table is high,

⁴ To adequately determine the overall ease with which water will travel from the land surface to the aquifer it is necessary to determine the overall permeability of both soil and underlying ground. Soil permeability can be determined through use of the County's Soil Survey. Permeability for each soil type can be found in tables



there is a greater potential for ground water contamination. Once ground water is contaminated, it is costly and difficult, if not impossible, to clean up. Preventing ground water contamination is necessary to avoid high costs for clean up, hardships, and potential physical harm to people.

Designation

It is generally acknowledged that the following areas have the potential to be aquifer recharge areas: rivers and creeks (especially at their headwaters), forests, wetlands, lakes and ponds, alluvial fans, and areas within the 100-year floodplain. These areas are only considered aquifer recharge areas if certain porous soil types, as identified by SCS in *1980 Soil Survey of Okanogan County Area, Washington*, are present. In addition, some types of land use have a greater potential for ground water contamination than others. Ground water contamination can come from a variety of land uses, including agricultural, industrial and residential. Examples of potential contamination sources include:

Landfills;

Agricultural activities that do not incorporate best management practices;

Industrial facilities with heavy chemical use;

Septic tanks and leaky sewer pipes; and

Underground storage tanks.

Fish and Wildlife Conservation Areas

GMA requires the County to address land use issues that directly and indirectly impact fish and wildlife habitat. The quality of life in the County is interrelated with the protection of the natural environment, including fish and wildlife conservation areas. County residents and visitors enjoy a variety of recreational pursuits that involve wildlife, such as hunting, fishing, bird watching, and wildlife photography. The preservation of the County's fish and wildlife habitat conservation areas will contribute to the development and enhancement of the County's appeal to tourists as a recreational destination.

describing the physical and chemical properties of soils. Generally, these values are given in the inches per hour water moves downward through a saturated soil. The extent of the various soil permeability can be found in maps that accompany each Soil Survey. In most cases however, exclusive use of the Soil Survey to determine aquifer susceptibility is not technically valid and will not meet the use requirement of "best available science".



Designation

The designation of fish and wildlife habitat conservation areas should include (WAC 365-190-080):

Areas where endangered, threatened, and sensitive species have a primary association;

Habitats and species of local importance;

Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat;

Waters of the State;

Lakes, ponds, streams, and rivers planted with game fish by a governmental entity; and

State designated natural area preserves and natural resource conservation areas.

The County may chose to use the information prepared by the Washington State Department of Fish and Wildlife (WDFW) to classify and designate locally important habitats and species. A database of priority habitats and priority species is maintained by the WDFW for land within Okanogan County. While these are WDFW priorities, the counties may consider them as well as the data on which they are based.

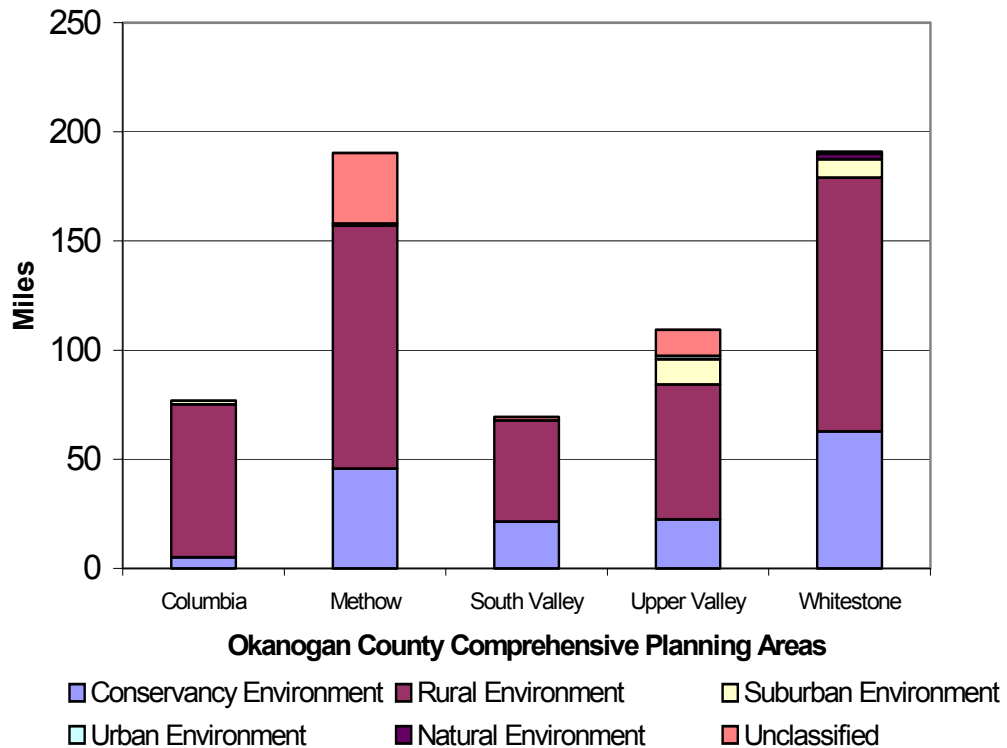
What is fish and wildlife habitat conservation?

It is managing the land in a way that maintains species in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created. This does not mean maintaining all individuals of all species at all times, but it does mean cooperative and coordinated land use planning is critically important among counties and cities in a region.

RCW 365-190-070



Figure 0-7. Shorelines of the State – Environments (Type 1 Waters)



Source: Okanogan County GIS, 2005.

Shorelines of the State

In addition, the County has classified streams and shorelines according to State standards in its Shoreline Master Program (amended May 20, 1996; Res. 56-96). Figure 0-7 shows the distribution of Shorelines of the State by County Comprehensive Planning Area and the designated environment. A detailed discussion of the Shorelines of the State is not included in this report. The County’s Shoreline Master Program contains both policies and implementation regulations related to use and development of all Shorelines of the State. Appendix A includes a list of all lakes, streams and rivers in the County that are Shorelines of Statewide Significance as well as Lakes of Statewide Significance.

It is also important to note that the County is preparing to update its Shoreline Master Program in partnership with its cities and towns. It is anticipated that this process will be initiated in the Summer of 2005 and completed in June 2007.

Species and Habitats

The biggest threats to wildlife are loss of habitat quantity and quality. In Okanogan County, major impacts to habitat quantity and quality include:



Habitat fragmentation --The partitioning of larger habitats into smaller more isolated parcels, usually as a result of development, such as subdivision built in the middle of a forest, a road through a wetland, a dam across a river.). Fragmentation of habitat can negatively affect the abundance and diversity of plants and animals in an area;

Invasive species --Invasive species successfully establish themselves in, and then overcome, native ecosystems after being purposely or accidentally relocated/ introduced. Invasive species can prey on or out compete native species; and

Pollution --The contamination of soil, water, or air by the discharge of harmful substances can impact fish and wildlife by causing direct mortality, weakening the health of individual animals, destroying habitat or producing reproductive consequences such as infertility and birth defects.

Okanogan County has classified, defined and adopted regulations to protect Fish and Wildlife Habitat Conservation Areas. Table 0-2 contains a list of priority habitat species identified in the County's Critical Area Ordinance, "Fish and Wildlife Habitat Conservation Areas" (OCC 14.12.270), which were adopted in 1994.

Natural Environment Regulations

The Natural Environment is an area along the shoreline existing relatively free of human influence.

Conservancy Environment Regulations

The Conservancy Environment is an area containing a resource capable of sustained yield.

Rural Environment Regulations

The Rural Environment is an area where there exists land capable of supporting cultivated and irrigated agriculture with associated activities.

Suburban Environment Regulations

The Suburban Environment is an area where there are few biophysical limitations to development.

Urban Environment Regulations

The Urban Environment is an area of high intensity shoreline land use for residential, commercial, recreational and industrial development.

(Okanogan County Shoreline Master Program)



Table 0-2. Okanogan County Priority Habitat and Species adopted in 1994(OCC 14.12.270)

Species Level	Species
Level I Species: Threatened or Endangered Species	White Pelican
	Bald Eagle
	Spotted Owl
	Western Gray Squirrel
Level II Species: Species and Habitat of Local Concern	Anadromous/Resident Fish
	Western Bluebird
	Common Loon Long
	Sharp-Tailed Grouse (wintering and lek)
	Golden Eagle (nest)
	Harlequin Duck
	Mountain Goat
	Big Horn Sheep
	Great Blue Heron (nest sites)
	Mule Deer (Critical Winter Range, Migration Corridors, Spring Range)
Habitat Types (Caves, Riparian [Type 1, 2, & 3 waters], Cliffs, Shrub Steppe)	
Level III Species: Other Important Species and Habitat	Chukar
	Blue Grouse (nest/winter range)
	Long Billed Curlew
	Priority Mule Deer Winter Range
	White Tail Deer
	Habitat Types (Talus Slopes, Riparian [Type 4 waters, subject to setback regulation only])

Existing Conditions

Planning Areas

Columbia Planning Area

Map 4-17 shows the distribution of priority species and habitat based on Okanogan County classifications for Level I, II and III. Following are the priority species identified as located within the Columbia Planning Area.

Level 1 Species:

- ◆ American White Pelican;



- ◆ Bald Eagle;
- ◆ Lynx;
- ◆ Western Gray Squirrel;
- ◆ Spring Run Chinook (found in the Columbia and Methow Rivers, Gold Creek, and North and Fork Gold Creeks); and
- ◆ Steelhead *O. mykiss* (found in the Columbia and Methow Rivers, Black Canyon, Foggy Dew, Gold, North Fork Gold, and South Fork Gold Creeks).

Level II Species:

- ◆ Common Loon;
- ◆ Golden Eagle;
- ◆ Great Blue Heron;
- ◆ Sharp Tailed Grouse;
- ◆ Coho Salmon (found in the Columbia River);
- ◆ Fall Chinook (found in the Columbia River);
- ◆ Sockeye Salmon (found in the Columbia and Methow Rivers); and
- ◆ Summer Chinook (found in the Columbia and Methow Rivers).

Level III Species:

- ◆ Long Billed Curlew

Methow Valley Planning Area

Map 4-18 shows the distribution of priority species and habitat based on Okanogan County classifications for Level I, II and III. Following are the priority species identified as located within the Methow Valley Planning Area.

Level I Species:

- ◆ Bald Eagle;
- ◆ Lynx;



- ◆ Oregon Spotted Frog;
- ◆ Western Gray Squirrel;
- ◆ Spring Run Chinook (found in the Chewack, Methow, Twisp and West Fork Methow Rivers; Boulder, Buttermilk, Cub, Early Winters, Falls, Goat, Lake, Little Boulder, Little Bridge, Robinson, War, and Wolf Creeks and Lost River Gorge); and
- ◆ Steelhead *O. mykiss* (found in the Chewack, Methow, Twisp, and West Fork Methow Rivers, Beaver, Boulder, Cub, Eightmile, Falls, Goat, Libby, Little Bridge, Robinson, South, War and Wolf Creeks and Lost River Gorge).

Level II Species:

- ◆ Golden Eagle;
- ◆ Sharp Tailed Grouse;
- ◆ Western Bluebird;
- ◆ Sockeye Salmon (found in the Methow River); and
- ◆ Summer Chinook (found in the Methow River).

Level III species:

- ◆ Peregrine Falcon.

Whitestone Planning Area

Map 4-19 shows the distribution of priority species and habitat based on Okanogan County classifications for Level I, II and III. Following are priority species identified as located within the Whitestone Planning Area.

Level I Species:

- ◆ Bald Eagle;
- ◆ Lynx; and
- ◆ Steelhead *O. mykiss* (found in Aeneas and Bonaparte Creeks; and the Okanogan River).

Level II Species:

- ◆ Golden Eagle;



- ◆ Sharp Tailed Grouse;
- ◆ Sockeye Salmon (found in the Okanogan River); and
- ◆ Summer Chinook (found in the Okanogan River).

Level III Species:

- ◆ Black Tern

Mid-Valley Planning Area

Map 4-20 shows the distribution of priority species and habitat based on Okanogan County classifications for Level I, II and III. Following are priority species identified as located within the Mid-Valley Planning Area.

Level I species:

- ◆ Bald Eagle;
- ◆ Lynx; and
- ◆ Steelhead *O. mykiss* (found in the Okanogan River and Chiliwist and Salmon Creeks).

Level II Species:

- ◆ Golden Eagle;
- ◆ Sharp-Tailed Grouse;
- ◆ Sockeye Salmon (found in the Okanogan River); and
- ◆ Summer Chinook (found in the Okanogan River).

Upper Valley Planning Area

Map 4-19 shows the distribution of priority species and habitat based on Okanogan County classifications for Level I, II and III. Following are priority species identified as located within the Upper Valley Planning Area.

Level I Species:

- ◆ Bald Eagle; and
- ◆ Steelhead *O. mykiss* (found in the Okanogan River and Tonasket Creek).



Level II Species:

- ◆ Golden Eagle;
- ◆ Sharp-Tailed Grouse;
- ◆ Sockeye Salmon; (found in the Okanogan River); and
- ◆ Summer Chinook (found in the Okanogan and Similkameen Rivers).

Level III Species:

- ◆ Black Tern;
- ◆ Long-Billed Curlew; and
- ◆ Western Grebe.

The Washington Department of Fish and Wildlife (WDFW) publishes a Priority Habitats and Species (PHS) list, which is a catalog of habitats and species considered priorities for conservation and management. Priority species require protective measures for their perpetuation due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance. Priority species include State Endangered, Threatened, Sensitive, and Candidate species; animal aggregations considered vulnerable; and those species of recreational, commercial, or tribal importance that are vulnerable. Priority habitats are those habitat types or elements with unique or significant value to a diverse assemblage of species. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element. An area identified and mapped as a priority habitat by the WDFW has one or more of the following attributes:

- ◆ comparatively high fish and wildlife density;
- ◆ comparatively high fish and wildlife species diversity;
- ◆ important fish and wildlife breeding habitat;
- ◆ important fish and wildlife seasonal ranges;
- ◆ important fish and wildlife movement corridors;
- ◆ limited availability;
- ◆ high vulnerability to habitat alteration; and



- ◆ unique or dependent species.

Table 0-3 uses the current WDFW priority species list and incorporates priority species listed in the Okanogan County Critical Areas Code and the County's 1993 Growth Management Committee Final Report as well as additional species that have been identified as located within the County. The acreage data was provided by Okanogan County, 2005. The PHS data comes from the WDFW The level 1-2-3 system is from 1992 data. It is my understanding that we are going to drop this system, but Ron wanted to use just the level 2 and level 3. The



Table 0-3 WDFW Priority Species (acres)

	Columbia	Methow Valley	Mid-Valley	Upper Valley	Whitestone
Species Criteria 1					
State Listed and Candidate Species: State listed species are those native fish and wildlife species legally designated as Endangered (WAC 232-12-014), Threatened (WAC 232-12-011), or Sensitive (WAC 232-12-011). State Candidate species are those fish and wildlife species that will be reviewed by WDFW for possible listing as Endangered, Threatened, or Sensitive according to the process and criteria defined in WAC-232-12-297.					
American White Pelican* ^{SE}	1,962				
Bald Eagle* ^{FT, ST}	5,917	7,839	3,426	6,817	14,112
Spotted Owl* ^{FT, SE}					
Western Gray Squirrel* ^{Fco, ST}	9,060	166			
Common Loon* ^{SS}	3,212				
Sharp-Tailed Grouse (wintering and lek)* ^{Fco, SC}	2,915	9,786	127,722	304	23,027
Golden Eagle* ^{SC}	3,679	6,703	8,226	3,295	11,506
Lynx * ^{FT, ST}	48,175	798,651	93,799		387,928
Oregon Spotted Frog ^{FC, SE}		32			
Peregrine Falcon ^{Fco, SS}		816			
Western Grebe ^{SC}				137	
Northern Goshawk* ^{Fco, SC}					
Pileated Woodpecker* ^{SC}					
Gray Wolf* ^{FT, SE}					
Grizzly Bear* ^{FT, SE}					
Sage Grouse* ^{FC, ST}					
Bull Trout ^{FT, SC} (Proposed Critical Habitat)	52.74 mi	263.92 mi	5.24 mi	7.39 mi	44.65 mi
Spring Run Chinook ^{FE, SC}	32.15 mi	144.61 mi	5.4 mi		
Steelhead O. mykiss ^{FE/FT, SC}	47.48 mi	142.72 mi	43.71 mi	18.11 mi	30.91 mi



	Columbia	Methow Valley	Mid-Valley	Upper Valley	Whitestone
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Species Criteria 2

Vulnerable Aggregations:

Vulnerable aggregations include those species or groups of animals susceptible to significant population declines, within a specific area or statewide, by virtue of their inclination to aggregate.

Harlequin Duck*^{Sco}

Great Blue Heron (Nest sites)*SM

2,336

Black Tern ^{FCo}

531

56

Coho Salmon

1.44 mi

Fall Chinook

10.18 mi

Sockeye Salmon

37.58 mi

29.65 mi

21.17 mi

15.93 mi

20.11 mi

Summer Chinook

37.58 mi

29.65 mi

27.1 mi

15.93 mi

20.11 mi

Species Criteria 3

Species of Recreational, Commercial, and/or Tribal Importance that are Vulnerable

Native and non-native fish and wildlife species of recreational or commercial importance, and recognized species used for tribal ceremonial and subsistence purposes, that are vulnerable to habitat loss or degradation.

Bighorn Sheep(1)*^{FCo}

683

12,771

19,399

Northwest White Tail Dee(1)r*
SOC

82,885

127,930

114,297

40,042

228,692

Blue Grouse (1)
(nest/winter range)*

2,351

160

4,945

Chukar(1)*

171,189

10,991

25,152

22,635

Mountain Goat(1)*

27,208

12,765

Rocky Mountain Mule Deer(1) *

Critical Winter

14,775

68,005

Migration Corridor

524,963

Spring Range

2,246

136,424

Priority Winter

82,885

127,930

114,297

40,042

228,692

Total

99,906

857,322

114,297

40,042

228,692

Source: Washington Department of Fish and Wildlife Species list and criteria access on line on May 20, 2005 (<http://wdfw.wa.gov/hab/phslist.htm>)

Acreage data provided by Okanogan County GIS, 2004

Notes:

(1) Acreage Data from Okanogan County, 2005.

* Listed in Okanogan County's 1993 Final Report of the Growth Management Program



FC: Federal Candidate; FCo: Federal Species of Concern; SE: State Endangered; ST: State Threatened; SC: State Candidate; SS: State Sensitive; SCo: State Species of Concern; SM: State Monitored Species

Okanogan County has also classified priority habitats, which include Level II Habitats of Local Concern such as Caves, Riparian (Type 1, 2 and 3 waters), cliffs and shrub steppe. Level III habitats included Talus Slopes and Riparian Corridors (Type 4 waters). Following is a discussion of the location of Type 1, 2, 3 and 4 waters within each planning area. The County has adopted the WA DNR Water Typing System (Table 0-4), which classifies lakes, rivers, creeks, and ponds into five categories.

Table 0-4. Water Typing System (OCC 14.12.090)

Water Type	Definition
Type 1 Water	All waters, within their ordinary high water mark, as inventoried as "shorelines of the state" under Chapter 90.58 RCW and the rule promulgated pursuant to Chapter 90.58 RCW, but not including waters' associated wetlands as defined in Chapter 90.58 RCW.
Type 2 Water	<p>Segments of natural waters, which are not classified as Type 1 Water and have a high fish, wildlife, or human use. These are segments of natural waters and periodically inundated areas of their associated wetlands, which:</p> <ol style="list-style-type: none"> 1. Are used by substantial numbers of anadromous or resident game fish for spawning, rearing or migration. Waters having the following characteristics are presumed to have highly significant fish population: <ol style="list-style-type: none"> a. Stream segments having a defined channel 20 feet or greater in width between the ordinary high water mark and a gradient of less than 4%. b. Lakes, ponds or impoundments having a surface area of one acre or greater at seasonal low water. 2. Are used by salmonids for off-channel habitat. These areas are critical to the maintenance of optimum survival of juvenile salmonids. This habitat shall be identified based on the following criteria: <ol style="list-style-type: none"> a. The site must be connected to a stream bearing salmonids and accessible during some period of the year. b. The off-channel water must be accessible to juvenile salmonids through a drainage with less than a 5% gradient.



Water Type	Definition
Type 3 Water	<p>Segments of natural waters, which are not classified as Type 1 or 2 water and have a moderate to slight fish, wildlife and human use. These are segments of natural waters and periodically inundated areas of their associated wetlands which:</p> <ol style="list-style-type: none"><li data-bbox="410 384 1404 636">1. Are used by significant numbers of anadromous fish for spawning, rearing or migration. Waters having the following characteristics are presumed to have significant anadromous fish use:<ol style="list-style-type: none"><li data-bbox="508 485 1369 569">a. Stream segments having a defined channel of five feet or greater in width between the ordinary high water marks; and having a gradient of less than 12 percent and not upstream of a falls of more than 10 vertical feet.<li data-bbox="508 579 1354 636">b. Ponds or impoundments having a surface area of less than one acre at seasonal low water and having an outlet to an anadromous fish steam.<li data-bbox="410 646 1404 877">2. Are used by significant numbers of resident game fish. Waters with the following characteristics are presumed to have significant resident game fish use:<ol style="list-style-type: none"><li data-bbox="508 720 1404 804">a. Stream segments having a defined channel of 10 feet or greater in width between the ordinary high water marks; and a summer low flow greater than 0.3 cubic feet per second; and a gradient of less than 12 percent.<li data-bbox="508 814 1365 877">b. Ponds or impoundments having a surface area greater than 0.5 acres at seasonal low water.<li data-bbox="410 888 1404 1003">3. Are highly significant for the protection of downstream water quality. Tributaries which contribute greater than 20 percent of the flow to a Type 1 or 2 water are presumed to be significant for 1,500 feet from their confluence with the Type 1 or 2 water or until their drainage area is less than 50 percent of their drainage area at the point of confluence, whichever is less.
Type 4 Water	<p>This classification shall be applied to segments of natural waters which are not classified as Type 1, 2 or 3, and for the purpose of protecting water quality downstream are classified as Type 4 water upstream until the channel width becomes less than two feet in width between the ordinary high water marks. Their significance lies in their influence on water quality downstream in Type 1, 2 and 3 waters. These may be perennial or intermittent.</p>
Type 5 Water	<p>This classification shall be applied to all natural waters not classified as Type 1, 2, 3 or 4; including streams with or without well-defined channels, areas of perennial or intermittent seepage, ponds, natural sinks and drainage ways having short periods of spring or storm runoff.</p>

Figure 0-8 shows the distribution by water type within each Planning Area.



Figure 0-8. Distribution by Water Type

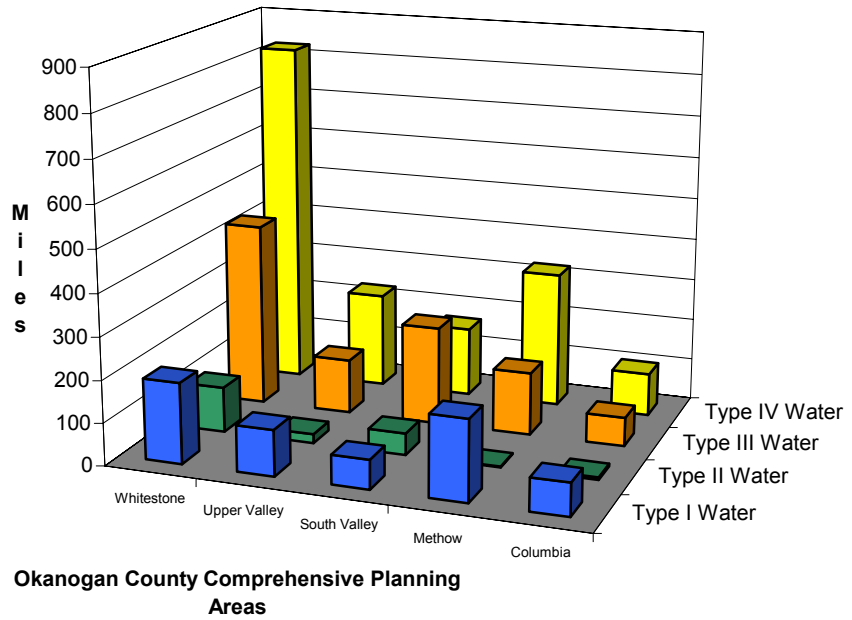


Table 0-5 provides the total linear miles of shoreline by water type in each Planning Area.



Table 0-5. Miles of Shoreline in Okanogan County by Water Type

	Columbia (miles)	Methow Valley (miles)	Mid-Valley (miles)	Upper Valley (miles)	Whitestone (miles)	Totals
Type 1 Waters (Shorelines of the State):						
Conservancy Environment	5	46	21	23	63	158
Rural Environment	70	111	46	62	116	405
Suburban Environment	2	1		12	9	24
Urban Environment				2		2
Natural Environment					2.42	2.42
Unclassified		32	2	12	1	47
Total miles of Type 1 Waters	77	190	70	109	191	637
Type II Water	6	2	52	22	108	190
Type III Water	68	149	234	130	437	1,018
Type IV Water	102	324	166	227	826	1,645
Totals	253	665	522	488	1,562	3,490

Source: Okanogan County GIS, 2005.

Columbia Planning Area

Of the approximately 253 miles of water typed 1-4 by DNR, 40% is Type 4 waters, which include for example the upper portions of Black Canyon, Squaw, and McFarland Creeks, along with Watsons Draw, and Peters Creek. 30% is Type 1 Waters (Shorelines of the State), which includes the Columbia, Okanogan, and Methow Rivers and a small segment of Gold Creek. Rat Lake and the upper portion of Gold Creek are classified as a Type 2 Waters. See Map 4-21 for a map of the Columbia Planning Area's rivers, lakes, creeks and streams by their water type classification as designated by the County.

Methow Valley Planning Area

Just under, 50% of the waterways in the Methow Valley Planning Area are classified as Type 4 Waters, such as Poorman and Newby Creek. Approximately 29% are Type 1 Waters; the Methow and Twisp Rivers. Type 2 Waters consist of some unnamed lakes in Sec. 31 and 39,



T33 R23. See Map 4-22 for a map of the Methow Valley Planning Area's rivers, lakes, creeks and streams by their water type classification as designated by the County.

Whitestone Planning Area

The Whitestone Planning Area has the most miles of water designated as Type 1, 2, 3 or 4 totaling approximately 1,562 miles, of which around 53% are Type 4 Waters. There is approximately 191 shoreline miles of Type 1 Water in this Planning Area, which includes the Okanogan River, portions of Sinlahekin Creek, Palmer Lake, Blue Lake, Conners Lake, Lemanasky Lake, Aeneas Lake, Spectacle Lake, Whitestone Lake, Talkire Lake, and Bonaparte Lake. Type 2 Waters include upper segments of Bonaparte Creek and Toroda Creek, Penny Lake, Turner Lake, and Washburn Lake. See Map 4-23 for a map of the Whitestone Planning Area's rivers, lakes, creeks and streams by their water type classification as designated by the County.

Mid-Valley Planning Area

Of the approximately 522 miles of water, typed 1-4 by the County, 45% is Type 3 Waters, which include for example Frazer Creek, Summit Creek, Tallant Creek, Little Loup Loup Creek, Sweat Creek, Chiliwst Creek, Smith Lake, Spaulding Lake, and Darling Lakes. Around 13% is Type 1 Waters (Shorelines of the State), which includes the Okanogan River, Brown Lake, Green Lake Leader Lake, as well as Conconully Lake and Reservoir. Salmon Creek, Buzzard Lake, and the Rock Lakes are classified as Type 2 Waters. See Map 4-24 for a map of the Mid-Valley Planning Area's rivers, lakes, creeks and streams by their water type classification as designated by the County.

Upper Valley Planning Area

Of the approximately 490 miles of water typed 1-4 by the County, 47% is Type 4 Waters, with influence on downstream water quality. Approximately 22% is Type 1 Waters (Shorelines of the State), which includes the Okanogan River, Similkameen River, Beaver Creek, Myers Creek, Bonaparte Creek, Lake Osoyoos, Blue Lake, Muskrat Lake, Sidley Lake, Molson Lake, Lost Lake, and Wannacut Lake. Salmon Creek, Buzzard Lake, and the Rock Lakes are classified as Type 2 Waters, of high use and importance in water quality. See Map 4-23 for a map of the Upper Valley Planning Area's rivers, lakes, creeks and streams by their water type classification as designated by the County.

Frequently Flooded Areas

Protection of floodplains and other areas subject to flooding is important to minimize adverse effects to human health, safety, and infrastructure. In addition to being potentially hazardous



areas for development due to flooding and erosion, floodplains also provide important habitat to fish and wildlife. Natural floodplains, channel migration zones and their associated riparian habitat and wetlands are important components of a well-functioning aquatic ecosystem.

The County uses the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) to identify frequently flooded areas, which designate the location of 100-year floodplains. A 100-year flood is a type of flood that has a 1% chance of being equaled or exceeded in any given year. The floodplain is the land area susceptible to being inundated by a 100-year flood. Okanogan County Code (OCC) Chapter 15.08 Floodplain Management contains regulations for development activities within or around a floodplain. FIRM data is available from the Okanogan County Planning Department.

Existing Conditions

Most of the 100-year floodplains are located along the County's major rivers: Columbia River, Okanogan River, Methow River, Chewack River, and Twisp River. The floodplains associated with these rivers vary in width. The widest floodplains are found along the river valley floors and within channel migration areas.

Geologically Hazardous Areas

Geologically hazardous areas include areas susceptible to erosion, landslides, earthquake, or other geological events. Limiting incompatible development in areas of significant hazard will reduce the threat to public health and safety. When geological hazards cannot be reduced or mitigated to an acceptable level by engineering, design, or modified construction practices, building in geologically hazardous areas should be avoided. Geologically hazardous areas can contribute to maintenance of fish and wildlife habitat, through mass wasting, landslides, and debris flows that provide sediment and woody debris for development of complex instream habitats important for fish and wildlife. At the same time, large landslides and debris flows can harm habitat and lead to the need for stream restoration.

Designation

The County has not mapped Geologically Hazardous Areas pursuant to its Critical Area Ordinance criteria. It currently relies on a variety of state and federal agency maps to assist in the identification of potential geologically hazardous areas. The County Critical Area Ordinance (1994) classification of geologically hazardous areas includes the following.

What is a channel migration zone?

An area where the active channel of a stream is prone to movement over time. Effective management of the ecological functions in this area is critical to reduce flood hazards, erosion and habitat loss, and to avoid the need for future shoreline stabilization. While channel migration areas can be hazardous areas for development, fish and wildlife also depend on the habitat created when a river is allowed to migrate.



Erosion Hazard Areas

Erosion hazard areas contain all three of the following:

A slope of 30% or greater;

Soils identified by SCS as unstable and having a high potential for erosion; and

Areas that are exposed to the erosion effects of wind or water.

Landslide Hazard Areas

Landslide hazard areas may include areas:

Historically prone to land sliding;

Containing soil types identified by the Soil Conservation Service as unstable and prone to landslide hazard;

Showing evidence of or are at risk from snow avalanches; and

Potentially unstable as a result of rapid stream incision or stream bank erosion.

Mine Hazard Areas

Mine hazard areas include:

Areas that are directly underlain by, adjacent to, or affected by mine workings such as adits, tunnels, drifts, or air shafts with the potential for creating large underground voids susceptible to collapse, tailings piles, and waste rock;

Steep and unstable slopes created by open mines, tailings and waste rock piles have the potential for being mine hazard areas; and

Mine hazard areas are based upon the identification of active or historic mining activity and site-specific information regarding topography and geology.

Seismic Hazard Areas

There are no known active faults in the County.

Existing Conditions

Virtually any area in Okanogan County can experience soil erosion if subjected to inappropriate grading and construction practices. The U.S. Department of Agriculture Soil Conservation Service has identified certain soil types in the County as being especially susceptible to erosion. Geologically hazardous areas may not be well suited to high-density development and intensive land uses because of the sensitivity of these soils and areas to disturbance. The County has not mapped geologically hazardous areas. Maps 4-25 through 4-28, Severe Slope Maps- for each



Planning Area shows slopes greater than 30%. In addition, mine hazard areas are likely to occur in the vicinity of past and present mines.

2.4 Next Steps – Critical Areas

Okanogan County has identified and mapped, utilizing a very broad and generalized data, obtained from a variety of sources, lands that may be suitable for designation and protection as a Critical Area. The next step is to provide affected property owners and interested citizens in Okanogan County the opportunity to review this information and the associated maps and obtain feedback on the appropriate criteria and policies appropriate for designating and protecting Critical Areas. The County shall seek to balance the interests of private property owners with the need to protect public health and safety and preserve valuable critical areas.

The County should work with citizens to develop policies that will guide future development regulations related to the prevention of habitat fragmentation and ways to encourage wildlife corridors between isolated patches of habitat. The County should incorporate policies which give guidance to critical areas regulation and indicate that the policies and regulations are to be based on the best available science with “special consideration” to the conservation or protection measures necessary to preserve or enhance anadromous fisheries (RCW 36.70 and WAC 365-195-900)

In addition, the County should considered obtaining the following data or funding the following studies to gain a better understanding of the County’s critical areas:

In order to adequately protect its aquifers, the County should consider at the time subarea plans are prepared undertaking a hydrogeologic study to determine the location and susceptibility of aquifer recharge areas. Hydrogeologic susceptibility provides the basis for classifying critical aquifer recharge areas in terms of relative risk of contamination and then implementing regulations and best management practices to ensure that ground water in not contaminated.

The County should update its wetland regulations to be compatible with the Washington State Wetland Rating System for Eastern Washington (Ecology, Publication #04-06-15), which was designed to differentiate between wetlands based on their sensitivity to disturbance, their significance, their rarity and the ability to replace them and the functions they provide.

Obtain the most current digital data available on priority habitat species in Okanogan County. Recommend ordering current digital data Priority Species and Habitat information from Washington State Fish and Wildlife. (Online order form available at http://wdfw.wa.gov/hab/phsorder_jan1005.pdf)

While not an immediate need the County should be aware that in 1999 the State Legislature adopted The Forest and Fish Report (ESHB 2091) which outlined a plan to institute a new



habitat-based water typing system. The report delineates waters of the state into three categories:

Type S waters—Shorelines of the State (Shoreline Management Act);

Type F Waters—Fish habitat; and

Type N Waters—Non-fish habitat.

Table 0-6. Water Type Conversion

DNR Permanent Water Typing	Okanogan Water Typing
Type “S”	Type 1 Water
Type “F”	Type 2 & 3 Water
Type “Np”	Type 4 Water
Type “Ns”	Type 5 Water

The Washington State Department of Natural Resources is responsible for development of the new water type maps in Washington, which it is doing in two phases first Western Washington (which has been completed) followed by Eastern Washington (not yet completed). CTED recommends adoption of this new Water typing system. The County should be cognizant of this pending change and be prepared to revisit its Critical Area regulations to determine if the existing Water Type classification and buffers needs to be updated or revised.

Specific polices that Okanogan County should consider in its next steps are as follows:

Consider non-regulatory means to preserve and restore critical areas. In addition to its regulatory authority, Okanogan County should develop incentives to protect and restore the natural environment. Any incentives should be monitored to determine their effectiveness.

Areas of native vegetation that connect wetland systems and riparian areas should be protected. This may be accomplished by incentive programs such as buffer averaging, cluster development, or other appropriate non-regulatory mechanisms.

Habitat corridors for threatened, endangered and other priority species of local concern should be identified and mapped. The County should provide incentives for new for development within or near habitat corridors to incorporate design techniques that protect and enhance wildlife habitat.

Slopes with a grade of 30% or more or areas subject to landslides shall not be developed unless the risks and adverse impacts associated with such development can be reduced to a non-significant level.



The County shall work with other jurisdictions and the Coleville tribe to establish uniform countywide wetland, as well as, fish and wildlife resource (riparian areas, migration corridors, winter ranges, etc.) policies that provide protection of both regionally and locally unique resource critical areas.

The protection of lands where development would pose hazards to health, property important critical areas functions or environmental quality shall be achieved through the acquisition, enhancement, incentive programs and appropriate regulations. The following critical areas are particularly susceptible and should be protected:

- ◆ 100-year floodplains;
- ◆ Channel migration zones;
- ◆ Slopes with a grade of 30% or greater or landslide hazards that can not be mitigated;
- ◆ Wetlands and their protective buffers;
- ◆ Critical Aquifer Recharge Areas;
- ◆ Streams, lakes and their protective buffers;
- ◆ Wildlife habitat areas; and
- ◆ Other critical habitat areas identified for protection through subarea plans or Water Resource Area plans

The county should protect the priority habitats listed by the Washington Department of Fish and Wildlife that are not otherwise protected by policies and regulations. Protection should be accomplished through regulations, incentives or purchase. Priority habitats are: caves, cliffs, old growth/mature forest, snag rich areas, and talus slopes.

The County shall regularly review the Washington State Department of Fish and Wildlife's list of Priority Species and other scientific information on species of local concern, and evaluate whether any species should be added to or deleted from the priority habitat and species list in the Comprehensive Plan. Any additions or deletions should be made through the annual amendment process for the comprehensive plan.

The County shall utilize the best scientific information available in an adaptive management approach to preserve or enhance the functions and values of critical areas through regulations, policies and incentives.

Utilize science-based mitigation for unavoidable adverse impacts to critical areas to protect the overall function of the critical area.



Environmental quality and important critical area functions shall be protected and hazards to health and property shall be minimized through development reviews and the implementation of critical areas regulations and floodplain regulations as well Water Resource Inventory Area Plans.

Rivers and stream channels, stream outlets, headwater areas and riparian corridors should be preserved, protected and enhanced for their hydraulic, hydrologic ecological and aesthetic functions, including their functions in providing woody debris sources to salmonid-bearing streams.

As watershed plans are developed, they should define how the natural functions of watersheds critical to salmonids are protected so that the quantity and quality of water entering the streams, lakes, wetlands and rivers support salmonid spawning, rearing, resting and migration.



Chapter 3: Fire Planning

3.1 Introduction

Wildland fire planning has become an important element of land use planning in the County (County), because of the number of structures being constructed in areas susceptible to wildfires. This fire planning section includes information on the existing conditions related to wildfires; the history of fires in the County; and discussion of the wildland urban interface (WUI), emergency management and response, and current countywide planning efforts.

This element has been prepared as a portion of the County Comprehensive Plan, although it may act as a stand-alone report to facilitate independent discussion and review. The format is consistent with the Comprehensive Plan and several sections duplicate information in the Comprehensive Plan. After review, discussion and approval portions of this document will be incorporated, where appropriate, throughout the Comprehensive Plan.

Purpose

As the number of people living in forested and grassland areas continues to grow, so does the potential that these people will experience a wildfire on or near their property. The County has the most fire ignitions and the highest suppression costs of any County in the State. As population increases, more people are exposed to wildfire risks (DNR 2003). As a result, there is an ongoing need to provide protection of life, property, and cultural and natural resources. The purpose of this fire planning section is to establish goals and policies that will guide the development of land within the WUI consistent with the County's overall goals and policies.

Planning Area and Land Use Distribution

Larger than several states, the County is bordered on the north by Canada, on the south by the Columbia River, on the east by Ferry County, and on the west by the 8,000-foot peaks of the North Cascade Mountains. The County covers 5,281 square miles, making it the largest County in Washington. Only 30% of the land within the County is in private ownership due to the amount of state and federal land. The Colville Indian Reservation (Reservation), located in Ferry and Okanogan counties, occupies approximately 675,000 acres of Okanogan Counties total land area, and is an integral part of the County's heritage.



The County’s total area is approximately 3,400,000 acres, of which 953,301 acres is privately owned and 1,574,262 acres is federally owned. Over 95% of the federally owned land is encompassed within the jurisdiction of the United States Forest Service (USFS), primarily within the National Forest and the Pasayten Wilderness on the western side of the County. Other agencies with wildland fire management jurisdiction include the Bureau of Indian Affairs (BIA), Bureau of Land Management (BLM) and U.S. Fish and Wildlife Service (USFWS). Table 4-1 highlights land ownership in the County.

Table 0-1. Acres of Land Ownership in Okanogan County

Ownership	Acres
Private	953,301
City	1,343
County	937
Public Utility Districts	1,505
State	357,721
Federal	1,574,262
Tribal	485,695
Water Bodies	36,439
Total	3,411,203

Source: the County

Community Profile

The 2000 census recorded a County population of 39,564 people. With a population of 2,415, Okanogan is the second largest city in the County as well as the County seat. Omak, the largest city in the County has a population of 4,495. Other cities within the County are: Brewster (2,055), Conconully (177), Coulee Dam (890), Elmer City (310), Nespelem (235), Oroville (1,615), Pateros (595), Riverside (305), Tonasket (1,025), Twisp (1,000), and Winthrop (375). The County has an unincorporated population of 21,764, while the incorporated population is 15,136. There are 19,085 housing units at an average density of four dwelling units per square mile.

Agriculture and forestry are the *major economic generators* for the County, employing approximately 5,756 people. Government, retail trade, services, and manufacturing are a few



of the *major employers* within the County. Omak, the regional center for services and trade, is experiencing a great deal of growth. The city of Coulee Dam is the location of Grand Coulee Dam, one of the largest concrete structures in the world and the largest electricity producer in the United States.

3.2 Existing Conditions

The following sections describe the built and natural conditions within the County relating to wildfires.

The Nature of Fire

A fire needs three elements in the right combination to start and grow: a heat source, fuel, and oxygen. How a fire behaves primarily depends on the characteristics of available fuel, weather conditions, and terrain.

Lighter fuels such as grasses, leaves and needles quickly expel moisture and burn rapidly, while heavier fuels such as tree branches, logs, and trunks take longer to warm and ignite. Snags and hazard trees – those that are diseased, dying, or dead – also burn more rapidly than heavier fuels. In 2002, about 1.8 million acres of the state’s 21 million acres of forest land contained trees killed or defoliated by forest insects and diseases; the largest number were in eastern Washington.

East of the Cascades, summer drying typically starts in mid June and runs through early September, with drought conditions extending this season. Passage of a dry, cold front through this region can result in a sudden increase in wind speeds and a change in wind direction affecting fire spread. Thunderstorm activity, which typically begins in June with wet storms, turns dry with little or no precipitation reaching the ground as the season progresses into July and August. Consequently the risk of catastrophic wildfire generally increases in late summer.

The peak burning period of a fire generally is between 1 p.m. and 6 p.m.; local factors (generally described above) influence this greatly. Wildland fires can take on a life of their own when there is plenty of heat and fuel. They can create their own winds and weather, generating hurricane force winds of up to 120 miles per hour. Fires can heat fuels in their path, drying them out, and making them easier to ignite and burn.

Climate, Fuel, and Topography

The County’s climate is typical of eastern Washington: distinct seasons, hot summers and cold winters. Average precipitation in the County is 15 inches per year. The majority of precipitation between October and March is snow. Figure 3-1 depicts average precipitation throughout the County. The highest precipitation is in the high mountainous western portion



of the County with over 90 inches; most of the mountainous regions of the County receive only 20 to 25 inches. Some valley areas in the southern portion of the County average 5 inches, the lowest in the County. Temperature ranges from 17 to 29 degrees in the winter to 57 to 85 degrees in the summer.

The wildland fire season in Washington usually begins in early July and typically culminates in late September with a moisture event; however, wildland fires have occurred in every month of the year. Drought, snow pack, and local weather conditions can expand the length of the fire season. The beginning and end of the fire season usually are associated with human-caused fires. Lightning generally is the cause of most fires in the peak fire period of July, August, and early September. Monthly lightning activity for the County is illustrated in Figure 3-2. Lightning strikes occur throughout the County; the most densely hit areas are in mountainous terrain. Lightning strikes are not limited to forested areas; a large number of strikes hit low-lying grassland areas.

A report for the National Forest⁵ cites the number of fires caused by lightning strikes over the past 5 years and in 2002. Table 0-2 shows that lightning strikes were the cause of over 77% of the fires and 94% of the acres burned.

⁵ The National Forest, Annual Report on forest Plan Implementation and Monitoring for Fiscal year 2002, September 2003, Pacific Northwest Region, US Forest Service.



Table 0-2. Wildfire Occurrence by Cause

Cause	5-Year Fire Average 1997-2001	5-Year Acre Average 1997-2001	Number of Fires 2002	Number of Acres 2002
Campfire	30	316	9	1
Children	0	0	0	0
Debris Burn	13	3	0	0
Equipment	4	1	0	0
Incendiary	1	0.2	0	0
Lightning	264	5,064	58	12,189
Misc.	20	7	4	0.3
Smoking	11	5	2	0.2
Total	343	5,396	73	12,191

Source: Forest Service

Figure 3-3 illustrates a fuel model developed by USFS that includes the County. Figure 3-4 illustrates a corresponding crown fire potential map. Crown fires involve flames of high intensity that generally exceed the crown of overstory trees and are carried from crown to crown. Crown fires commonly kill all trees over extensive areas. The areas with the greatest risk of crown fire are generally located in areas of short needle timber in the western and eastern portions of the County. These areas are typically mountainous and are at higher elevations. The western portion of the County is primarily federal land; while the eastern portion includes federal, state, and private lands. The topography of the County is varied, exceeding an elevation of 8,000 feet in the western portion with a low of 1,000 feet near the Columbia River. The western half of the County is dense, rugged, and mountainous terrain (Figure 3-5). Similar terrain dominates the northeast corner of the County though the slopes are neither as steep nor the peaks as high. From the north, the terrain descends to rolling hills, grassy ranges, and fertile valleys that extend through the center of the County along the Okanogan and Methow rivers. The County is dotted with lakes; Palmer and Osoyoos are the largest in the north central and Omak in the south.



The steep ridges and river valleys can limit the spread of fire by functioning as natural barriers or by influencing local weather conditions. The central portion of the County with rolling hills and shrub and grassland lacks these barriers.

Vegetation Type and Natural Fire Regimes

Vegetation types in the County are complex and varied. Vegetation types result from physical characteristics of the landscape such as slope and aspect as well as climate and geologic influences. Those areas where human establishment and the risk of wildfire coexist generally include shrub/steppe (grasses and sagebrush) and forested communities (ponderosa pine and dry Douglas fir) over several thousand feet of elevation change.

Natural disturbances are an intrinsic part of ecosystem development, and fire has been an important natural process in the maintenance of historic ecosystem health and diversity in the forests of the western United States. In Washington, ecosystems are developed in concert with, and are subject to, a variety of natural, introduced, and altered fire regimes.

When attempting to determine the effects of post-European human influence and management on the fire and fuels resource, the characterization of the fire regime condition class is an important index. An historical fire regime is defined by the natural patterns of frequency, predictability, seasonality, intensity, duration, and scale with which fire historically passed through the habitat.

Fire regimes, as identified in “Spatial Data for National Fire Planning and Fuel Management” can be classified into the five groups shown in Table 0-3.



Table 0-3. Fire Regime Classifications

Classification	Fire Return Interval	Severity	Example Habitats
Group I	0–35 years	Low	Ponderosa pine, other long-needle pine species, and dry-site Douglas-fir
Group II	0–35 years	Stand replacement	Drier grasslands, tall grass prairie, and some Pacific chaparral ecosystems
Group III	35–100+ years	Mixed	Interior dry-site shrub communities, such as sagebrush and chaparral ecosystems
Group IV	35–100+ years	Stand replacement	Lodgepole pine and jack pine
Group V	>200 years	Stand replacement	Temperate rain forest, boreal forest, and high-elevation conifer species

Sources: Hardy et al. 2001, Schmidt et al. 2002.⁶

The concepts of fire regime and condition class require an understanding of historical (pre-European) conditions to facilitate measurement of the departure from those conditions. For areas where pre-European vegetation maps are not available, one method to determine historical vegetation is to use information on soils, climate, and topography of the area to predict the potential natural vegetation (PNV). PNV groups represent the stable vegetation types that would become established on an ecological site, if all successional stages were completed without human interference under present environmental conditions

Natural fire regimes have been altered by management activities, including fire exclusion, livestock grazing, and timber harvesting. Historical climate variability and potential global climate change have and may further affect fire regimes.

A close approximation to the past frequency of fire occurrence, extent, and severity (fire regime) on particular sites is important to understanding the relative difference in vegetation and dead/down debris on these sites today. The change or departure on these sites in the amount of these materials relates directly to the type of fire behavior and post-fire effects these sites will support today, compared to the past. Comparing current site conditions to those of the past will indicate changes in fire severity or fire behavior. The ability to predict potential

⁶ Hardy, C. C., Schmidt, K. M., Menakis, J. M., and N. R. Samson. 2001. Spatial Data for National Fire Planning and Fuel Management. *International Journal of Wildland Fire* 10:353-372.



fire behavior characteristics is important to understanding the risk to people and key ecological resources.

USFS is in the process of classifying its forests and will issue a fire regime map and condition class. A condition class is a measure of a forest's historical fire experience. The existing fire regime map is shown in Figure 3-6. As a region reaches the end or extends beyond the natural fire return interval the likelihood of fire increases. Reviewing this map in relation to development within the County will establish areas of primary concern, where fire reduction potential will be critical. Examples include the Winthrop, Twisp, Chesaw and Wauconda areas where fires may occur in less than 35 year increments with minor severity.

Land Development

Land development within the County is most dense along river valleys in towns and cities. Development in rural areas has always occurred in the County, although, during the past several years, more development has occurred beyond these traditional locations adjacent and within agricultural and forest lands. Figure 3-7 displays the distribution of residential structures throughout the County. Examples of development that border forest land are Molson and Chesaw in the northeast corner of the County, Loomis in the north-central part of the County, Sun Mountain southwest of Winthrop, Lost River north of Mazama, and Early Winters in the western portion of the County. Table 0-4 lists areas where subdivision has occurred over several years, followed by the construction of housing, indicating a desire of people to live or vacation in these locations. In each case these areas are adjacent to wild lands, which are in danger of fire hazards.

Within the Methow Valley several areas have seen considerable development bordering on wild lands. These include the western portion of the valley near Lost River, Mazama and Wolf Creek and southwest of Winthrop including Elbow Coulee and Twin Lakes. Also, the Twisp River valley has seen the division of large lots and some traditional subdivision activity. The southern Methow Valley is being developed slowly, primarily those lands adjacent to the Methow River and the upland areas near the communities of Carlton and Methow.

West of Oroville, the Nighthawk and Wannacut areas have two large lot subdivisions with a completed road system and some housing. This area is a mixture of forest and grassland. Areas of similar development east of Oroville include Nine Mile Road and Swanson Mill Road. Several areas east of Tonasket, along the Aeneas Valley and East of Riverside, have seen continued development in large subdivisions, including Lyman Lake, Davis Lake, Cape Labelle and Tunk Valley.



Table 0-4. Available Residential Development Potential

Sub Area	Area	Location	Number of Developed Parcels	Number of Vacant Parcels	Total Number of Parcels
Methow	Lost River Gorge	Lost River Road from McGee Creek to end of road. T36R19 Sections 5, 4, and 9.	150	297	447
Methow	Goat Creek	Goat Creek Rd from Methow River west of Sunflower Lane. T35R20 Sections 3, 4, and 10.	131	279	410
Methow	Wolf Creek	South of the Methow River T35R21 Sections 30, 31, and 32.	86	124	210
Methow	Pine Lake	T34R21 Sections 17, 20, and 21.	72	116	188
Methow	Twin Lakes	T34R21 Sections 10, 15, 11, and 14.	287	284	535
Methow	Twisp River	From Poorman Creek Rd to FS Rd 4400145. T33R20 Sections 15, 16, 11, 12, and T33R21 Sections 7, 8, 10, 11, and 12.	218	215	433
Upper Valley	Ellemeham	T40R26 Sections 19, 20, 21, 22, 27, 28, 29, and 30.	14	173	187
Upper Valley	Nine Mile Road	T40R28 Sections 1, 2, 4, 8, 17, 16, 20, 21, and 28	26	198	224
Upper Valley and Whitestone	Swanson Mill Road	T39R28 Sections 30, 29, 28, 27, 31, 32, 33, and 34. T38R28 Sections 6, 5, 4, and 7.	160	450	610
Whitestone	Watoka Way	T35R31 Sections 17 and 18	17	137	154
Whitestone	Gooseberry	T35R31 Sections 3, 10, and	7	68	75



	Meadow	T36R31 Section 34			
Whitestone	Cape Labelle	T36R30 Sections 21, 22, 28, 27	21	191	214
Whitestone	Wannacut Lake	T39R26 Sections 14, 15, 22, 23, 26, 27, 34, and 36.	6	206	212
Mid Valley	Chiliwist Valley	T32R24 Sections 4, 3, 10, and 11.	19	79	98
Mid Valley	Pogue Flats	T34 R26	658	449	1107
Columbia	Brewster Flats	T30R25 Sections 5 and 6.	19	99	118
Columbia	French Creek	T31R23 Sections 28, 29, 32, and 33.	26	93	119

The County allows subdivisions throughout the County. Figure 3-8 depicts the land division that has occurred over the previous years. Future subdivisions will likely occur where there is a County road system, available private land, and some existing subdivisions. Several areas that meet these criteria are the Molson and Chesaw areas in the northeast portion of the County; the Wauconda area in the east central portion of the County; the Pine Creek area between Tonasket and Conconully; the Chiliwist area southwest of Malott; and many of the uplands surrounding the Methow Valley.

Community Facilities

Community facilities within the County encompass fire stations, law enforcement facilities, schools, hospitals, airports, wastewater treatment plants, and public works facilities. These facilities are typically located within or adjacent to municipal boundaries. Rural fire stations, supported by fire protection districts, are the notable exception. Figure 3-9 (This figure is not available) displays the locations of these facilities within the County. Table 0-5 lists the types and amounts of public facilities within the County.



Table 0-5. Community Facilities

Community Facility	Number
Airports	7
Hospitals	3
Fire stations	20
Law enforcement	7
County Public Works	5
Schools	23
Wastewater Treatment	21

All of the airports are located outside of municipal boundaries and are adjacent to rural lands and exposed to wildland fires. The airports with the highest amount of exposure, due to proximity to open land and lack of surrounding roadways, are Tonasket, Oroville, and Okanogan. The hospital in Tonasket is located within the city limits and is surrounded by commercial development. The Brewster hospital is located at the top of a steep hill (covered with grass and shrubs) that is outside the commercial core but surrounded by development. The Omak hospital is located on the south of town and is adjacent to a small amount of grasslands to the south. However, agricultural lands surround this entire area.

Nearly all of the fire stations are located within commercial or residential areas. The Mt. Hull station stands the most risk from wildfire. Located on Swanson Mill Road in an isolated area of grassland and forest, it was threatened by the Rocky Hull Fire. The stations at Molson, Chesaw, Conconully, Loomis, and Fields Lake are also at risk, because wildlands surround the communities they lie within. Some of these issues are mitigated by stationing fire equipment at residences, as is the case in the Cameron Lake Area.

All of the law enforcement facilities and schools are located within municipal areas and at no more risk than the communities themselves. School buildings adjacent to grasslands or forest lands include those serving Twisp/Winthrop, Pateros, Okanogan, and Tonasket.

Transportation

The transportation system within the County is comprised of a significant number of roads, several airports, a rail line and an extensive trail system. The road system is comprised of state highways, Washington State Department of Natural Resources (DNR) roads, County roads,



USFS or BIA roads, and private roads. USFS roads constitute the most miles of road, followed by County roads (Table 0-6).

Table 0-6. Roads Within the County by Ownership

Jurisdiction	Miles
Washington State Highways	288
DNR, Private, BIA	1,378
County	1,425
Forest Service	2,209
Total	5,300

Roads are important in the wildland urban interface, because they provide a means of escape and access to fight fires, and because they may act as barriers to the spread of a fire. Figure 3-10 shows the location of roads throughout the County. Comparing the location of existing roads (Figure 3-10) to concentrations of housing units (Figure 3-6) to fires over the past several years (Figure 3-11) reveals areas where additional roads should be considered to improve access, as fire breaks or to suppress fires, as follows:

Carlton (T32R22) – Few fires have occurred in this area, which has some development. Construction of a road between Vintin and Texas Creek roads would provide an alternative means of exiting the area and access for suppressing fires.

Harmony Heights (T31R24) – Few fires have occurred in this area; however, the heights has only one southern access route. Extending Harmony Heights Road to Paradise Hill or Black Bear Road would provide an alternative exit route.

Rat Lake (T31R24) – The area west of Monse includes some large lot subdivisions and housing. Several fires have occurred in this area. Providing connections between Valley Road and North Star Road would provide circulation for fire responders.

Omak (T34R26) – Immediately north of Omak is an excellent grid system of roads. Continuing this system up to Riverside Cutoff Road would provide access for fire suppression and alternative exit routes.

Palmer Mtn (T39R26)– Connecting several of the access roads and adding a connection on the west in Section 16 to Wannacut Lake Road or to the east would provide an alternative exit route.



Ellemham Mtn. (T40R26) – Several large fires have occurred in the Similkameen River Valley. Additional private roads should be constructed to improve access, by linking existing road system and creating loops.

Arenas Valley – This valley has had over 30 fires of 10 acres or more over the previous 10 years. The area has several subdivisions with single access that should be connected to adjacent roadways to provide alternative access routes.

Talkire Lake - Talkire Lake has several subdivisions with single access that should be connected to adjacent roadways to provide alternative access routes

Nine Mile – The frequency of fires in this region is low along, as is the number of housing units. However, there are a considerable number of large lots. As these lots develop, roads should be extended to provide loops and connections as alternative routes of access.

3.4 History of Fire in the County

The County has the most fire starts and the highest fire suppression costs in the state. According to the DNR, on average, 93 wildland fires ignite in the County each year. Table 0-7 summarizes DNR-classified, fire statistic data for the County (DNR 2004). The average annual DNR fire-fighting expense, including contract services, was over \$1.56 million over the past three decades. However, the expense for each of the past five years (1999-2003) was over \$3.24 million, more than any previous year. The highest expense, \$9.47 million, was in 2000. The most recent years for devastating fires within the County are 1970, 1979, 1985, 1994, 2000, and 2001. Figure 3-11 depicts the locations of fires and acres burned over the past 10 years. The heaviest concentration of fires has been along the State Route 155 corridor from Omak to Nespelem to Elmer City in the southeast portion of the County. The largest recent forest fires have been the Farewell, Thirtymile, Thunder Mountain, and Needles fires in the Okanogan National Forest. The largest mixed grassland and forest fires have been Virginia Lake and St Mary's Mission fires in the southeast portion of the County.



Table 0-7. DNR County Fire Statistics from 1970-2003

Years	County		
	Average Starts per Year	Average Acres per Year	Average Fire Fighting Expenses per Year (est. in 2003 dollars)
1970 - 1979	70	6,185	\$ 800,000
1980 - 1989	56	3,910	\$1,209,688
1990 - 1999	59	2,554	\$ 872,153
2000 - 2003	73	6,269	\$6,105,828
Total	2,149	151,580	\$53,241,729

3.5 Fire Protection and Response Responsibility

Response Providers⁷

Fire response within the County is divided among a number of agencies, including local fire protection districts, USFS, DNR, and BIA. Fire protection districts are chartered under RCW 52 with taxing authority and elected commissions; they have sole responsibility for responding to fires within their jurisdictions. Each district’s jurisdiction is entirely on private land, though it may provide support on public lands with a Suppression Agreement. Figure 3-9 displays the County’s 14 fire districts.

A fire protection district may call for mutual aid or State mobilization and thus invite other fire entities into its protection area. The County Fire Chief’s Association provides a Mutual Aid Agreement among all fire protection districts, allowing a host district to request assistance from another district. Districts only have legal authority to call for mutual aid within their fire protection boundaries. The help given is at the discretion of the district responding to the request. There is no cost for this assistance.

DNR is responsible for fire suppression in two cases:

DNR has sole jurisdiction over the state-owned lands it manages, but may bring in other agencies to assist with fires

⁷ A portion of this text was included in an email from J. Foster Fanning, fire Chief, FPD #14.



DNR will suppress fires on private lands that pay forest patrol assessments to DNR but do not pay fire protection districts; however DNR will not respond to structure fires on these properties.

Joint jurisdiction over private lands occurs when fire protection districts and DNR both collect taxes for fire protection coverage on those lands. In this case, the District is concerned primarily with structural protection, while DNR focuses on wildland fire protection. Joint jurisdiction is frequent in the County.

Additionally, DNR has Fire Suppression Agreements with most of the fire protection districts in the County. These agreements allow Districts to either assist with or be first responders to fires under joint jurisdiction or on State lands. Once a certain stage of containment is achieved on wildland fires during fire season, DNR usually will assume command and mop-up the fire.

Reciprocal Agreements exists between DNR and USFS for a specified distance into each other's protection area adjacent to the dividing boundary. This type of agreement has a specific timeframe, no fees to either party, and is designed to allow for the 'closest forces' to take quick action.

USFS is responsible for suppressing fires on its land and may use a number of interagency agreements to assist in this effort. Other federal agencies responsible for fighting fires include BIA, which covers the Reservation, and the Bureau of Land Management (BLM). Figure 3-13 shows the federal and state lands protected by various entities.

A large portion of private land, over 490,000 acres, remains within the County that is not protected by these entities. As shown in Figure 3-13, this acreage is throughout the County; the largest portions are west of Malott, east and west of Riverside, east and west of Tonasket, and in the Highlands. When fire breaks out in these areas response will depend on the severity and type of fire. Structure fires may result in a response from a local fire protection district. Woodland fires will only see a response, if land controlled by federal or state agencies is threatened.

Multi-Agency Approach

Fire suppression often may become a multi-agency effort. This is accomplished through a number of ways. A Suppression Contract may be used between fire agencies, allowing one agency to take over suppression duties for another agency. DNR and USFS have used this type of contract in the past.

A fire protection district encountering a very difficult fire within its jurisdiction can call for additional firefighting resources after exhausting all other efforts of securing aid. In this case, called State Mobilization, state emergency services will pay the suppression costs of outside responding agencies.



A Multi-Agency Coordination (MAC) group, part of the National Incident Management System, is a coalition of agency representatives that provides jurisdictional, functional, or significant support to incidents. Members are fully authorized to commit agency funds and resources to the incident. The purpose of a MAC group is to provide a forum for County agencies to meet and provide guidance and assistance to the Incident Management Team. A MAC group is activated when multiple or complex single incidents involve many agencies. It also can be activated if there is competition for resources or if and when the Board of County Commissioners thinks it is necessary. A MAC group sets incident priorities, authorizes allocations of resources, provides a focal point for the overall situation, and provides a political interface. Additionally, the MAC group can monitor implementation, conduct future planning, and coordinate information releases to the public and other entities.

Current Countywide Planning Efforts

Through coordination and collaboration among federal, state, county, local governments and citizenry, a grant application has been submitted to design a fire plan with a 10-year vision. The Methow Local Coordinating Group (LCG) in conjunction with the Highlands Fire Defense LCG is collaborating with the County Fire Chief's Association, County Emergency Management, local jurisdictions, and citizens of the County to prepare a plan to address community fire risk and emergency operations with mitigation processes. The purpose is to increase public and firefighter safety and reduce wildland fire costs and losses. This plan will determine needs and priorities for fuels treatments, fire training, community education, communication and equipment needs, mutual aid agreements, transportation plans, pre-attack mapping, and evacuation procedures.

Through the collaborative efforts of entities comprising the Methow LCG, Highlands Fire Defense LCG, local governmental agencies and citizens, individuals are working together to solve problems, establish priorities, and work through issues. The Highlands Fire Defense LCG is made up of County fire protection districts, local agencies, DNR, USFWS, Colville BIA, Spokane/Wenatchee BLM, County Emergency Management, and members from the/Wenatchee, Colville National Forests and the community. The Highlands is a sub-geographic region spanning 1.6 million acres of multiple jurisdictions south of the Canadian border, north of the Reservation, from the Kettle Range Mountains on the east to the Cascades on the west.

In addition to improved fire protection and emergency response, community benefits include a leadership role for local fire districts in plan design and implementation. This planning process also will lead to a greater understanding of the fire risks in this area by all partners and the public. The County will make direct, countywide efforts to help participants realize the benefits of investing in projects to reduce fire risk and ensure adequate protection as a community. This plan will improve interagency and private landowner coordination,



preparedness, and planning as well as safe and efficient suppression and prescribed fire operations. This, in turn, will better ensure public and firefighter safety, and reduce fire costs, losses and damages.

3.6 Wildland Urban Interface

The definition of the WUI zone is important, because it defines the area for which development guidance is provided or federal funds are applied to reduce the risk of fire. The following section describes a number of WUI definitions and development guidance found in existing literature on the subject. Finally, a definition is proposed for the County that could be tailored to each planning area.

Federal Definition

The federal definition of WUI includes communities where the risk from wildland fire is high and where people and communities "meet or intermix" with wildland fuels. Ideally, local WUIs are adopted in collaboratively developed, locally adopted Community Wildfire Protection Plans (CWPPs), authorized under the Healthy Forests Restoration Act of 2003 (HFRA). In the absence of a CWPP, the following definition provided in HFRA (or any subsequent controlling legislation) applies:

an area extending ½ mile from the boundary of an at-risk community;

an area within 1 ½ miles of the boundary of an at-risk community, including any land that has a sustained steep slope that creates the potential for wildfire behavior endangering the at-risk community;

has a geographic feature that aids in creating an effective fire break, such as a road or ridge top; or

is in condition class 3, as documented by the Secretary [of Agriculture] in the project-specific environmental analysis;

an area that is adjacent to an evacuation route for an at-risk community that the Secretary determines, in cooperation with the at-risk community, requires hazardous fuels reduction to provide safer evacuation from the at-risk community.

Other Communities Definition

A review of current literature found the following definitions and specific guidance on development within a wildland interface zone:



NFPA 299, *Standards for Protection of Life and Property from Wildfire* (1991 edition)⁸

WUI – an area where development and wildland fuels meet at a well-defined boundary. Wildland/Urban Intermix – an area where development and wildland fuels meet with no clearly defined boundary.

Bureau of Land Management⁹

WUI – the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels (Glossary of Wildland Fire Terminology, 1996). Each state may apply a more geographically specific definition of what constitutes WUI to account for differences in fire regimes, condition classes, and local environmental and social factors.

Clark County, WA¹⁰

WUI – those areas at elevation above 500 feet, with either slope greater than 25%, forest type vegetation, or outside an organized fire district. Also includes some areas of particularly rough terrain below 500 feet elevation.

Skagit County, WA¹¹

Section 14.04.190 of the County Zoning Code specifies that building permits for residential and commercial structures may not be issued outside of rural fire protection district boundaries, except under certain circumstances. This ordinance effectively controls urban growth and provides for vegetation management when building does occur.

Douglas County, CO¹²

Section 1702.23 of the Wildfire Hazard-Overlay District defines Wildfire Hazard as the condition of the natural and built environment creating a wildfire opportunity that is so adverse

⁸ http://firewise.org/pubs/everyones_resp/interface_intermix.html

⁹ EMS Transmission 3/12/03, Instruction Memorandum No. OF&A 2003-021. United States Department of the Interior, Bureau of Land Management, Office of Fire and Aviation, Boise, ID. March 11, 2003.

¹⁰ Wildland Urban Interface/Intermix Ordinance, Clark County, WA

¹¹ Zoning Ordinance and Growth Policy, Skagit County, WA.

¹² Zoning Ordinance for Wildfire Hazard Overlay District, Douglas County, CO.



to past, current, or foreseeable construction or land use as to constitute a significant hazard to public health, safety, or property. The term incorporates the combined effects of slope, aspect, wildfire behavior, and existing vegetation; and may also incorporate additional factors such as evacuation conditions, history of fire occurrence, and local emergency service availability.

University of Wisconsin – Madison¹³

Research at the University of Wisconsin suggested a WUI is composed of both interface and intermix communities. In both interface and intermix communities, housing must meet or exceed a minimum density of one structure per 40 acres. Interface communities are areas with housing in the vicinity of contiguous vegetation. Interface areas have more than one house per 40 acres, have less than 50% vegetation, and are within 1.5 miles of an area over 1,325 acres that is more than 75% vegetated. Intermix communities are places where housing and vegetation intermingle. In intermix, wildland vegetation is continuous, more than 50% vegetation, in areas with more than one house per 40 acres.

National Fire Protection Association¹⁴

A set of conditions including weather, humidity, type of vegetation, building construction, road construction, lot size, topography, and other factors that simply make some communities more vulnerable to wildfire than others.

Three major factors that will propagate the pressures of the interface on communities:

Growth of communities into previously forested areas

Unusually severe weather events (prolonged drought, severe heating periods, floods)

Inadequate infrastructure due to the rapidity of growth or aging

A combined approach that involves planning, ordinances, and permitting with a consolidated suppression action is the best approach to managing the hazards that exist in this ecosystem.

USDA Forest Service¹⁵

¹³ SILVIS Lab, Spatial analysis for conservation and sustainability, Forest Ecology & Management, University of Wisconsin – Madison. <http://silvis.forest.wisc.edu/Library/WUIDefinitions2.asp>

¹⁴ “Homes Don’t Have to Burn – Getting Firewise in Your Community.” *Reducing the Community Risk of Wildland-Urban Interface Fires – A Public Entity Risk Institute Symposium*. Jim Smalley, Manager, National Firewise Program, National Fire Protection Association (NFPA), Quincy, MA.



“Home Ignition Zone” – a home (including its exterior materials and design) and the immediate areas around a home within 100 feet. A home’s location does not necessarily determine its vulnerability to wildland fire; the condition of a home’s ignition zone determines its vulnerability.

Oregon Forestland-Urban Interface Fire Protection Act¹⁶

Each County determines the WUI lands in its jurisdiction by means of a County forestland-urban interface classification committee. The committee establishes preliminary WUI areas and public hearings are held to provide the public the opportunity to object, complain, or submit suggestions. The committee may revise the preliminary classifications, hold additional hearings, and make final determinations. Any owner who disagrees with a determination may file an appeal with the County’s circuit court.

Illinois Valley (OR) Fire Plan¹⁷

The WUI was defined using USDA guidelines as Census blocks with population densities of at least 28 people per square mile. The WUI was buffered by 2 kilometers to form another fire management zone. Because roads are key in providing access as well as being possible ignition sources, roads were also buffered by 100 meters outside the WUI to generate another fire management zone.

Federal Register¹⁸

The definition of urban wildland interface is modified from “A Report to the Council of Western State Foresters – Fire in the West – the Wildland /Urban Interface Fire Problem”, dated September 18, 2000. Under this definition, “the urban wildland interface community exists where humans and their development meet or intermix with wildland fuel.” There are three categories of communities that meet this description:

Interface Community – where structures directly abut wildland fuels

¹⁵ “Thoughts on the Wildland-Urban Interface Fire Problem.” June 2003. *Forest Fire in the Northern Rockies U.S. – Written and Oral History*. Jack Cohen, Research Physical Scientist, USDA Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, Missoula, MT.

¹⁶ The Oregon Forestland-Urban Interface Fire Protection Act of 1997. Oregon Administrative Rules 629-044-1000.

¹⁷ Illinois Valley Fire Plan, Cave Junction, OR. Public Draft, November 15, 2004.

¹⁸ Federal Register, Vol. 66, No. 3. Thursday, January 4, 2001. Notices.



Intermix Community – where structures are scattered throughout a wildland area

Occluded Community – where structures about an island of wildland fuels (e.g., park or open space)

Generally, the federal agencies will focus on communities that are described under categories 1 and 2. For purposes of applying these categories and the subsequent criteria for evaluating risk to individual communities, a structure is understood to be either a residence or a business facility, including federal, state, and local government facilities. Structures do not include small improvements such as fences and wildlife watering devices.

Communities within the County listed in this Federal Register notice include:

Brewster	Mazama	Omak Urban
Cameron Lake	Methow	Oroville
Carlton	Nespelem	Pateros
Desautel	Okanogan	Riverside
Highway 97 Corridor	Omak	Tonasket
Loomis	Omak Rural	Twisp
Twin Lakes	Wauconda	Winthrop

Yakima County, WA¹⁹

Yakima County adopted the International Urban-Wildland Interface Code (IUWIC) with minor modifications. The county’s ordinance prescribes regulations mitigating the hazard to life and property from intrusion of fire from wildland fire exposures, fire exposures from adjacent structures, and prevention of structure fires from spreading to wildland fuels. Specific boundaries of natural or man-made features of urban-wildland interface areas are shown on the county’s urban-wildland interface map. These areas include all areas of Yakima County as identified by risk factor classification*:

Non-rated – slope less than 8%, within 1 mile of a county road, inside a fire district

Moderate hazard – slope greater than 8%, within 1 mile of a county road, inside a fire district

High hazard – slope greater than 8%, more than 1 mile from a county road, inside a fire district

Extreme hazard – slope greater than 8%, more than 1 mile from a county road, outside a fire district

¹⁹ Yakima County Ordinance [4-2001] Urban-Wildland Interface Code



Risk factor classifications are not absolute.

Kittitas County, WA²⁰

A major component of a community wildfire protection program is creation of defensible space, which allows fire protection agencies to have a realistic chance to effectively protect lives and property when wildland fires threaten. DNR received a \$340,000 USFS grant to create a defensible space demonstration project in upper Kittitas County. The FireWise Kittitas County Project had three elements:

Create a 150- to 200-foot wide shaded fuel break around the towns of Ronald and Roslyn and along the Highway 903 corridor that connects them.

Improve defensible space around the community school complex.

Create defensible space prescriptions for individual home sites and complete the prescribed work using hired crews.

Creating defensible space around individual homes and communities is an effective use of fire protection funds, a visible and action-oriented activity for fire professionals, understandable by homeowners, and cheaper than fire suppression. The FireWise Kittitas County project has begun to change homeowners' mindsets about their responsibility to protect their property and to educate them about what can be done. Demonstration sites now exist and interest in creating defensible space is high.

Okanogan County Definition

The classic definition of the WUI is the boundary where a fire moves from a wildland environment, consuming vegetation for fuel, to an environment where structures and buildings are fueling the fire. Typical areas include:

Classic interface where city boundaries and suburbs meet wildland vegetation;

Mixed interface where homes and other structures are intermixed with wildland vegetation similar to the conifer forest growing throughout mountain communities; or

Occluded interface where islands of wildland vegetation occur inside a metropolitan area.

The preceding discussion in Sections 3 through 6 describes communities and residential development throughout the County at risk. Even incorporated areas of the County are adjacent to forest and grassland. These areas are subject to lightning strikes and have experienced wildland fires. The topography, type of vegetation, or location within the County

²⁰ FireWise Kittitas County, Final Report. George Flanigan and Matt Eberlein, October 31, 2001.

<http://www.ecosystem.org/fire/RoslynFinalReport.htm>



has had little bearing on the risk of wildland fires. The establishment of a broad definition of the WUI will allow Subarea Plans to be more definitive in tailoring the WUI definition to their needs and priorities. For the purposes of this plan the following definition is adopted:

The wildland urban interface in Okanogan County is defined as those lands lying within the County not in federal or state management or not located within the Colville Indian Reservation.

The inclusion of the Colville Indian Reservation, state or federal lands was considered because the same wildland fire hazards exist on these lands as the County. With regards to the Reservation urban growth area boundaries encompass portions of the Reservation, and fire protection districts that are outside the Reservation provide services to the Reservation. However, because the County has no jurisdiction on these lands, this plan proposes continued coordination with representatives of Reservation and other federal and state lands during the development of local fire protection plans and completion of the Comprehensive Plan.

Incorporated areas within the County were included in the WUI for one or more of the following reasons: DNR has identified them as communities at risk, their boundaries abut wildland, need to continue planning discussions within urban growth areas, and because municipal fire departments are responsible for providing fire protection in these areas.

3.7 Next Steps

As the County considers specific fire suppression actions, several items in the Federal Code should be considered. The following are examples of regulations, which have been used by neighboring areas for fire prevention. The intent of development/construction-type regulations is to prevent the home or other personal assets from being destroyed by wildland fires.

Access

New subdivisions and individual structures shall be provided with fire apparatus access. Existing structures, roads, and fire equipment shall be adequately marked.

Topics to be addressed: Access roads, driveways, marking of roads, marking of fire protection equipment, address markers.

Water Supply

New subdivisions and individual structures shall be provided with water access components. Existing structures, roads, fire equipment and water sources shall be adequately marked.



Topics to be addressed: Distance and volume of water sources, draft sites at natural water sources, hydrant design and construction, adequacy of water supply in relation to dwelling/building size, obstruction of water sources, identification of water sources and related access and equipment, testing of sources and equipment, clearance of fuel around water supplies, standby power supply for water supply facilities.

Fire Hazard Severity

The fire hazard severity of building sites (for construction, modification, or relocation) must be established (see Table 502, Pg. 13, IUWIC).

Ignition-Resistant Construction

New buildings and structures should meet construction requirements based on their ignition-resistant classification (see Table 503.1, Pg. 13, IUWIC).

Topics to be addressed: Roof covering, protection of eaves and soffets, gutter and downspout materials, exterior wall materials, under floor protection, materials of accessory structures attached to buildings (e.g. decks), exterior glass window and door glazing, exterior door materials, location and design of vents, materials of detached accessory structures.

Replacement or Repair of Roof Coverings

Replacement of roof covering of existing buildings shall meet ignition-resistant construction specifications.

Fire Protection Requirements

Create defensible space, which reduces fuel load in areas adjacent to structures by treating or clearing material to slow rate and intensity of wildfire.

Topics to be addressed: Distance of fuel modification from structures, responsible parties, ornamental vegetation, trees.

Maintenance of Defensible Space

Existing defensible spaces shall be maintained.

Topics to be addressed: Clearing vegetation around buildings or structures, responsible parties, trees, deadwood and litter.

Spark Arresters

Chimneys shall have spark arrestors.



Topics to be addressed: Construction, dimensions, and materials of spark arrestors.

Liquefied Petroleum Gas Installations

Liquefied petroleum gas containers shall be located within the defensible space.

Storage of Firewood and Combustible Materials

Topics to be addressed: Storage locations of firewood and combustible materials.

Vegetation Control

Topics to be addressed: Clearance of vegetation from roadways and electrical transmission and distribution lines.

Access Restrictions

Topics to be addressed: Restriction of access or closure of public lands and private lands, use of fire roads and defensible space, use of various types of vehicles within the WUI, tampering with markers within the WUI.

Ignition Source Control

Topics addressed: Clearance between ignition sources and combustible materials, fireworks, outdoor fires, use or installation of devices generating heat/sparks/flame, location of vegetation in relation to electrical lines.

Control of Storage

Topics to be addressed: Hazardous materials, explosives, piles of combustible materials, separation of combustible materials

Dumping

Topics to be addressed: Waste materials and ashes and coals.

Protection of Pumps and Water Storage Facilities

Topics to be addressed: Defensible space, trees, protection of electrical power supplies.

Land Use Limitations

Topics to be addressed: Permits and access for temporary events.

Vegetation Management Plan



Buildings or structures should create a vegetation management plan for use in controlling, changing, or modifying wildland areas beyond defensible space perimeters.

Self-Defense Mechanism

Outline alternative concepts, including: exterior sprinkler systems, alternative water supply systems for exposure protection, Class A foam systems, enhanced exterior fire protection, “Shelter in Place”, and building locations.



Reserved: Chapter 4: Housing

Reserved: Chapter 5: Transportation

Reserved: Chapter 6: Capital Facilities & Utilities

Reserved: Chapter 7: Economic Development

Reserved: Chapter 8: Planning Area Plans

Reserved: Chapter 9: Sub Area Plans



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APPENDICES



Appendix A

Streams and Rivers in Okanogan County Constituting Shorelines of the State (WAC 173-18-280)

Streams and rivers in Okanogan County constituting Shorelines of the State (WAC 173-18-280)

Stream Name	Legal Description
Beaver Creek	From the confluence of Beaver Creek and unnamed creek (NE1/4 of NE1/4 Sec.26, T34N, R22E) downstream to mouth at Methow River (Sec.27, T33N, R22E).
Bonaparte Creek	From the confluence of Bonaparte Creek and Bannon Creek (Sec.32, T37N, R28E) downstream to mouth on Okanogan River near Tonasket (Sec.16, T37N, R27E).
Chewack *River	From the Okanogan National Forest boundary (Sec.2, T35N, R21E) downstream to mouth at Methow River (Sec.2, T34N, R21E). The flow exceeds 200 cfs MAF at Okanogan N.F. boundary.
Columbia River (Cont.)*	From the intersection of the Okanogan County line and the Reservation boundary (Sec.18, T30N, R25E) downstream right bank only to Chelan County line (Sec.31, T29N, R24E). The flow exceeds 200 cfs MAF at the Reservation boundary.
Early Winters Creek	From the Okanogan National Forest boundary line (Sec.23, T29N, R19E) downstream to mouth at Methow River (Sec.27, same township).
Gold Creek	From the confluence of Gold Creek and South Fork Gold Creek (Sec.17, T31N, R22E) downstream to mouth at Methow River (Sec.16, same township).
Methow River*	From the Okanogan National Forest boundary (Sec.6, T36N, R19E) downstream to mouth at the Columbia River (Sec.36, T30N, R23E) excluding all federal lands. The stream flow is 200 cfs MAF at confluence of Methow River and Lost River (Sec.5, T37N, R19E).
Myers Creek	From the confluence of Myers Creek and Mary Ann Creek (Sec.28, T40N, R30E) downstream to the Canadian Border (Sec.3, same township).
Okanogan River*	From the United States-Canadian Border crossing Osoyoos Lake (Sec.4&5, T40N, R27E) downstream on both shores to Reservation (Sec.6, T34N, R27E) the west shore only to mouth at Columbia River (Sec.18, T30N, R25E), excluding all federal lands. This stream has over 200 cfs MAF and over 300 sq. miles of drainage area at United States-Canadian Border.
Sanpoil River (W. Fk.)	From the confluence of West Fork Sanpoil River and Frosty Creek (Sec.12, T35N, R30E) to the Okanogan National Forest boundary (Sec.22, T35N, R31E).
Similkameen River*	From the Canadian Border (Sec.4, T40N, R25E) downstream to mouth at Okanogan River (Sec.9, T39N, R27E) excluding all federal lands. This stream has over 200 cfs MAF and over 300 sq. miles of drainage at Canadian Border.
Sinlahekin River (Creek)	From the confluence on the Sarsapkin Creek and Sinlahekin Creek (Sec.10, T37N, R25E) downstream to mouth at Palmer Lake (Sec.13, T39N, R25E).
Toats Coulee Creek	From the confluence of South and Middle Fork Toats Coulee Creek (Sec.35, T39N, R24E) downstream to mouth at Sinlahekin Creek (Sec.35, T39N, R25E).
Toroda Creek	From the confluence of Beaver Creek and Toroda Creek (Sec.22, T39N, R31E) downstream to the Ferry County line (Sec.25, T40N, R31E) excluding federal lands.

Stream Name	Legal Description
Twisp River*	From the Okanogan National Forest boundary (Sec.10, T33N, R21E) downstream to mouth at Methow River (Sec.8, T33N, R22E). The flow exceeds 200 cfs MAF at Okanogan N.F. boundary.
Wolf Creek	From the Okanogan National Forest boundary (Sec.6, T34N, R21E) downstream to mouth at Methow River (Sec.32, T35N, R21E).

Lakes in Okanogan County Classified as Shorelines of the State (WAC 173-20-500)

Name	Area (Acres)	Use
Alta Lake	187.4	Recreation-wildlife, general public use, beatification, fishing, etc.
Rat Lake	62.7	Recreation-wildlife, general public use, beatification, fishing, etc. Public supply, municipal use, civic, industrial use, etc.
Leader Lake (Res.)	159.0	Recreation-wildlife, general public use, beatification, fishing, etc.
Patterson Lake (Res.)	142.9	Recreation-wildlife, general public use, beatification, fishing, etc., Irrigation
Twin Lakes. (Little)	23.8	Recreation-wildlife, general public use, beatification, fishing, etc.
Twin Lakes. (Big)	77.4	Recreation-wildlife, general public use, beatification, fishing, etc.
Moccasin Lake	33.1	Recreation-wildlife, general public use, beatification, fishing, etc.
Davis Lake	39.3	Recreation-wildlife, general public use, beatification, fishing, etc.
Green Lake	44.8	Recreation-wildlife, general public use, beatification, fishing, etc.
Brown Lake	61.4	Recreation-wildlife, general public use, beatification, fishing, etc.
Duck Lake	29.1	Recreation-wildlife, general public use, beatification, fishing, etc., Irrigation
Crawfish Lake	80.4	Recreation-wildlife, general public use, beatification, fishing, etc.
Pearygin Lake (Res.)	192.0	Recreation-wildlife, general public use, beatification, fishing, etc., Irrigation
Roberts Lake	29.8	Recreation-wildlife, general public use, beatification, fishing, etc.
Salmon Lake	313.0	Recreation-wildlife, general public use, beatification, fishing, etc., Irrigation
Conconully Res.	450.0	Recreation-wildlife, general public use, beatification, fishing, etc., Irrigation

Name	Area (Acres)	Use
Booher Lake	24.8	Recreation-wildlife, general public use, beatification, fishing, etc.
Medicine Lake	37.9	Recreation-wildlife, general public use, beatification, fishing, etc.
Peninsula Lake	23.4	Recreation-wildlife, general public use, beatification, fishing, etc.
Horseshoe Lake	28.7	Recreation-wildlife, general public use, beatification, fishing, etc.
Alkali Lake	46.1	Recreation-wildlife, general public use, beatification, fishing, etc.
Evans Lake	26.9	Recreation-wildlife, general public use, beatification, fishing, etc.
Fish Lake	102.3	Recreation-wildlife, general public use, beatification, fishing, etc.
Unnamed Lake (T36N- R27E Sec. 30-NW1/4)	22.7	Recreation-wildlife, general public use, beatification, fishing, etc.
Talkire Lake	26.9	Recreation-wildlife, general public use, beatification, fishing, etc.
Round Lake	20.3	Recreation-wildlife, general public use, beatification, fishing, etc.
"L" Lake	21.4	Recreation-wildlife, general public use, beatification, fishing, etc.
Forde Lake	23.9	Recreation-wildlife, general public use, beatification, fishing, etc.
Lemanasky Lake	20.1	Recreation-wildlife, general public use, beatification, fishing, etc.
Blue Lake (Res.)	186.0	Recreation-wildlife, general public use, beatification, fishing, etc.
Aeneas Lake	60.7	Recreation-wildlife, general public use, beatification, fishing, etc.
Lower Sinlahekin Impoundment	57.7	Recreation-wildlife, general public use, beatification, fishing, etc.
Spectacle Lake	314.8	Recreation-wildlife, general public use, beatification, fishing, etc., Irrigation
Whitestone Lake (Res.)	169.6	Recreation-wildlife, general public use, beatification, fishing, etc., Irrigation
Fanchers Dam Res.	20.0	Recreation-wildlife, general public use, beatification, fishing, etc., Domestic-private use, farm pond, fire protection, stock, garden, etc
Bonapart Lake	158.7	Recreation-wildlife, general public use, beatification, fishing, etc.
Walker Lake	43.5	Recreation-wildlife, general public use, beatification, fishing, etc.
Meadow Lake	23.7	Recreation-wildlife, general public use, beatification, fishing, etc.
Chopaka Lake	148.8	Recreation-wildlife, general public use, beatification, fishing, etc.

Name	Area (Acres)	Use
Wannacut Lake	411.6	Recreation-wildlife, general public use, beatification, fishing, etc.
Blue Lake	110.6	Recreation-wildlife, general public use, beatification, fishing, etc.
Horseshoe Lake	59.9	Recreation-wildlife, general public use, beatification, fishing, etc.
Unnamed Lake (T39N-R27E Sec. 27-G/K)	26.1	Recreation-wildlife, general public use, beatification, fishing, etc.
Muskrat Lake	89.6	Recreation-wildlife, general public use, beatification, fishing, etc.
Unnamed Lake (T40N-R25E Sec. 17 J/R)	23.4	Recreation-wildlife, general public use, beatification, fishing, etc.
Zosels Mill Pond	100.0	Recreation-wildlife, general public use, beatification, fishing, etc.
Sidley Lake	108.8	Recreation-wildlife, general public use, beatification, fishing, etc.
Molson Lake	20.3	Recreation-wildlife, general public use, beatification, fishing, etc.
Fields Lake	21.7	Recreation-wildlife, general public use, beatification, fishing, etc.
Lost Lake	46.8	Recreation-wildlife, general public use, beatification, fishing, etc.

Lakes of Statewide Significance located in Okanogan County (WAC 173-20-510)

Name	Area (acres)	Use
Wells Dam Reservoir	4,753 –Okanogan Co. 4,850 –Douglas Co. 97 --Chelan Co. 9,700 –Total	Recreation-wildlife, general public use, beautification, fishing, etc.,
Palmer Lake	2,063	Recreation-wildlife, general public use, beautification, fishing, etc., Irrigation
Osoyoos Lake	2,036 –Okanogan Co. 3,693 --British Columbia 5,729 –Total	Recreation-wildlife, general public use, beautification, fishing, etc.,

Notes: Acreage given includes only water surface acres and not contiguous wetlands.