

Preliminary Draft

LOWER LAKE CHELAN BASIN
REGIONAL STRATEGIC ACTION PLAN



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Prepared for Chelan County, Washington
In cooperation with the City of Chelan, Washington

And funded by
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of
Community, Trade and Economic Development



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1 PROJECT BACKGROUND

1.1 PROJECT PURPOSE

“The pressures of growth in the Lake Chelan Basin have created the need to address future growth from a regional and broad based perspective. The first step in guiding future growth and development in the region is to develop a common vision that ties together and builds on the diverse public viewpoints. This study seeks to develop a consensus of the community’s ideals, shared goals, and environmentally sustainable development regulations.”

Chelan County Web site

This project is a Chelan County (County) initiative, in cooperation with the City of Chelan (the City), and is funded by a grant from the Washington State Department of Community, Trade and Economic Development. The purpose is to produce a regional vision for the Lower Lake Chelan Basin (LLCB), including a conceptual land use plan and level of service analysis to create a long-range strategy for regional water and sewer infrastructure throughout the region. The project’s goal is the establishment of clear and objective methods for guiding future land development and establishing and managing regional infrastructure through development of a Regional Strategic Action Plan.

1.2 PROJECT BACKGROUND

The LLCB is located in Chelan County and includes the southern area of Lake Chelan and the surrounding mountains. The natural beauty of the lake supports a vital tourist industry; the geographic setting supports a long-time orchard and agricultural industry; and the surrounding mountains of the Wenatchee National Forest offer large areas of undeveloped, open space for recreational activities. With its geographic beauty, the recreational opportunities, and pleasant climate, the area is highly desirable for second and retirement homes. This demand for developable properties, especially those



Figure 1. Looking north across Lake Chelan to Rocky Point. Manson to the left, Chelan to the right.

with a view of the lake, has increased housing prices in the area so much that long-time residents are often priced out of the local housing market. Many residents fear that the rush to develop the land around the lake will spoil the visual quality, the sense of community, and pristine nature of the lake itself.

The rapid growth in the region puts pressure on the existing infrastructure and services around the lake. At present, there are several water systems and multiple sewer providers. The sewer systems operate and expand independently, but several send their waste to the City Waste Treatment Facility. County, city, and state services often operate independently as the area continues to grow. This project will provide a comprehensive review of the entire lower basin to understand the region's longer-term infrastructure requirements and to protect the regional environment.

Tourism is an important industry in the region, but it is seasonal in nature and presents additional complexity to the region's ability to manage growth. During the popular summer months, traffic and infrastructure demands are at their peak as the population in the region more than doubles in size. The region's growth-related needs are twofold: providing adequate infrastructure for the peak use and providing a consistent and stable year-round economy.

This project's required visioning process will provide a common framework by which the County, the City, and unincorporated Manson will manage future growth and development in the region. This study will incorporate and coordinate with the concurrent Transportation Improvement Plan update, the County land use update, the Watershed Plan, the ongoing Shoreline Master Plan (SMP), and community sub-area planning efforts.

The action plan will help guide public and private development in the area to accommodate the projected growth in a manner that enhances the community, supports a balanced economy, and preserves and protects the lakeside environment and visual character.

1.3 STUDY AREA AND FOCUS AREA

The LLCB is a 254-square-mile area bounded by the Columbia River, the Okanogan County line, and watershed boundaries of First Creek, Twenty-five Mile Creek, and the Manson Lakes. The lower basin is surrounded by mountains and drains into Lake Chelan, which is a deep glacial lake approximately 55 miles long with an average width of 1.5 miles. The lake height is controlled by a dam at the end of the lake in the City and is operated by the County Public Utility District (PUD) to produce electrical power. The lake then drains into the Columbia River.

Lake Chelan is in the center of the project boundary, and it is the lake, with its natural beauty and recreational potential, that attracts people to the region. The long, sunny days; the east Cascade climate; the gentle slopes surrounding the lake and along the Columbia River; and the availability of irrigation water make the area well-suited for orchards and vineyards.

The City of Chelan is located on the southeastern end of the lake and is the only incorporated city in the region. The city boundary wraps around the north and south shores of the lake. Although not an incorporated city, the Manson area is a community unto itself with a downtown core, urban densities and services, and an independent school system. Both Chelan and Manson historically are apple-growing areas. While agriculture continues to play a major role in the region's economy, tourism and recreation are increasingly important economic factors that are creating pressure to convert agricultural land to residential uses and generating rural sprawl.

Parts of the project area, like much of the County, are public lands managed by a variety of public agencies, including U.S. Forest Service, Bureau of Land Management, Washington State Parks, Department of Natural Resources, and the County. The remaining private lands are under the jurisdiction of either the County or the City.

Use of and access to the public lands is an important benefit to the region. The public lands offer a wide variety of recreational opportunities to tourists and residents alike.



Figure 2. Looking north over Manson orchards.

1.4 PROJECT PARTICIPANTS AND STAKEHOLDERS

The LLCB project is administered by the County and is cooperatively coordinated with the City. Stakeholders have participated to ensure a holistic regional approach. Participants included:

- City and County Planning staff
- County Commissioners
- City Council members
- Representatives from the City and County Planning Commissions
- Manson Community Council
- Howard Flats Community members
- Chelan Falls Community Council

- The U.S. Forest Service
- The Washington Department of Transportation (WSDOT)
- City and County Public Works officials
- Chelan County PUD
- Port of Chelan County Commissioners and staff
- Fire Safety officials
- Representatives from the Howard Flats community
- Business owners
- Property owners and the public
- Consultants working on the Watershed Plan, the Land Use Update, the Transportation System Plan, the SMP, and the Airport Master Plan

This project obtained data from a number of existing sources. The existing data were collected and analyzed by the consultant team. The following agencies supplied the data used in the site analysis:

- The County's GIS department provided mapping information for roads, parcels and property ownership, County and City zoning, urban growth area (UGA) and City limits, utility districts, sections and townships, land use, streams and water bodies, contours, and FEMA Flood Zones.
- The U.S. Forest Service, a major land manager, shared its GIS mapping for the national forest lands and roads.
- Natural Resources Conservation Service provided soils data.
- WSDOT provided highway data for SR150 and SR 97.
- U.S. Fish and Wildlife Service provided wetlands data.
- Sewer agencies and water districts provided their respective data.
- The Washington State Department of Health (WSDOH) office in Spokane provided small water system data.
- Transpogroup consultants provided data from their transportation system and needs assessments.
- Alliance Consulting Group provided land use data they had collected for their land use update work.
- Century West Engineers provided input about the Airport Master Plan.
- RH2 engineers provided input about the ongoing Watershed Plan process.
- Watershed Group provided SMP information.

1.5 PUBLIC INVOLVEMENT

The collected data were distilled and first presented to the public at an open house on June 24, 2008. Thirty-five citizens came to the meeting and shared their concerns and insights about the community's future both verbally and

through a survey distributed at the meeting and available on the County's Web site.

A second public meeting, where 25 people signed in, occurred on August 14, 2008. Four land use visions with supporting action items for the region were presented. The following morning, during the stakeholder meeting, public comments were used to develop a single Preliminary Action Plan.

After refinement, the Preliminary Regional Strategic Action and Vision plans were presented to the public on October 29, 2008.



Figure 3. June 24, 2008 public meeting.

1.6 GOALS

The following goals and guiding principles evolved from citizen and stakeholder input early in the study.

- Create an action plan that maintains the inherent qualities and beauty of the basin while accommodating the pressures for growth and a balanced economy.
- Develop strategies for intergovernmental policy and criteria recommendations.
- Determine the levels of infrastructure needed for future growth and determine the capital costs required for the appropriate improvements.
- Prepare development regulations that reflect and protect the area's vision.
- Ensure the safety of residents and the environmental quality of the lake by requiring adequate infrastructure development.
- Reconcile the needs of traditional rural agriculture with urbanization.
- The Action Plan will suggest specific actions that the County and City should take to forge a path toward their common vision.

These goals very closely parallel those developed earlier by the volunteer group, Valley Vision.

1.7 GUIDING PRINCIPLES

- The plan will be led by the County in cooperation with the City, the U.S. Forest Service, and community groups within the basin.
- The plan will examine historical and changing land use patterns and pressures.
- The plan will identify physical and regulatory development issues and growth trends.
- The plan will work to balance conflicting needs between and among agricultural, industrial, commercial, and residential development.
- The plan will strive to protect the environmental quality while accommodating additional growth.
- Stakeholders and the public will be asked to participate through interviews, focus group meetings, a written survey, and presentations.
- The plan will create a consistent framework among the areas' jurisdictions to implement a shared vision of future growth in the lower basin.
- The plan will propose strategies for intergovernmental agreements, partnerships, and policy recommendations.

The regional planning goals and principles reflect the values expressed by the Valley Vision group's *Vision Pillars*. They are included in Appendix A for reference.



Figure 4
Looking southeast over Lake Chelan from the Manson area.

2 EXISTING CONDITIONS ANALYSIS

2.1 GEOGRAPHY AND SLOPE

The LLCB project offers a wide variety of geographic settings. The basin is on the eastern edge of the Cascade Mountains and abuts the Columbia Basin, with the Columbia River as the defining edge. Much of the area has mountainous terrain, with steep slopes and high elevations consisting largely of rock outcroppings and shallow soils. The very steep slopes limit access throughout the area and make much of the area unsuitable for development.

Areas on the north side of the lake, between the City and unincorporated Manson and wrapping around the south shore, have gentle to moderate slopes leading to the water. The gentle sloping areas provide landscapes suitable for agriculture and residential development. There are a number of “flats” adjacent to the Columbia River, both close to and above the river elevation. Historically, the flats have been fruit tree orchards.

Exhibit 1 illustrates the slopes throughout the study basin. The red and orange areas indicate slopes greater than 30 percent. Most of the flatter slopes are found in the narrow valleys, around the lake and river and within the flats. As indicated on the map, much of the area has a steep terrain and nearly all existing development and agriculture has occurred on slopes less than 20 percent at below 2,000-foot elevation (City Comprehensive Plan).

2.2 SOILS

Soils data available from the County GIS database indicate general characterizations of soil suitability for agriculture, with and without irrigation. Volcanic pumice and ash have added substantially to the depth and character of the soil in many areas. **Exhibit 2** indicates the areas classified as prime agriculture soils on the County’s GIS database.

The information in this mapping is generalized and more detailed soils information should be used to characterize soils on individual lots. Agricultural Zoning based on the generalized soil classification may be incorrect.

2.3 PUBLIC AND PRIVATE LAND

Like the rest the County, a large percentage of the LLCB is publicly owned. Private land is concentrated around Lower Lake Chelan. **Exhibit 3** indicates the publicly owned lands with various tones of green and the privately owned lands in beige. Since the public lands have limited opportunities for development, most development occurs on the privately owned lands. Activities allowed on the national forest lands include hiking, off-road vehicle riding, camping, and traditional gathering and Christmas tree cutting.

Recreational resorts may be allowed by permit, but have very complicated and time-consuming requirements. Other owners of public lands are the County, the Chelan County PUD, the U.S. Bureau of Reclamation, the U.S. Bureau of Land Management, the State of Washington, local Tribes, and the Douglas County PUD.

It is the privately owned lands that are experiencing growth pressures, especially those that are within the lake's bowl and have a view of or easy access to the water.

2.4 TRANSPORTATION SYSTEM

Concurrently with this regional plan, the County is updating the Transportation Infrastructure Plan. The regional plan will incorporate into the body of its findings the transportation study recommendations. However, as part of the regional planning effort it is important that the existing transportation system is understood and considered as a factor that impacts how and where future growth will most readily occur. Vehicular access to Lake Chelan is provided by State roads 150 and 971, by US 97A through the Knapp Coulee, and regionally by US 97 from the north and south.

Both SR 150 and 97A go through the center of downtown Chelan, splitting at the intersection of Woodin Avenue and Sanders Street, where SR 150 travels on the north side of the lake toward Manson and 97A edges to the south shoreline until it turns south to cross over the mountain through Knapp Coulee. County roads, City streets, Forest Service roads, and private roads and driveways make up the remainder of the roadway system. The rugged landscape in much of the lower basin dictates the roadway locations in all but the flattest of areas.

Most of the roadways follow the natural passageways in the landscape. The roads are located in gulches; they traverse slopes or follow ridges and plateaus or benches. The existing federal, state, county, city, and Forest Service roads are shown on **Exhibit 4**.

Because of the difficult geography, there are few alternatives to get from place to place in the basin. SR 150 is the only road that connects Manson with the City and the rest of the region. It is a two-lane highway that becomes very congested during the peak summer season. The WSDOT Route Development Plan identifies both existing conditions and future needs and has identified a need for left-turn lanes or a center turn lane along almost the entire length of SR 150 between Manson and downtown Chelan to ease congestion. Other improvements call for wider shoulders in different locations along the roadway. Left-turn lanes are needed along sections of 97A along the south shore of the lake. Sidewalks and trails are identified as needs for both highways as well. **See Appendix B**.

WSDOT has authority over permits for access onto the state highways. They can request highway improvements from developments that have direct access to the highways, but not on developments that do not have direct access to

highways. WSDOT may make recommendations to the jurisdictions as part of the State Environmental Policy Act process that developments with roadway impacts provide a pro-rata share of development improvements to compensate for off-site development impact to the roadway. The jurisdiction must have a justifiable and quantifiable method for determining what would be a fair pro-rata share, similar to a transportation impact fee for development. The Transportation Improvement Plan for the County is addressing these types of funding processes.

2.5 PUBLIC UTILITIES

WATER—GENERAL

Currently, there are 74 active and 22 inactive water systems providing service to over 11,000 residents (full time and part time) in the study area. Inactive systems have several status indicators, such as “approved but not yet constructed.” See **Exhibit 5** for water system locations.

- There are 36 Group A water systems, i.e., water systems with 15 or more connections or defined as commercial (e.g., restaurants, wineries, ski areas, and orchards with housing). These systems are under the jurisdiction of Washington State Department of Health (WSDOH). Ten of these systems have Water System Plans (WSPs) on file at the WSDOH. The other 27 systems have no plans.
- There are 60 Group B water systems, i.e., water systems with 14 or fewer connections. Ten of these systems have 10 to 14 connections and are under the jurisdiction of WSDOH. Fifty of these systems have 9 or fewer connections and are under the jurisdiction of the Chelan-Douglas Health District. The existence of planning documents for these group B systems has not been verified.

There are two active water systems in the Lower Lake Chelan Basin—the **Lake Chelan Reclamation District (LCRD)** and the **City System**—that serve over 9,600 residents or about 87 percent of those served by active water systems. These two major systems have WSPs dated:

- Chelan Comprehensive Water System Plan 2002
- LCRD Water System Plan 2006

The City and LCRD systems’ source water is pumped from Lake Chelan. Eight hundred thirty-five million gallons of source water is produced annually or 2.3 million gallons per day.

The City and LCRD water rights are not currently being exceeded and are projected to remain in good standing through the year 2025.

The remaining 72 active water systems provide service to the remaining 1,400 residents. All remaining residents use wells.

Major existing facilities within the LLCB are summarized in Table 1.

TABLE 1—TOTAL OF EXISTING MAJOR FACILITIES				
PUMPS (FINISH)	BOOSTER PUMPS	PIPE (MILES)	TREATMENT PLANTS	STORAGE (MILLION GALLONS)
12	13	85.6	2	5.07
TOTAL OF MAJOR FACILITIES POPULATION / ERU'S / CONNECTIONS				
POPULATION (2007)	POPULATION (2021)	ERU'S (2007)	ERU'S (2021)	CONNECTIONS
11,036	16,600	5,845	9,201	3,969

WATER—LAKE CHELAN RECLAMATION DISTRICT

The LCRD facilities are summarized in Table 2.

TABLE 2—TOTAL OF MAJOR EXISTING FACILITIES—LAKE CHELAN RECLAMATION DISTRICT					
PUMPS (RAW)	PUMPS (FINISH)	BOOSTER PUMPS	PIPE (MILES)	TREATMENT PLANT	STORAGE (MILLION GALLONS)
5	2	5	51	1	2.3
POPULATION / ERU'S / CONNECTIONS					
POPULATION (2007)	POPULATION (2021)	ERU'S (2007)	ERU'S (2021)	CONNECTIONS	
6,484	9,627	2,155	3,344	1,558	

- The filtration treatment plant capacity is 6.70 million gallons per day.
- The current known cost of planned water system improvements for the next six years is \$2.2 million and an additional \$7.0 million for the next 20 years.

WATER—CITY OF CHELAN

The City facilities are summarized in Table 3.

TABLE 3—TOTAL OF EXISTING MAJOR FACILITIES—CITY OF CHELAN					
PUMPS (RAW)	PUMPS (FINISH)	BOOSTER PUMPS	PIPE (MILES)	TREATMENT PLANT	STORAGE (MILLION GALLONS)
3	10	8	30	1	2.5
POPULATION / ERU'S / CONNECTIONS					
POPULATION (2007)	POPULATION (2025)	ERU'S (2007)	ERU'S (2025)	CONNECTIONS	
4,172	6,547	3,529	5,664	2,259	

- The filtration treatment plant capacity is 6.24 million gallons per day with an average daily flow of 1 to 1.5 million gallons.
- The current cost of planned water system improvements for the next six years and 20 years is currently undocumented.

SEWER—GENERAL

There are three major service providers in the Lower Lake Chelan Basin:

- City (north-east shore)
- LCSD (south shore)
- LCRD (north shore)

Treatment:

- Sewage treatment for all three major systems is provided at the City Wastewater Treatment Plant.
- The plant currently treats an average of 282.6 million gallons of wastewater each year, averaging 0.77 million gallons per day. The treatment flow is expected to increase to 1.51 million gallons per day in 2025.
- The plant is currently operating under its permitted loadings, i.e., flow, biological oxygen demand (BOD), and total suspended solids (TSS). It is expected to exceed its permitted loadings for BOD and TSS before 2025.
- The Plant in its current figuration is forecast to exceed its design capacity in 2011
- The City has begun design of the planned Phase Two Upgrade and anticipates that construction will be complete well before the current configuration reaches maximum capacity (2011).
- With the construction of the Phase Two Upgrade there will be sufficient capacity to accommodate expected growth through 2027.

Planning:

The service providers' current planning status is as follows:

- Chelan General Sewer Plan (GSP) (draft) 2006
- Chelan Wastewater Treatment Facilities Engineering Report 2008
- LCRD Wastewater Facilities Plan 2002
- LCSD Wastewater Facilities Plan 1993 (currently being updated)

All remaining resident's use septic tanks and drain fields for wastewater disposal and treatment.

Please refer to **Exhibit 6** for sanitary sewer locations.

TABLE 4—TOTAL OF EXISTING FACILITIES				
COLLECTION PIPE (MILES)	FORCE MAIN (MILES)	LIFT STATIONS	GRINDERS	TREATMENT PLANT
38	18.6	21	1	1
TOTAL OF POPULATION / ERU'S				
POPULATION (2000)	POPULATION (2025)	ERU'S (2004)	ERU'S (2025)	
5,649	9,179	5,302	9,537	

The current planned cost of improvements for six years is \$11.9 million, and for 20 years is \$40.7 million.

SEWER—LAKE CHELAN RECLAMATION DISTRICT

The LCRD facilities are summarized in Table 5.

TABLE 5—LAKE CHELAN RECLAMATION DISTRICT EXISTING FACILITIES				
COLLECTION PIPE (MILES)	FORCE MAIN (MILES)	LIFT STATIONS	GRINDERS	TREATMENT PLANT
12	3.1	5	0	0
POPULATION / ERU'S				
POPULATION (2000)	POPULATION (2025)	ERU'S (2004)	ERU'S (2025)	
UNDOCUMENTED	UNDOCUMENTED	1,414	2,121	

The current planned cost of improvements for six years is undocumented, and is \$8.2 million for 20 years.

The LCRD pays for a pro-rata share of operations and maintenance costs for treatment as well as capital improvement costs to the City for the wastewater treatment facility.

SEWER—CITY OF CHELAN

The City facilities are summarized in Table 6.

TABLE 6—CITY OF CHELAN EXISTING FACILITIES				
COLLECTION PIPE (MILES)	FORCE MAIN (MILES)	LIFT STATIONS	GRINDERS	TREATMENT PLANT
26	10.5	11	1	1
POPULATION / ERU'S				
POPULATION (2000)	POPULATION (2025)	ERU'S (2004)	ERU'S (2025)	
4,030	6,705	3,197	6,429	

The current planned cost of improvements for six years is \$11.8 million, and is \$1.0 million for 20 years.

SEWER—LAKE CHELAN SEWER DISTRICT

The LCSD provides sanitary sewer service to the south shore residents in Lower Lake Chelan Basin. Their facilities are summarized in Table 7.

TABLE 7—LAKE CHELAN SEWER DISTRICT EXISTING FACILITIES				
COLLECTION PIPE (MILES)	FORCE MAIN (MILES)	LIFT STATIONS	GRINDERS	TREATMENT PLANT
UNKNOWN	5	5	0	0
POPULATION / ERU'S				
POPULATION (2000)	POPULATION (2025)	ERU'S (2004)	ERU'S (2025)	
1,619	2,474	691	987	

The current planned cost of improvements for six years is undocumented, and is \$31.4 million for 20 years.

GENERAL WATER AND SANITARY SEWER DATA:

- The County PUD has developed a satellite management program to assist utilities with their technical and administrative tasks and to minimize extended water outages and other issues associated with water and wastewater systems.

AREAS IN NEED OF SERVICE:

- Chelan Falls is without sanitary sewer.
- Howard Flats and the airport area need water and sanitary sewer.

2.6 BUILDABLE LANDS ANALYSIS

The Buildable Lands analysis combined specific slope criteria, existing state and county roads, and the privately owned lands to determine areas that will most likely be developed. **Exhibit 7** illustrates a 2,500-foot-wide corridor centered along existing roads. All privately owned lands are in yellow. Privately owned land areas where the slope is between 0 and 15 percent are shown as blue-green inside the corridors and green outside the corridors. Privately owned lands with slopes between 15 and 30 percent are shown as purple inside the corridors and mauve outside the corridors.

The blue-green areas shown on **Exhibit 7** indicate areas that most readily could be developed. Green areas adjacent to blue-green areas offer potential similar to that of the blue-green areas but are located away from the road corridors. They provide flat land areas where larger clusters of development can occur.

Properties with visual and physical access add a fourth criterion related to marketability. These properties are highly desirable “Buildable Lands.” Buildable Lands that are geographically removed from both the lake and the river and that do not offer a view to the water have reduced market appeal for residential development and are therefore less likely to be developed. The attraction of the water bodies drives the development pressure in the LLCB.

2.7 ENVIRONMENTAL CONSTRAINTS

Environmental constraints and developed land in the LLCB include wetlands, streams, steep slopes, wildlife habitat, and water quality in Lake Chelan. County and City critical-areas ordinances prescribe measures to protect these environmentally sensitive areas, including buffers and a process to minimize and mitigate impacts. Development on steep slopes is a concern in the LLCB both for the potential for erosion and landslide and for the aesthetic impacts on views. Lake Chelan is considered a pristine water body because of its low nutrient levels and high water clarity. Multiple efforts, including a total maximum daily load plan, a Watershed Plan, and the Lake Chelan Water Quality Board, have been established to maintain the high water quality of the lake. Specific areas with environmental problems are presented on **Exhibit 8**.

2.8 LAND USE AND REGULATORY CONTEXT

A large part of the study area consists of public land holdings. The largest areas of public lands are the Wenatchee National Forest, managed by the U.S. Forest Service, and the Chelan Butte Wildlife Area, managed by the Washington State Department of Fish and Wildlife. Additional public lands in the study area are owned and managed by the U.S. Bureau of Land Management, U.S. Bureau of Reclamation, Washington State Parks and Recreation Commission, Douglas County PUD, the County, and the County PUD. Private land ownership is concentrated around the edge of Lake Chelan, near the airport at Howard Flats, and in Chelan Falls.

The County and the City have regulatory authority over development of private land in their respective jurisdictions under the authority of the state Growth Management Act (GMA). The County has established countywide policies to coordinate planning and development regulations between cities and the County. The County and the City each have adopted comprehensive plans, zoning codes, and development regulations. The City regulates activity within the City limits. Through an intergovernmental agreement, the City does the planning within the City UGA and the County processes the applications. The County regulates the remainder of the nonpublic areas in the LLCB, including Manson, Chelan Falls, and Howard Flats. There are two established UGAs within the LLCB, one for the City of Chelan and one for the Manson area. Land use within 200 feet of shorelines, floodways, and contiguous floodplains is also regulated by the County and City Shore Line Master Plans.

2.9 CURRENT LAND USE DESIGNATIONS AND ZONING

The land use designations in the study area are established by the City and County Comprehensive Plans. Major land use considerations that were integrated in the Comprehensive Plans include:

- Urban development densities within the Urban Growth Area boundaries

- Efficient provision of public services
- Water quantity and water quality concerns
- Potential conflicts between land usage
- Rural development densities outside of urban growth area boundaries

The predominant land use designations in the study area are forestry, agriculture, rural residential, and urban residential (**Exhibit 8**). Forestry lands are located in hills to the west and northeast of Lake Chelan. Agricultural lands are located mainly along the foothills east of Lake Chelan and around the Howard Flats area. The zoning codes for commercial forestry and agricultural land uses both contain setback provisions for adjacent residential structures to minimize potential conflicts.

Residential land uses are divided into urban and rural zoning codes that create a spectrum of development densities. The rural residential zones range from one dwelling unit per 20 acres to one dwelling unit per 2.5 acres. Additionally, there are rural waterfront, rural village, and rural recreational / residential zones that allow development at densities greater than four dwelling units per acre in distinct areas. The urban residential zones allow for smaller lot sizes and higher density, including duplex and multifamily units.

The land use designations and zoning codes also designate areas for commercial and industrial development.

Table 8 summarizes the zoning designations in the City and the County, respectively. **Exhibit 9** maps the designated City and County zoning throughout the LLCB.



*Figure 5.
Looking
southeast
toward Manson
and Lake
Chelan.*

TABLE 8 - ZONING

	CHELAN COUNTY	CITY OF CHELAN
RESIDENTIAL	Rural Residential / Resource—1 Dwelling Unit Per 20 Acres	Single Family Residential
	Rural Residential / Resource—1 Dwelling Unit Per 10 Acres	Multi-Family Residential
	Rural Residential / Resource—1 Dwelling Unit Per 5 Acres	Planned Development District
	Rural Residential / Resource—1 Dwelling Unit Per 2.5 Acres	
	Rural Waterfront	
	Rural Recreational/Residential	
	Rural Village—Single Family	
	Rural Village—Duplex	
	Rural Village—Multifamily	
	Urban Waterfront Residential—Single Family	
	Urban Waterfront Residential—Duplex	
	Urban Waterfront Residential—Multifamily	
	Urban Residential 1	
	Urban Residential 2—Single Family	
	Urban Residential 2—Duplex	
	Urban Residential 2—Multifamily	
	Urban Residential 3	
	Urban Residential 3—Duplex	
	Urban Residential 3—Multifamily	
	Planned Unit Development Overlay District	
Master Planned Resort		
COMMERCIAL	Pedestrian-Oriented Commercial	Low Density Commercial District
	Tourist Commercial	High Density Commercial District
	General Commercial	Highway Service Commercial District
	Rural Commercial	Waterfront Commercial District
RESOURCE LANDS	Commercial Agricultural Lands	

	CHELAN COUNTY	CITY OF CHELAN
	Commercial Forestlands	
	Commercial Mineral Lands	
INDUSTRIAL	Industrial	Warehousing And Industrial District
	Rural Industrial	
PUBLIC LAND USE WITHIN A UGA		Urban public lands and facilities (UP)
OVERLAY ZONES		Special Use District
	Airport Overlay	
	Planned Unit Development Overlay	
	Fish And Wildlife Habitat Overlay	
	Wetlands Area Overlay	
	Aquifer Recharge Overlay	
	Frequently Flooded Areas Overlay	
	Geologically Hazardous Areas Overlay	

The County is currently in the process of reviewing its land use designations.

2.10 COMPREHENSIVE PLANS

CHELAN COUNTY COMPREHENSIVE PLAN:

The first GMA Comprehensive Plan was adopted in February 2000, and the zoning code was adopted in the fall of 2000. The County is now in the process of updating its land use inventory and is considering an update to its Comprehensive Plan. At present, the Comprehensive Plan’s land use designations are the same as the zoning designations. The suggested Comprehensive Plan changes would create generalized land use categories such as residential, commercial, industrial, agricultural, and resource land. Specific zoning classifications would be specified with the zoning map. Such a change would allow zone changes in a single Comprehensive Plan designation without a Comprehensive Plan amendment.

The County-wide Planning Policies that were adopted by the Board of County Commissioners set the direction for comprehensive planning on a regional level. Once these policies were adopted they became the basis of the Comprehensive Plans that were adopted by the County and the cities in the County. In addition to the County-Wide Planning Policies, the Washington State GMA, as a legislative policy, is expressed in 14 goals:

- Urban Growth—Encourage urban growth where facilities are adequate to meet service needs.
- Reduce Sprawl—Eliminate sprawling, low-density development that is expensive to deliver services to and that is destructive to critical areas, rural areas, and resource values.
- Transportation—Encourage efficient, multimodal transportation.
- Housing—Encourage a variety of affordable housing for all economic segments of the population.
- Economic Development—Encourage economic development consistent with resources and facilities throughout the state.
- Property Rights—Protect property from arbitrary decisions or discriminatory actions.
- Permits—Issue permits in a timely manner and administer them fairly.
- Natural Resource Industries—Maintain and enhance resource-based industries.
- Open Space and Recreation—Encourage retention of open space and recreational areas.
- Environment—Protect the environment and enhance the quality of life.
- Citizen Participation—Encourage citizen involvement in the planning process.
- Public Facilities and Services—Ensure that adequate public facilities and services are provided in a timely and affordable manner.
- Historic Preservation—Identify historic sites and encourage their preservation.
- Shoreline Management—The goals and policies of the SMP are added as one of the goals of the GMA.

The comprehensive plans are the starting point for any discussion of the local land use process and are at the heart of a redefined planning process under the GMA. All adopted development regulations and policies are required to be coordinated and consistent with the local comprehensive plans.

CITY OF CHELAN COMPREHENSIVE PLAN:

The City recently updated its Comprehensive Plan following GMA guidelines. Urban Growth goal is one of the 14 goals of the GMA. The intent of this goal is to reduce the demand for urban-level services outside of designated UGAs. The City's Urban Growth Area element in the Comprehensive Plan addresses many of the City's concerns about growth and infrastructure in the City and the surrounding region. Goal 1 and its policies are listed as follows:

Goal 1: Encourage Development in UGAs Where Adequate Public Facilities and Services Exist or Can Be Provided in an Efficient Manner.

Policy 1: Improvement standards for new developments proposed within the UGA should be developed by the City and implemented by the County (per

the memorandum of understanding for UGAs agreed upon by the County and the cities on July 8, 1997). Standards should address such improvements as street alignment and grade, public road access, right-of-way, street improvements (which may include street width, curbs, gutters, and sidewalks, trails or pathways, etc.), sanitary sewer, stormwater improvements, and park and recreation facilities.

Rationale: Development within UGAs has the potential to be included into the City and therefore should be improved to City standards.

Policy 2: Projects should be reviewed to ensure compatibility with the urban density of the comprehensive plan for the UGA.

Rationale: In order to implement the comprehensive plan, growth in UGAs should be consistent with densities established in the plan and with services for the area.

Policy 3: The timing of utility extensions into the UGAs shall be consistent with the adopted capital facilities plan of the utility purveyor.

Rationale: Public financing of capital facilities will not allow for unplanned growth. Coordination between developments and utility purveyors allowing a repayment plan for utility improvements with provisions for utility-assisted financing and latecomers' fees should be established. Development beyond planned utility extensions within the UGA can be permitted when financing can be obtained.

Policy 4: Encourage efficient public use of shoreline properties by techniques such as higher density zoning, use of off-site parking, integration with waterfront structures, flexibility and setbacks for publicly desired uses, and use of waterfront parcels for docks, swimming, and other water-related uses, when not in conflict with other private use of waterfront property, provided that the development is consistent with the SMP of the City.

Rationale: The amount of waterfront property suited for residential development is limited.

The presence of urban-level services will support higher densities, and development at such densities is encouraged in order to make efficient use of the urban services and shoreline.

Policy 5: Recognize that lands can continue to be used for agricultural purposes.

Rationale: Existing agricultural areas in the UGA should not be put out of business by encroachment from expanding urban uses.

Policy 6: Existing agricultural uses in the UGA are grandfathered uses that have the right to continue as long as the owner chooses to operate them.

Rationale: The agricultural use was established first and as long as it is economically viable it should be allowed to continue.

Policy 7: New nonfarm development adjacent to orchard in the Special Use District should provide buffering. New orchard next to an existing development in the Special Use District must obtain a conditional use permit and provide a buffer. Buffer options should include 25-foot setbacks with a

minimum 6-foot-high hedge, or 100-foot setbacks, including the use of right-of-ways.

Rationale: This ensures that existing orchard operations in the Special Use District are able to continue as long as they choose to, and that any new orchard operations in the Special Use District are not detrimental to urban development.

Policy 8: Notification should be placed on all plats or binding site plans that the adjacent land is an orchard operation subject to a variety of activities that may not be compatible with residential development. The notice should state that the agriculture-related activities performed in accordance with city, county, state, and federal laws shall not be subject to legal action as public nuisances.

Rationale: Such notification will allow potential purchasers to make educated real estate purchase decisions.

Policy 9: Allow extension of urban services from the City to the UGA, where compatible with the comprehensive plan, upon an annexation request.

Rationale: Extension of urban services consistent with the plan will promote orderly development of the planning area.

This goal and set of policies expresses Chelan’s need for appropriate infrastructure growth and responsible shoreline development, and addresses the right to farm interests in the community.

MANSON’S SUB-AREA GOAL AND POLICIES:

Manson developed a set of goals and policies that supplement the County Comprehensive Plan as part of its community sub-area planning effort. Manson’s goals and policies were developed to help guide the community and the County to meet the specific community needs. The goals and policies are as follows:

LAND USE

Goal LU-1: Achieve an efficient use of land in and around Manson, reducing pressure to expand into the agricultural countryside and optimizing the provision of services.

- Policy LU-1.A. Work with the County to establish a UGA buffer between Manson and Chelan to help keep each community visually and territorially distinct.
- LU-1.B. Implement a program to facilitate long-term open space/agricultural preservation while still providing adequate flexibility for owners of agricultural land to adapt to changing conditions.
- This program could include clustering, transfer of development rights, or similar strategies.
- LU-1.C. Establish incentives to promote infill development within the existing UGA before expanding outside the UGA.

- LU-1.D. Actively participate in the County’s comprehensive plan review processes to ensure that the UGA is sized appropriately.
- LU-1.E. Ensure that any development in the UGA is fully served by water, wastewater, and other necessary public services.

Goal LU-2: Provide for a vital commercial downtown in Manson.

- Policy LU-2.A. Establish mixed uses in the town center, promoting housing-type variety, small business, and economic development.
- LU-2.B. Create zoning designations for the town center that reinforce its identity as the “village by the lake.”
- LU-2.C. Consider strategies to revitalize the town center and reinforce its position as the regional center for services and social/cultural activities.
- LU-2.D. Regulate building height and bulk to permit viable residential use above ground-floor retail while still preserving views from the hillsides above the commercial districts.
- LU-2.E. Encourage public access to the shoreline in the town center.

Goal LU-3: Create enjoyable and safe neighborhoods that support a variety of housing types and income levels.

- Policy LU-3.A. Orient new housing to enhance street frontages and to be compatible with its surroundings.
- LU-3.B. Encourage a variety of housing types within residential zoning districts.

Goal LU-4: Retain an agricultural presence in Manson, helping it evolve to meet changing market, social, and environmental conditions.

- Policy LU-4.A. Protect agricultural land of long-term significance from conversion or encroachment, considering conversion requests only as part of a larger comprehensive plan review.

Goal LU-5: Provide adequate land dedicated to employment and production of goods.

- Policy LU-5.A. Zone land for light industrial use where appropriate and where impacts to surrounding properties can be avoided, managed, or mitigated.

Goal LU-6: Allow adequate space for necessary community facilities, such as schools, parks, houses of worship, and civic facilities.

- Policy LU-6.A. Allow conditional use of community facilities in all zoning districts, providing that impacts to their surroundings can be avoided, managed or mitigated.

Goal LU-7: Integrate open spaces throughout Manson to help retain the community’s rural character.

- Policy LU-7.A. Limit and carefully review development on slopes exceeding 20 percent in the study area.
- LU-7.B. In the case of clusters, ensure that remaining open spaces are arranged in a manner that protects agricultural, habitat, and/or recreational functions.

Goal ED-1: Improve Manson’s business diversity and 12-month economy.

ECONOMIC DEVELOPMENT

- Policy ED-1.A. Promote ties and links to outdoor recreational opportunities such as water sports, hiking, and mountain biking.
- ED-1.B. Establish a mixed-use town center, promoting small street-level retail with offices and/or residential uses on upper floors.
- ED-1.C. Promote arts and entertainment events in Manson, and consider artist-in-residence programs to foster arts culture.
- ED-1.D. Coordinate economic development activities with Chelan, understanding that teamwork is more productive than competition.
- ED-1.E. Facilitate alternative options to traditional farming such as organic practices, on-site sales, and agro-tourism.

ENVIRONMENT

Goal EN-1: Maintain the quality of Manson’s natural environment.

- Policy EN-1.A. Update the parks and recreation plan identifying long-range needs.
- EN-1.B. Develop LEED/“green” building certification incentives to encourage development of less resource-consumptive projects.
- EN-1.C. Promote water conservation measures such as xeriscape.
- EN-1.D. Collaborate with Chelan and the Reclamation District on long-range wastewater treatment needs, keeping growth on pace with capacity.
- EN-1.E. Identify more specifically the critical areas and shoreline buffers, using transfer of development rights or other techniques to preserve or enhance ecological function in those buffers and provide property owners with an opportunity for economic return in those areas.

2.11 WATERSHED PLAN

BACKGROUND

The County, the City, and the LCRD have initiated a planning process under the Watershed Planning Act (Chapter 90.82 RCW). The watershed planning effort focuses on water quantity and water quality issues in the LLCB. The watershed planning process consists of four phases: Phase 1—Organization;

Phase 2—Assessment; Phase 3—Plan Development; and Phase 4—Implementation. Phase 1 began in spring 2007. The Mission, Goal, and Objectives of the watershed planning effort are listed below:

MISSION

To develop an understanding of water and related aquatic and land resources by building trust and positive working relationships among diverse interests in the watershed to achieve a sustainable balance of economic, social, and environmental values.

GOAL

To implement a management plan for water use and protection that sustains the environmental, educational, economic, and recreational values associated with a healthy lakeside community and watershed.

OBJECTIVES

1. Assess water supply, use, and projected needs.
2. Develop and implement a comprehensive, long-term monitoring program of key parameters that will ensure water quality sustainability throughout the Lake Chelan watershed.
3. Address water bodies with constituents on the State 303(d) list and other parameters of potential concern that threaten lake water quality.
4. Inform and educate local communities and visiting populations about water quality protection.
5. Develop a Water Quality Improvement Plan and Water Quality Management Plan to understand, restore, and protect water resources.

To date, the Watershed Plan is in the assessment phase and is focused on water supply issues. Water quality concerns are being monitored and addressed by the Water Quality Committee.

2.12 SHORELINE MASTER PLAN

BACKGROUND

The County, along with the cities of Cashmere, Chelan, Entiat, Leavenworth, and Wenatchee, is in the process of updating the SMP. The County and cities originally adopted SMPs for their jurisdictions in the mid 1970s, after the Shoreline Management Act was passed by the state legislature. Local governments are required to update their SMPs to comply with new guidelines established by the Washington State Department of Ecology (WAC 173-26). The SMP update process began in the fall of 2007 and is expected to be completed in June 2010. The update process includes an inventory and analysis of current ecological conditions of shorelines; development of shoreline policies, environment designations, and use regulations; analysis of existing and

future shoreline use and related cumulative impacts; and preparation and adoption of a shoreline management plan.

The draft analysis of the existing conditions for the SMP was recently submitted to the County for review. There are no recommendations at this time.

2.13 COUNTY LAND USE UPDATE

Update process is in process and continuing.

2.14 MANSON SUB-AREA PLAN

Manson is in the process of developing an updated sub-area plan and UGA boundary. Once the process is complete, Manson's sub-area plan will be incorporated as part of the Regional Strategic Action Plan.

2.15 HOWARD FLATS AND CHELAN FALLS SUB-AREA PLANNING

Chelan Falls is just beginning the sub-area process. Chelan Falls has an elected Community Council and they are beginning the sub-area planning process. Howard Flats does not have a Community Council. Preliminary meeting to discuss the sub-area process have been held. The sub-area planning process should continue. The Howard Flats and Chelan Falls individual sub-area plans will be incorporated into the Regional Strategic Action Plan after they are completed.

3



*Figure 6-
Looking south toward
Chelan Falls.*

3 COMMUNITY INPUT PROCESS AND FINDINGS

An essential task of the regional planning process is to bring together recommendations that reflect the goals and desires of the entire LLCB into one action plan. Public participation and gathering community thoughts has been an ongoing process throughout this plan's development. Each public meeting included a survey document that solicited public opinion and thoughts. In addition to new thoughts, the planning process referenced preexisting community efforts that defined a shared vision. The voluntary Valley Vision group's *Vision Pillars* identifies many of the concerns that were echoed in the survey documents and public comments made as part of this project's public outreach efforts.

The first survey was generated for the first public meeting on June 24, 2008, and was later put on the County's Web site where the public would have another option to make comments and voice their opinions.

The survey questions are as follows:

PLACES TO LIVE AND WORK

1. **Do you live in the lower basin? Yes 24 No 0**

2. **Where? Responses below:**

City of Chelan, 20 Highway 97A near Walmart, Chelan/Manson, Chelan above dam, Manson, Campbell Ave., Chelan, Manson, E. Chelan Ave., Manson, Chelan, Business in Chelan/ rent in Manson, Manson, Lord Acres, 2 miles west of Chelan north shore, Minneapolis Beach, Hawk's Meadow, Manson, 3515 Ivan Rd Manson, South Shore Drive, Highway 97A (4500), 427 E. Wapato Ave., City of Chelan

3. **How Long Have You Lived In The Lower Basin? (Number Of Years):**

20, 50, 11, 5, 25, 60, 26, 27, 2, 3, 46, 35, 29, 11, 58, 60, 78, 39, 30, 5, 28, 10, 44, 17, 45

4. **Do You Live Here Year-Round? Yes 21 No 2**

5. **Do You Rent Or Own Your Home? Rent 3 Own 21**

6. **Please Rank in Order, the types of development you'd like to see more of in the lower basin (From 1 To 6, With 1 As Most Desired).**

– Retail and professional services

- Professional services (medical, financial, etc.)
- Warehouses / light industry
- Agricultural and resource-based industry
- Tourism / vacation homes / resorts
- Year-round residential development

Responses to **Question 6** are collated below.

RANKING	RETAIL	WAREHOUSE / LI	TOURISM / RECREATION	PROFESSIONAL	AG & RESOURCE-BASED	YEAR-ROUND RESIDENTIAL
1	7	1	1	2	10	12
2	4	4	2	6	6	2
3	3	3	2	8	2	2
4	3	3	3	5	3	3
5	6	5	4	2	1	2
6	0	7	10	0	1	1

PUBLIC SERVICES

7. The lower basin has adequate water and sewer service.

- Strongly Agree Agree Neutral Disagree
- Strongly Disagree

Responses to **Question 7** are collated below.

7. ADEQUATE SEWER AND WATER?	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
	3	5	3	9	6

8. There Is A Need For More Public Recreation Opportunities In The Lower Basin.

- Strongly Agree Agree Neutral Disagree
- Strongly Disagree

Responses to **Question 8** are collated below.

8. NEED FOR MORE PUBLIC RECREATION OPPORTUNITIES?	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
	5	10	6	3	1

COMMUNITY

9. The Lake Chelan area is a very balanced and livable region.

- Strongly Agree Agree Neutral Disagree
- Strongly Disagree

Responses to **Question 9** are collated below.

9. IS THE AREA BALANCED AND LIVABLE?	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
	4	8	3	8	2

10. Are you concerned about the area’s future? Yes 24 no 1 why?

(responses follow)

- Water quality and affordable housing, single family zoning.
- Earthquakes, damage to lake water quality.
- Manson area needs a plan to preserve open space while accommodating growth and agricultural use.
- Need a new route to Manson away from the lake.
- That developers will build for the almighty dollar. Once they make the money they’re gone! I’m left paying for things I don’t need. I’m also opposed to a 20 year plan. There is no one that can see five years (ahead).
- Concerns about water and sewer in the future, creating opportunities for the working class to stay here.
- Development of a Sewer system will ensure water quality in the valley for the future.
- We have a lot of land classified long term commercial (Agriculture) which should not be and doesn’t meet the definition of by GMA standards. This should be opened up for well planned development.
- Need more trees on property areas around the small lakes in Manson - heavily used -Could use some attention - H2O Quality- Scary.
- County seems willing to approve anything that increases tax base with little/no regard to neighborhood preservation.
- Keep agriculture land.
- High property taxes!
- Less Confusion on doubling in the City of Chelan
- AG preservation is of recent national & state concern. It should be paramount to County.

- Lake Chelan Area: Consider a housing moratorium until infrastructure has been addressed and a long-range plan developed.
- Need city sewer in this area.
- The water quality of the lake is also a concern. In addition, reasonable restrictions on the use of jet skis and other loud motorized water crafts would improve the quality of life for residents.
- Retired, limited older and housing for people, single families housing, too much usable land, for full time residents not available.
- The waterfront area was long ago developed - no plan - now the residential - zone every, loss of water quality of Lake Chelan

11. Please tell us about any ideas or concerns you have about the lower basin's future.

Summary of Community Comments:

The public comments and those of the stakeholders were varied in their focus but all but one of the respondents expressed concern about the region's future. Topics and concerns that were repeated and expressed strongly are summarized as the following:

- Traffic growth unsupported by adequate infrastructure
- Lack of a strong year-round economy
- Environmental degradation to the lake's water quality
- Character of the development/lack of full time community/rising taxes
- Farming/residential conflicts and loss of agricultural

4 DEVELOPMENT OF VISION AND LAND USE PATTERN OPTIONS

Based on the findings from the Existing Conditions Inventory, stakeholder interviews, previous studies, and community comments a number of issues were identified that required attention and action to help achieve the community's vision for the region's future.

Accommodating growth without deleterious impacts requires strategic actions.

PROTECT THE REGIONAL ENVIRONMENT

- Provide methods to protect and improve Lake Chelan water quality
- Protection of steep slopes from erosion and visual scarring

PROVIDE ADEQUATE CAPACITY OF INFRASTRUCTURE

- Improve roadways as growth occurs
- Provide public sanitary sewer service for UGA properties
- Provide density only where infrastructure can support it

PROVIDE COMMUNITY BALANCE

- Provide infrastructure services for affordable housing in Chelan Falls
- Provide affordable land areas for housing for low and middle income families and the elderly
- Develop opportunity areas for business park development and incubator structures near the airport for year round employment and appropriately zoned areas
- Provide right to farm protections

After the analysis and inventory process, the public input information and the inventory data were used to define the issues that the Regional Strategic Action Plan will address. With this background, four possible Vision Options were generated that identified possible land use patterns in the Buildable Lands area. The criteria used to define Buildable Lands within the LLCB are:

- Privately owned land
- Land that generally slopes toward the lake and offers views to it
- Land that is accessible from existing roads
- Land that is not overly steep (less than 30 percent slope)

The four options presented illustrate different patterns of growth that could occur as the demand for second or retirement homes in the area continues to

grow. The likelihood of each option is dependent on jurisdictional regulation and/or design standard modifications, but all are based on the existing zoning codes and focus on land with the fewest physical constraints as described in the Buildable Lands Analysis (**Exhibit 7**).

The Vision Option Plans focused on the areas most prime for development. The focus area includes all the private land sloping toward the lake except for the parcels zoned forest commercial or rural residential 20. This regional area includes and overlaps the City and its UGA, the Manson UGA, and the newly forming Howard Flats and Chelan Falls sub-area planning districts.

The intent of the Regional Strategic Action Plan is to address common issues on a regional level and leave specifics of individual sub-areas or jurisdictions to the individual entities.

GENERAL RECOMMENDATIONS FOR ALL THE VISION OPTION PLANS:

Incorporate the recommendations of the other ongoing planning studies (Transportation Improvement Plan, SMP, Watershed Plan, Land Use Update, and Sub-area Planning Efforts)

- Protect the quality of the lake.
- Provide a balanced community (housing, jobs, and year-round economy).
- Encourage employment opportunities at the airport and plan for airport safety and expansion in the Howard Flats neighborhood.
- Provide new housing in Chelan Falls with urban services and encourage “some” commercial development

4.1 VISION OPTION 1—UGA EXTENSION PLAN

This option will protect and enhance the inherent beauty and quality of the lake, the natural environment, and the agricultural community, while providing an economically balanced community. By concentrating growth in walkable urban areas, the region will incorporate additional residents without infringing on or threatening the agricultural character and environmental quality of the region. See **Exhibit 10**.

ACTIONS:

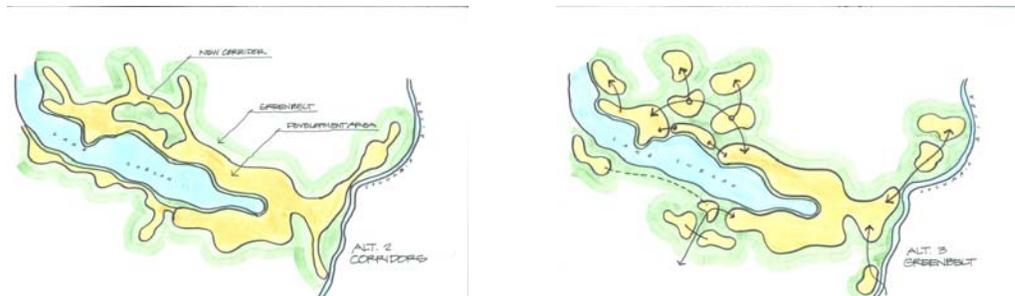
- Manson UGA expands to meet Chelan UGA—with coordinated urban services.
- No cluster subdivision in AC zoning.
- AC zoning minimum size per housing unit: 20 acres.
- RR 10, 5, and 2.5 subdivisions should be clustered—density bonus eliminated.

4.2 VISION OPTIONS 2 AND 3—CORRIDOR OR CLUSTER PLAN

These options will protect and enhance the inherent quality of the lake and the agricultural community while providing economically balanced communities in distinct and adequately serviced areas. The region will incorporate additional residents within the UGA in corridors or clusters that have access to existing roads in the basin. See **Exhibits 11** and **12**.

ACTIONS:

- Subdivisions outside the UGA must be served by existing roadways and must be clustered.
- Adequate sewer and water services must be available per recommendations of the Watershed Plan and the Health Department.



4.3 VISION OPTION 4—EXISTING ZONING PLAN

This option will protect and enhance the inherent quality of the lake and its natural environment. Growth will occur in areas that can adequately serve the increased population without undermining the environmental quality. See **Exhibit 13**.

ACTIONS:

Follow existing zoning along with the recommendations from the various planning studies.

The four options were presented to the public as part of a public workshop. The meeting included a short presentation about the project and a description of the plans. It was followed by a breakout session, where the public broke into groups for discussion and public input. Members of the consultant team and County staff helped facilitate the discussion of pros and cons of the four vision options. After the breakout, the group gathered to report their findings.

A joint session of the County Board of Commissioners and the City Council immediately followed the public meeting. The project was introduced to the joint meeting members and a discussion and question-and-answer session ensued.

The plans and survey were placed on the County's Web site for additional input and public review.

The survey questions are as follows:

WHICH VISION STATEMENT BEST DESCRIBES YOUR VISION FOR THE LOWER LAKE CHELAN AREA?

VISION OPTION 1—UGA EXTENSION PLAN

This vision will protect and enhance the inherent beauty and quality of the lake, the natural environment, and the agricultural community, while providing an economically balanced community. By concentrating growth in adequately serviced walkable urban areas, the region will incorporate additional residents without infringing on or threatening the agricultural character and environmental quality of the region.

VISION OPTIONS 2 AND 3—CORRIDOR OR CLUSTER PLAN

This option will protect and enhance the inherent quality of the lake and the agricultural community while providing economically balanced communities in distinct and adequately serviced areas. The region will incorporate additional residents within the UGA and in corridors or clusters that have access to existing roads in the basin.

VISION OPTION 4—EXISTING ZONING PLAN

This vision will protect and enhance the inherent quality of the lake and its natural environment. Growth will occur in areas that can adequately serve the increased population without undermining the environmental quality.

DO YOU HAVE A REVISION OR ALTERNATE SUGGESTION FOR A VISION STATEMENT?

HOW WOULD YOU PREFER TO SEE FUTURE GROWTH OCCUR?

- Only within existing UGA? (The UGA Extension Plan)
- Within UGAs and along existing or new roadways as corridors of development? (The Corridor Plan)
- Within existing UGAs and as clusters outside the UGA? (The Cluster Plan)
- Within existing UGAs and large lot subdivisions outside the UGA? (The Existing Zoning Plan)

COMMENTS:

Comments were collected during the meeting as part of a general discussion following group discussions. The public was divided in its preference for the 4 options.

5 REGIONAL VISION AND STRATEGIC ACTION PLAN

The Regional Vision and Strategic Action Plan is intended to address common issues on a regional level and leave specifics to the individual sub-areas or jurisdictions. Starting from a 254-square-mile study area, the regional planning study area was defined to include all the private land zoned RR 10 or less [that slopes toward the lake, and the newly forming Howard flats and Chelan Falls subareas.

Although the community is divided about how they want to see growth occur in the LLCB, there were a number of shared concerns about the region's future. They include:

- An overall concern for property rights and property values. Farming, as an industry and a land use, is valued. However, farmers want to protect their ability to convert their property to other uses, including residential development.
- A concern for environmental quality, and specifically, maintaining the lake's water quality.
- A concern about the adequacy of the existing infrastructure and the potential cost of expansion.
- A concern about additional traffic and the inadequacy of the existing roads, especially between Manson and the City of Chelan.
- A concern about the lack of a strong year-round economy.

5.1 PROPOSED VISION PLAN

The proposed Vision Plan attempts to address the community concerns and is a combination of the options presented during the August 14, 2008, public meeting and discussed in the previous section. The recommended Vision Plan proposes that:

- Future urban density development will occur between Manson and the Chelan along the Lake shoreline. The Manson and City of Chelan boundary will fall along a natural boundary, perhaps Rocky Point.
- Lands outside the UGA will remain rural residential or agricultural commercial zoned property. The zoning will remain substantially as it is now. The rural areas will remain rural and will continue to be allowed to develop per the existing zoning or by using the cluster ordinance to preserve additional open space while increasing the number of lots allowed. The clustered lots would be reduced only to a size that can safely support

individual septic systems per Washington State Department of Health standards.

- Infrastructure (transportation systems, water, and sanitary sewer) required to support urban density will be financed, expanded, and improved. Infrastructure should be addressed regionally.
- The airport overlay zone will be expanded as recommended in the Airport Master Plan, 2008 to facilitate future economic development.
- The Chelan Falls area will have additional residentially zoned land with urban services.

5.2 REGIONAL STRATEGIC ACTIONS

Making the regional vision plan a reality requires a series of actions by Chelan County and the City. Comprehensive Plan and Zoning Code sections that prevent innovation or allow development that exacerbates existing problems should be revised. Coordination between jurisdictions through intergovernmental agreements, adoption of compatible design and development standards, and coordination of regional infrastructure planning and construction should be embraced regionally and jurisdictionally. Recommended actions include:

LAND USE STRATEGIC ACTIONS

Adopt the regional vision plan (Exhibit 14) to guide the location of long-range growth areas in the LLCB.

- Expand the airport overlay zone to protect airport operations and provide compatible abutting land uses. Land adjacent to the airport should be designated as light industrial. Coordination between the Port, the County, and the City will encourage aviation-related, light industrial development in the area.
- Develop enforceable, clearly defined building and landscape design and development standards that provide coordinated design standards for the LLCB.
- Provide additional development provisions in the County’s cluster ordinance to protect “the right to farm,” and to better integrate farming and residential development, with the onus on the developing property to provide additional setback protections from agricultural uses.
- Provide or strengthen County and City development requirements for areas without public services to ensure that the carrying capacity of the land is respected.
- Develop measurable County and City sustainable design requirements for:
 - Stormwater runoff (these design requirements will fit within the development standards and engineering review)

- Domestic water use
- Energy conservation
- Walkable communities
- Encouraging the use of passive solar energy
- Revise City and County development standards to encourage public lakefront access at the time of new development applications.

TRANSPORTATION STRATEGIC ACTIONS

- Require new development to include provisions for connectivity, and for participation in the City’s and County’s Transportation Improvement Plan projects list, where applicable.
- Adopt recommendations in the Transportation Improvement Plan, including, among others, a new northern road between Manson and Chelan, improvements to the state highways and intersections in the City, and new or improved pedestrian and bicycle trails throughout the region.
- Adopt proposed transportation funding recommendations: planned action ordinance and impact fees that require new development to provide funds to subsidize its impact on the transportation system. Adopt similar development standards in the City and the County.

ECONOMIC STRATEGIC ACTIONS

Conduct an inventory and analysis of the existing farm economy. Include inventory of current acreage in commercial production, types of products, and market trends. Refine criteria to categorize prime farmlands to inform future land use planning. Estimate the contribution of agriculture and agri-tourism to the regional economy. Based on the findings of the study, consider establishing an agricultural task force to develop policies and programs to support agricultural business and innovative practices that will diversify the agriculture economy.

- Develop a regional economic development strategy. Involve the County, City, Port of Chelan County, and existing businesses. Focus on opportunities to expand existing businesses and targeted recruitment of new businesses. Identify opportunities to strengthen the off-season and year-round economies.
- Plan for a regional aquatic center for local use and as a winter tourist attraction.
- Provide zoning and infrastructure to plan for the development of sustained affordable housing stock.

ENVIRONMENTAL STRATEGIC ACTIONS

- The County and City should continue to collaborate on the Shoreline Master Plan (SMP) update. The policies developed in the SMP should reflect the regional vision for the LLCB. Recommend that the SMP

include specific requirements for water quality protections and public access to the lake.

- The watershed planning and the SMP planning efforts should share data and information to coordinate with the planning processes that affect land use and development in the LLCB.

GENERAL UTILITY STRATEGIC ACTIONS

- Encourage development of a coordinated Water System Plan(WSP) and (General Sewer Plan) GSP between the current service providers.
- Explore public funding opportunities for new or improved facilities.
- Consider the use of concurrency management procedures to address growth and the provision of sufficient public services capacity.
- Encourage service providers to use compatible information technologies to monitor demand and improve planning and delivery efficiency.
- All urban level development should be required to have both public sanitary sewer and public water.

WASTEWATER STRATEGIC ACTIONS

Develop a regional sanitary sewer district to ensure the protection of the lake. To facilitate other regional goals for affordable housing and employment areas, the district should also serve adjacent development in the airport area around Howard Flats and in the Chelan Falls neighborhood. The district should provide regional planning considerations to be incorporated into the City's planning effort for its wastewater treatment facilities.

The system should be sized to serve the existing UGAs as well as the projected UGA extension area between Manson and the City, the south shore, and future urban levels of development in Chelan Falls and the Howard Flats area near the airport. The district should begin to anticipate the future requirements of the system to ensure the quality of the lake and respond to the market pressures for development around the lake.

- Prepare a coordinated GSP for the LLCB, involving the City, the LCRD, and the LCSD.
- Encourage reducing the use of/reducing reliance on septic tanks and drain fields.
- Wastewater collection and transport systems will convey wastewater to centralized wastewater treatment facilities.
- Incorporated areas will be provided with wastewater collection and transport systems.
- Unincorporated areas in the UGA will be provided with wastewater collection and transport systems.
- Consider procedures to motivate existing and new development to connect to the municipal sewer.

- Promote wastewater reuse planning and technology in areas outside the UGAs to promote the conservation of water resources.
- Continue consideration of wastewater reuse at the City's wastewater treatment facilities as part of the City's GSP for those areas in the UGAs.
- Prohibit the extension of any sewer system that will degrade the existing system below the adopted level of service by assuring that development in UGAs provide necessary improvements to accommodate their needs.

WATER STRATEGIC ACTIONS

- Prepare a coordinated WSP involving the City and the LCRD.
- Consider procedures to encourage the consolidation of Group A and Group B systems.
- Encourage public and private water purveyors to implement measurable water conservation practices.
- Allow the provision of water service and construction of water service lines or other water system facilities outside the UGA that are consistent with the long-term development pattern outlined in the long-term strategic plan.
- Encourage the continued cooperation, coordination, and consolidation of water purveyors to achieve greater efficiency in the planning, improvement, and delivery of water services.
- Adopt a regional water rights transfer policy that ensures systematic conversion of agricultural water rights to municipal rights. (Note that the City currently has this provision in place and strongly recommends that a similar system be employed area-wide.)

UTILITY STRATEGIC ACTIONS

- Consider the development of a Regional Utility Corridor Plan.
- Coordinate dimensional guidelines for regional corridors with affected utility providers and jurisdictions.
- Promote the co-location of new utility transmission distribution and communication facilities when doing so is consistent with the utility industry practices. (Examples of facilities that may be shared are trenches, rights-of-way, towers, poles, and antennas.)
- Where consistent with multiple uses, promote joint use of utility corridors with recreational and green space applications (underground utility lines jointly with public trail system).
- Provide timely notice to affected private utilities of all major utility projects, including the maintenance and repair of existing roads, in order to promote the joint planning and coordination of public and private utility activities.
- Ensure that utility facilities are designed to minimize adverse aesthetic impacts on surrounding land uses.

TELECOMMUNICATION STRATEGIC ACTIONS

- Encourage coordination with utility providers in the provision of telecommunication services.
- Promote long-term planning for telecommunications systems.
- Require the placement of cellular communication facilities in a manner that minimizes adverse impacts on adjacent land uses and utilizes existing structures where feasible.
- Encourage telecommunication services as a means to mitigate the transportation impact of development and growth.

ELECTRICITY STRATEGIC ACTIONS

- Encourage coordination with utility providers in the provision of electrical services.
- Protect existing utility corridors to permit maintenance access and future expansion.
- Provide for efficient, cost-effective, and reliable utility service by ensuring that land is available for the location of utility lines (including their location in transportation corridors) and by creating guidelines and permit processes that are conducive to utility operations.



*Figure 7—
Looking northeast
toward the City of
Chelan from the
south shore*

The Strategic Actions are summarized in Table 9.

TABLE 9—STRATEGIC ACTIONS SUMMARY

LOWER LAKE CHELAN REGIONAL STRATEGIC ACTION PLAN

ACTION	COUNTY	CITY	OTHER
LAND USE STRATEGIC ACTIONS			
Adopt the Regional Vision Plan for the LLCB long-range growth	•	•	•
Expand the Airport Overlay Zone	•		
Develop building, site and landscape design and development standards within the LLCB	•	•	
Modify the Cluster Ordinance to provide protections to better integrate residential use with agricultural activities	•		
Strengthen development requirements for areas without public sewer or water to protect environmental quality	•	•	
Develop measurable sustainable design requirements	•	•	
Adopt shoreline development standards that encourage public lakefront access	•	•	
Finalize Chelan Falls and Howard Flats Sub-area Plans	•		•
TRANSPORTATION STRATEGIC ACTIONS			
Develop provisions to require new development to participate in transportation improvement plan (TIP) projects and to integrate 'connectivity principles' into new street design	•	•	
Adopt the recommendation of the TIP for a new Manson to Chelan connector road, highway and trail improvements	•	•	
Adopt proposed transportation funding recommendations	•	•	
ECONOMIC STRATEGIC ACTIONS			
Develop a regional economic development strategy with the County, City, Port and business chambers, with a focus on year round economies	•	•	•
Investigate an aquatic center for local use and a winter tourist attraction		•	
Provide zoning and infrastructure for sustained affordable housing stock	•	•	

ENVIRONMENTAL STRATEGIC ACTIONS			
Coordinate Shoreline Master Plan to protect the lake's water quality and provide public lake access	•	•	
Coordinate watershed and shoreline master plan efforts, especially those that affect land use and development.	•	•	
GENERAL UTILITY STRATEGIC ACTIONS			
Develop a coordinated water system plan and a regional general sewer plan	•	•	•
Explore funding for new and improved facilities	•	•	
Consider concurrency management to insure sufficient public service capacity	•	•	
Use compactable information technologies to monitor demand and improve efficiency of services	•	•	
All urban level development shall be required to have public water and sanitary sewer service	•	•	
WASTE WATER STRATEGIC ACTIONS			
Involve the City of Chelan, Lake Chelan Reclamation District and the Lake Chelan Sewer District and develop a coordinated General Sewer Plan (GSP)	•	•	•
Promote reduction of septic tanks and drain fields	•	•	
Convey waste water to a centralized wastewater treatment center	•	•	
Incorporated areas will be provided with wastewater collection and transport systems.		•	
Unincorporated areas within the UGA will be provided with wastewater collection and transport systems.	•		
Consider procedures to motivate existing and new development to connect to municipal sewer.	•	•	
Promote wastewater reuse planning and technology outside the UGA to promote the conservation of water resources.	•		
Continue consideration of wastewater reuse at the city's wastewater treatment facilities as part of the city's GSP for those areas within the UGA.		•	
Prohibit the extension of any sewer system that will degrade the existing system below the adopted level of service. UGA will provide necessary improvements to accommodate their needs.	•	•	

WATER STRATEGIC ACTIONS			
Prepare a coordinated water system plan involving the city and the LCRD.		•	•
Consider procedures to encourage the consolidation of Group A and Group B systems.	•		
Encourage public and private water purveyors to implement measurable water conservation practices.	•	•	•
Allow the provision of water service and construction of water service lines or other water system facilities outside the UGA that are consistent with the vision plan.	•		
Encourage the continued cooperation, coordination, and consolidation of water purveyors to achieve greater efficiency in the planning, improvement, and delivery of water services.	•	•	•
Adopt a regional water rights transfer policy that assures systematic conversion of agricultural water rights to municipal rights.	•		•
UTILITY STRATEGIC ACTIONS			
Consider the development of a regional utility corridor plan.	•	•	
Coordinate dimensional guidelines for regional corridors with affected utility providers and jurisdictions.	•	•	
Promote the co-location of new utility transmission distribution and communication facilities (facilities that may be shared are trenches, rights-of-way, towers, poles, and antennas.)	•	•	
Where consistent with multiple uses, promote joint use of utility corridors with recreational and green space applications (underground utility lines jointly with public trail system).	•	•	
Provide timely notice to affected private utilities of all major utility projects, including the maintenance and repair of existing roads, to promote the joint planning and coordination of public and private utility activities.	•	•	
Ensure that utility facilities are designed to minimize adverse aesthetic impacts on surrounding land uses.	•	•	
TELECOMMUNICATION STRATEGIC ACTIONS			
Encourage coordination with utility providers in the provision of telecommunication services.	•	•	
Promote long-term planning for telecommunications systems.	•	•	
Require the placement of cellular communication facilities in a manner that minimizes adverse impacts on adjacent land uses and utilizes existing structures where feasible.	•	•	
Encourage telecommunication services to mitigate the transportation impact of development and growth.	•	•	

ELECTRICITY STRATEGIC ACTIONS			
Encourage coordination with utility providers in the provision of electrical services.	•	•	
Protect existing utility corridors to permit maintenance access and future expansion.	•	•	
Provide for efficient, cost-effective, and reliable utility service by ensuring that land is available for the location of utility lines, including their location within transportation corridors, and by creating guidelines and permit processes that are conducive to utility operations.	•	•	

6 REGULATORY FRAMEWORK RECOMMENDATIONS

Specific changes to the regulatory framework in Chelan County are needed to implement the recommended strategic actions by the County and the City of Chelan. This section identifies Comprehensive Plan policies that require modification and sections of the development code that require additional or modified language to achieve the regional vision.

To begin the process, both the City of Chelan and Chelan County governments should approve in principle the draft Strategic Action Plan. This will be the first step of the formal adoption process for the Regional Vision and Strategic Action Plan.

PLANNING COORDINATION

The County planning staff should continue to assist in the formulation of the Chelan Falls and Howard Flats sub-areas. Each of these areas has unique planning issues and opportunities that should be addressed on a sub-area level. The Vision Plan in this document outlines and indicates proposed sub-area boundaries (Exhibit 14).

The County should consider adoption of the recommendations contained in the Transportation Improvement Plan.

The County should also coordinate the Shoreline Master Program and the Watershed Plan and amendments to them as they progress. It is incumbent upon the County to insist that water quality be protected and that public access to the water resources be maintained.

AIRPORT RELATED RECOMMENDATIONS

To expand the airport, the City of Chelan should begin exploration for the augmentation of the Urban Growth Area for the required runway expansion.

- The City should consider updating the airport overlay mapping in conformance with RCW 35.36.250 and Title 14, Code of Federal Regulations, Subchapter C Part 77, Objects Affecting Navigable Airspace, and data from the National Transportation Safety Board.
- The County and City should work jointly to update the overlay zone to the County zoning / land use map through a “Comprehensive Plan Land Use Map Amendment Application” to clarify the land use restrictions in the areas surrounding the airport.

CLUSTER SUBDIVISION RELATED RECOMMENDATIONS

To help maintain the rural character and protect the “right to farm” in areas adjacent to cluster developments, the following revisions and additions should be considered for addition to Chapter 12.28, “Cluster Subdivisions.”

Section 12.28.070 (1) Dimensional Standards (B) Minimum Setback: add:

(iii) To further protect the right to farm, it is the burden of the cluster developer to provide adequate setback or buffer between residential development and existing agricultural land use so that the agricultural activities may occur up to the property line, without adverse impact to the residences.

“Section 12.28.070 (2) Individually Owned Open Space Standards (B) Privately owned open space in a cluster development shall meet the following standards:” add:

(iv) For the portion of the development that is on the perimeter of the project site and where the abutting property is an agriculture use, the setback shall be sufficient to prevent conflicts between uses.

(v) Setbacks between commercial agricultural uses within the cluster open space and the residential development shall be sufficient to prevent conflicts between uses.

To maximize the amount of open space provided, individual sanitary sewer systems may be located on privately owned open space that is subject to use restrictions.

Section 12.28.070 (2) Individually Owned Open Space Standards

(B)(i) should be modified to read: “Privately owned open space must be maintained in its natural condition or used for agricultural, forest, ~~or~~ recreational, or individual sanitary sewer leaching fields, without negative impacts to preexisting agricultural activities. “

To ensure that the open space provided within the cluster is maintained, the following should be added to 12.29.060 Open Space Restricted.

The following proposed language should be considered for addition to **12.28.060:**

(3) All owners within a cluster development are responsible for the maintenance of the privately owned common open space. All owners shall be part of a homeowners association that is governed by approved Conditions, Covenants, and Restrictions that are recorded at the Assessor’s Office and noted on the face of the final plat.

DESIGN RELATED RECOMMENDATIONS

Sustainable-design recommendations should be considered as an addition to the Chelan County Code and the City of Chelan’s Development Code.

These include provisions for pedestrian-friendly communities, water quality requirements, water use reduction, green building strategies, and alternative

energy sources. They would be built upon the recommendation and data from the Watershed Master Plan for water efficiency proposals.

The City of Chelan should work toward adopting a downtown Master Plan and the design guidelines that will be formulated to establish design and development standards in the City's downtown core.

The City of Chelan should consider developing design guidelines for developments that encourage public waterfront access in areas where services are available to protect water quality.

COMMUNITY AND ECONOMIC DEVELOPMENT RELATED

The City of Chelan and the Port of Chelan, in cooperation with the County, should work together to identify opportunities to develop a stronger year-round economic base in the region. This could include expanding winter recreational opportunities such as an indoor water facility, green industries, or incubator businesses that are searching for a rural community lifestyle.

The Chelan Falls sub-area, in cooperation with the County, should pursue a private-public partnership to develop affordable housing.

WATER AND SEWER RELATED RECOMMENDATIONS

To address the Chelan County Comprehensive Plan's General Utility Strategic Action item that states, "*All urban level development shall be required to have public water and sanitary sewer service,*" the following Comprehensive Plan policy should be considered for modification.

The Chelan County Comprehensive Plan, Land Use Element for Urban Growth Areas, GOAL 1 states, "*ENCOURAGE DEVELOPMENT TO OCCUR IN URBAN GROWTH AREAS WHERE ADEQUATE PUBLIC FACILITIES AND SERVICES EXIST OR CAN BE PROVIDED IN AN EFFICIENT MANNER.*"

"Goal Rationale: Promoting the efficient utilization of land by encouraging urban development within designated urban growth areas will improve the efficiency of infrastructure provision and usage and reduce low density sprawling development within the County."

"**Policy 9:** For development within urban growth areas the following policies should be applied: A) If a public sewer system is not yet available, community sewage disposal systems are strongly encouraged. **Encourage Require** hook-up to the public sewer system when **feasible available.**"

County Code Title 15: Development Standards should be broadened to address utility requirements, design, and location. The County's development standards should address sanitary sewer and public water standards to fulfill the requirement that all urban-level development have public sewer and water. Since water and sewer lines generally fall within the public right of way, they should be included and described in the roadway cross-section standards for urban-level roads.

Sharing transportation rights-of-way with utilities and designing street sections to include water and sewer lines as well as telecommunications and electric lines can reduce the cost of serving areas with urban-level development. Utilities should be planned as part of the urban-level roadway sections and of rural collectors that connect urban areas with common sewer or water systems. The **Chelan County Development Standards** should be considered for modification as follows:

15.30.010 Purpose.

(1) These minimum standards for development provide requirements for road and bridge design, construction, and reconstruction. They provide guidance for incorporation of sanitary sewer and public water locations within the road's right-of-way section. In establishing the minimum standards for development, the county engineer has sought to encourage standardization of utility location and road design elements. Considerations include safety, convenience, functional networks and interconnectivity, aesthetics, proper drainage, and maintenance.

To facilitate the regional development of adequate sanitary sewer treatment facilities for urban development, all of the sanitary sewer providers should be working together to plan for future capacity of the shared treatment facility. The following policy should be considered for addition to the Chelan County Capital Facilities element of the Comprehensive Plan.

Policy 18: All conveyors and treatment providers of sanitary sewer waste that contribute to a shared treatment facility shall participate in a cooperative long-term planning process to ensure future service for all areas serviced by the treatment facility. They will use the same information technology to ensure communication of needs.

Rationale: Treatment facility costs can be equally shared and future needs can be more accurately predicted.

The Lake Chelan Reclamation District and the City of Chelan should cooperate and develop a coordinated plan to provide water for future north shore development. The plans should be consistent with the Watershed Master Plan that is being developed.

ENVIRONMENTAL PROTECTION RELATED RECOMMENDATIONS

Protecting the water quality of Lake Chelan is of paramount importance to the region. The pristine waters and surrounding mountains attract a large and growing tourist industry to the community and a growing number of second home ownerships and retirees. As development continues, the amount of stormwater that finds its way to the lake will increase. To help protect the water quality, all development should be required to provide water quality treatment for runoff generated by new impervious surfaces.

Title 15 of the Chelan County Code, Development Standards, should include an additional set of standards for water quality treatment requirements for impervious surfaces. The proposed language for Title 15 should be considered as follows:

15.30.060 Relationship to other county standards and requirements.

Other Chelan County plans, standards, and requirements with which these standards are intended to be consistent are:

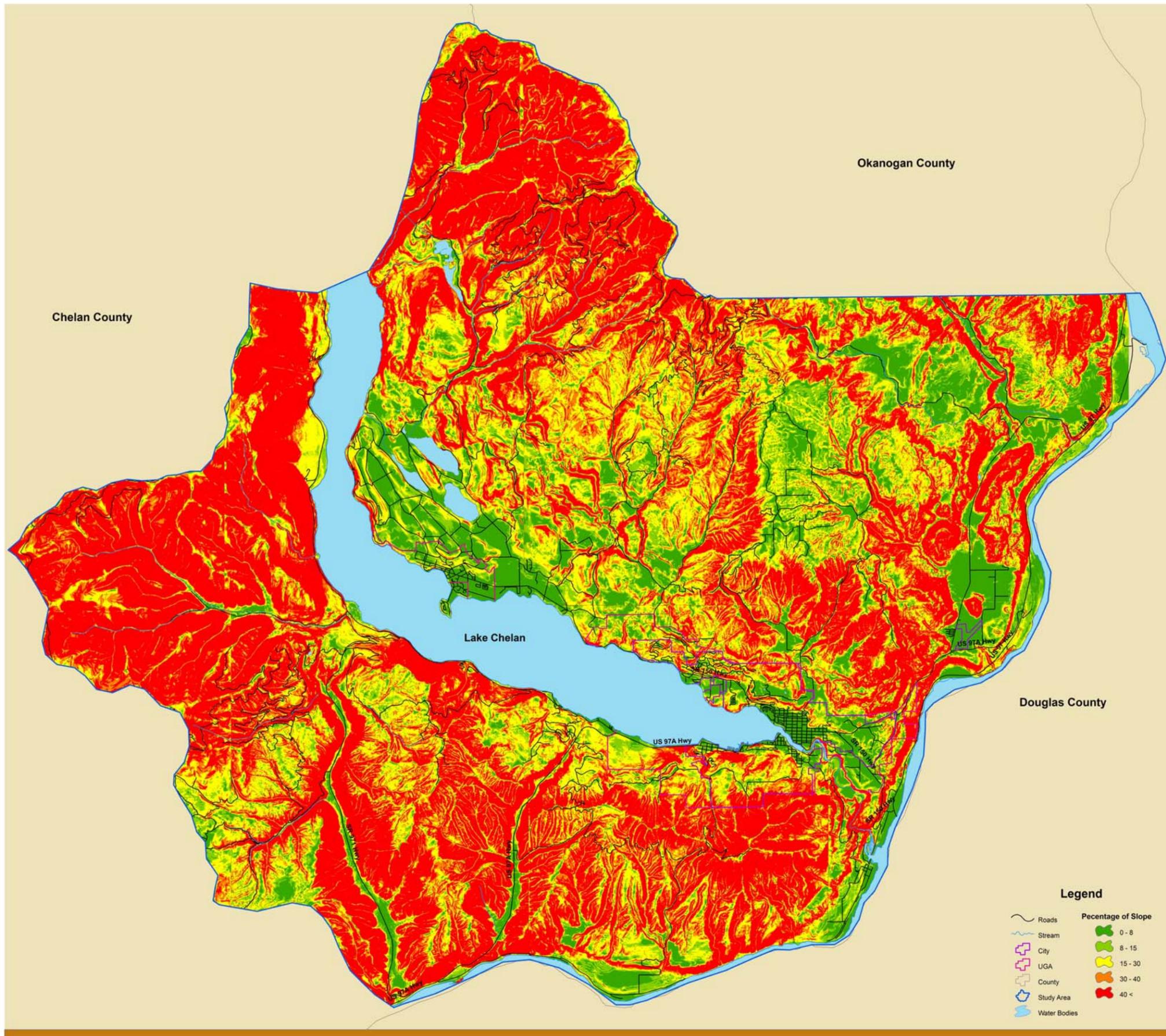
- (1) Chelan County comprehensive plan;
- (2) Chelan County Code, as amended, specifically Titles 8, 10, 11, 12, 13, 14, and the remainder of Title 15;
- (3) Adopted community plans within Chelan County. (Res. 2008-130 [part], 8/26/08)
- (4) Water Quality Treatment Design Standards, Section 15.80, shall be incorporated into all future County roadway work.

15.80 Water Quality Treatment Design Standards

This chapter applies to development of new impervious surfaces greater than 500 square feet. Design standards will be as described in the latest version of the Stormwater Management Manual for Eastern Washington or an equivalent manual adopted by the County.

The hills around Lake Chelan are one of the defining characteristics of the landscape. Because of the high visibility of these areas, there is a threat of development scarring that landscape. The County should consider developing a review process to assess visual impacts of new development with the objective of balancing growth with protection of viewsheds.

Steep slopes are defined by Chelan County as “any slope of forty percent or steeper with ten feet of relief or areas adjacent to these slopes, of which shall cover a distance equal to the vertical height of the slope or two hundred fifty feet, whichever is less” (CCC 11.86.02.) Development is permitted on steep slopes if certain conditions are met, including requiring engineering reports, minimizing vegetation clearing, and implementing best management practices to control erosion. The County should considering decreasing the slope threshold to thirty percent within the Lower Lake Chelan Basin to match the City of Chelan definition. The County should also consider limiting new development on steep slopes and within buffers at the top and toe of the slope.



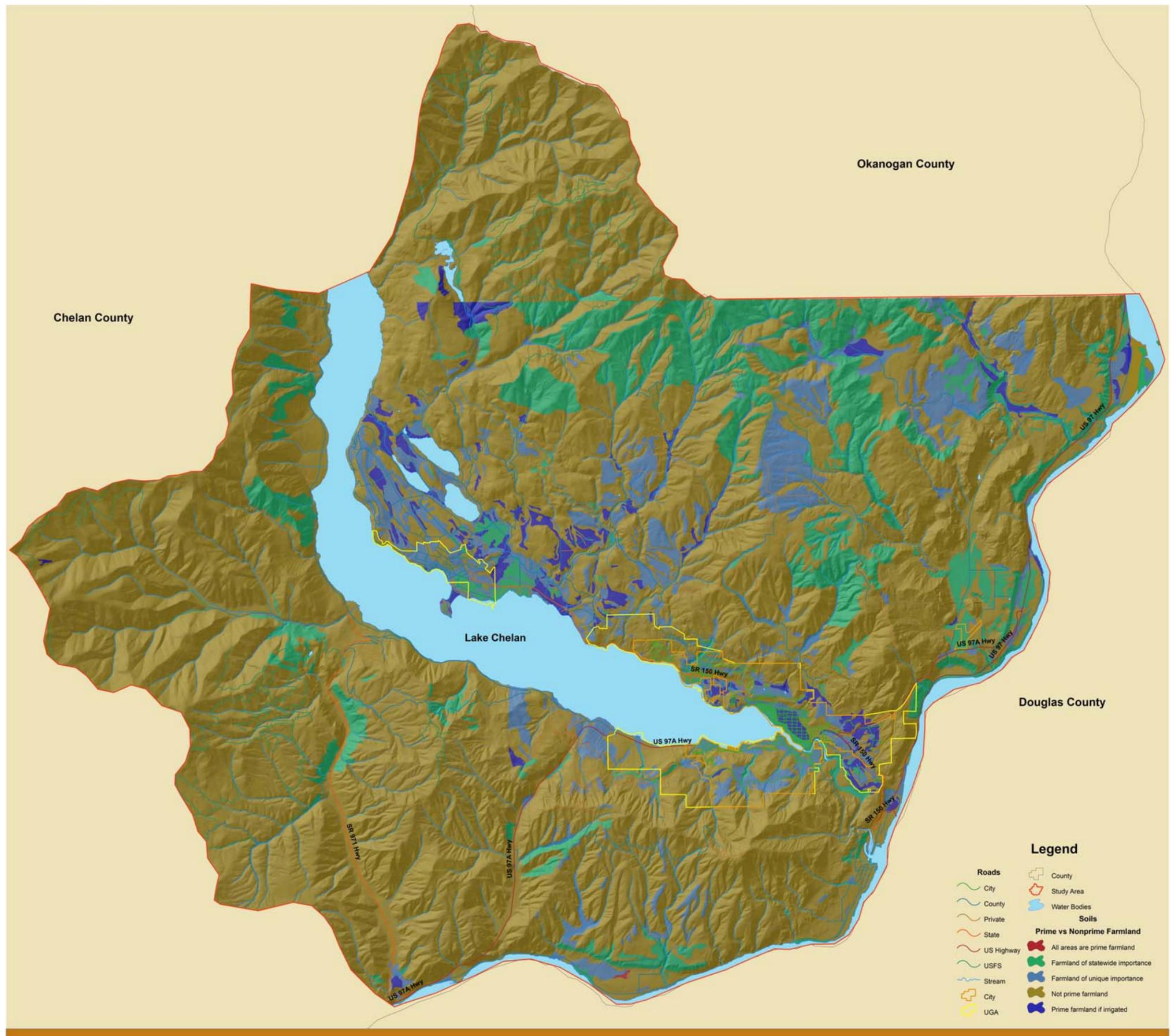
SLOPE ANALYSIS

LOWER LAKE CHELAN BASIN REGIONAL PLANNING STUDY



0 0.5 1 2 Miles
Source: Chelan County, State, and Federal Agencies





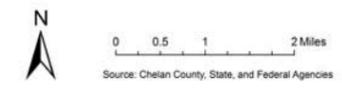
Legend

City	County
County	Study Area
Private	Water Bodies
State	Soils
US Highway	All areas are prime farmland
USFS	Farmland of statewide importance
Stream	Farmland of unique importance
City	Not prime farmland
UGA	Prime farmland if irrigated



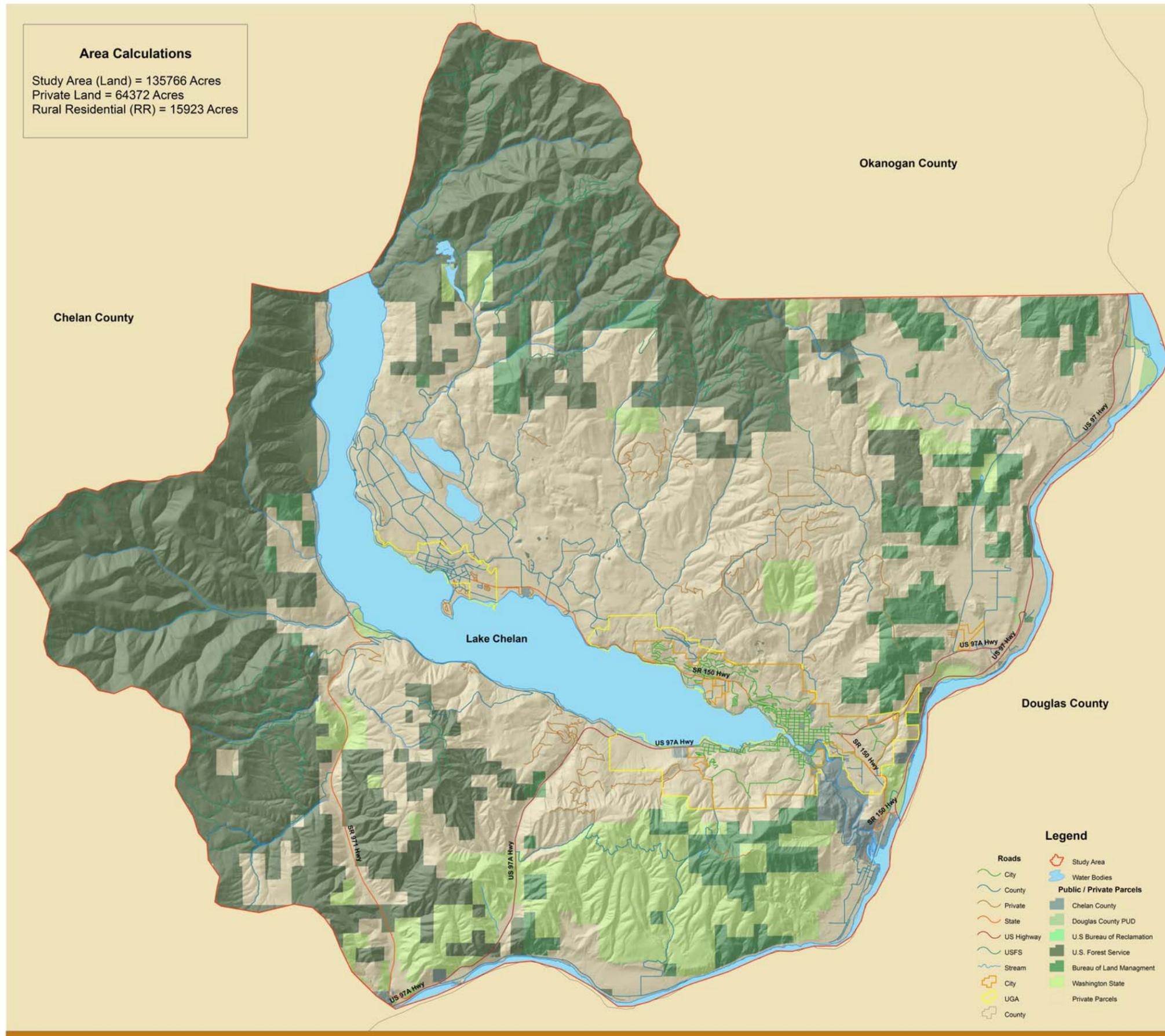
SOILS

LOWER LAKE CHELAN BASIN REGIONAL PLANNING STUDY



Area Calculations

Study Area (Land) = 135766 Acres
 Private Land = 64372 Acres
 Rural Residential (RR) = 15923 Acres



PUBLIC / PRIVATE LANDS

LOWER LAKE CHELAN BASIN REGIONAL PLANNING STUDY

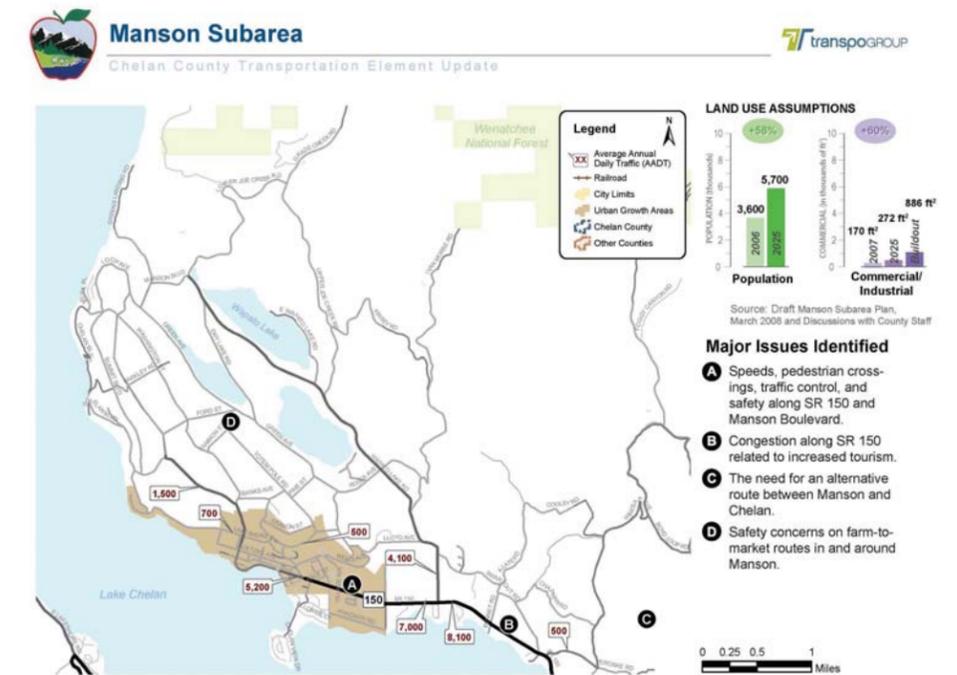
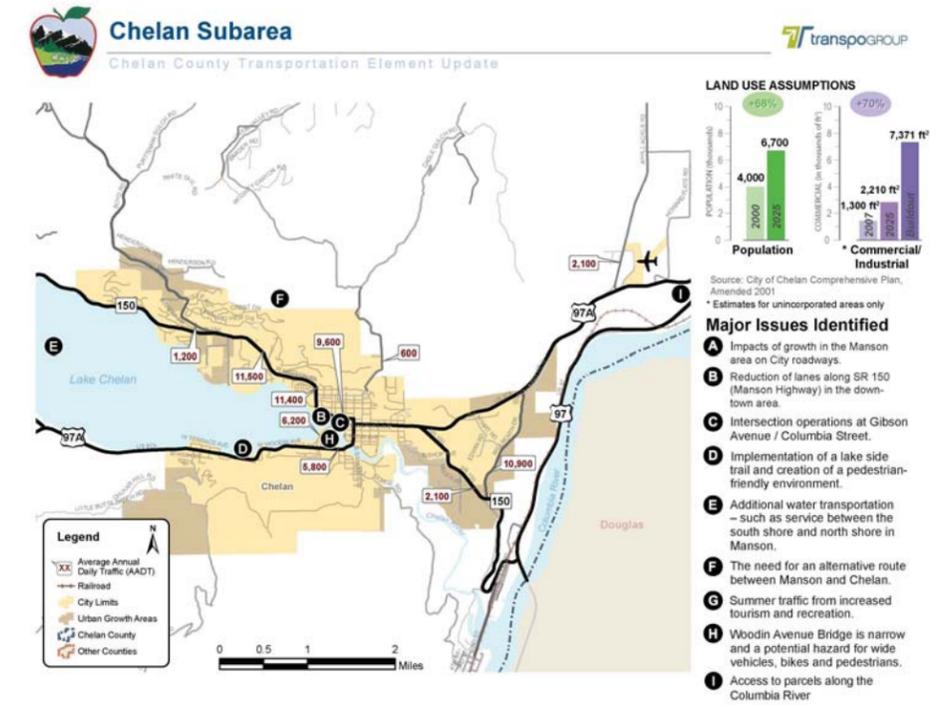
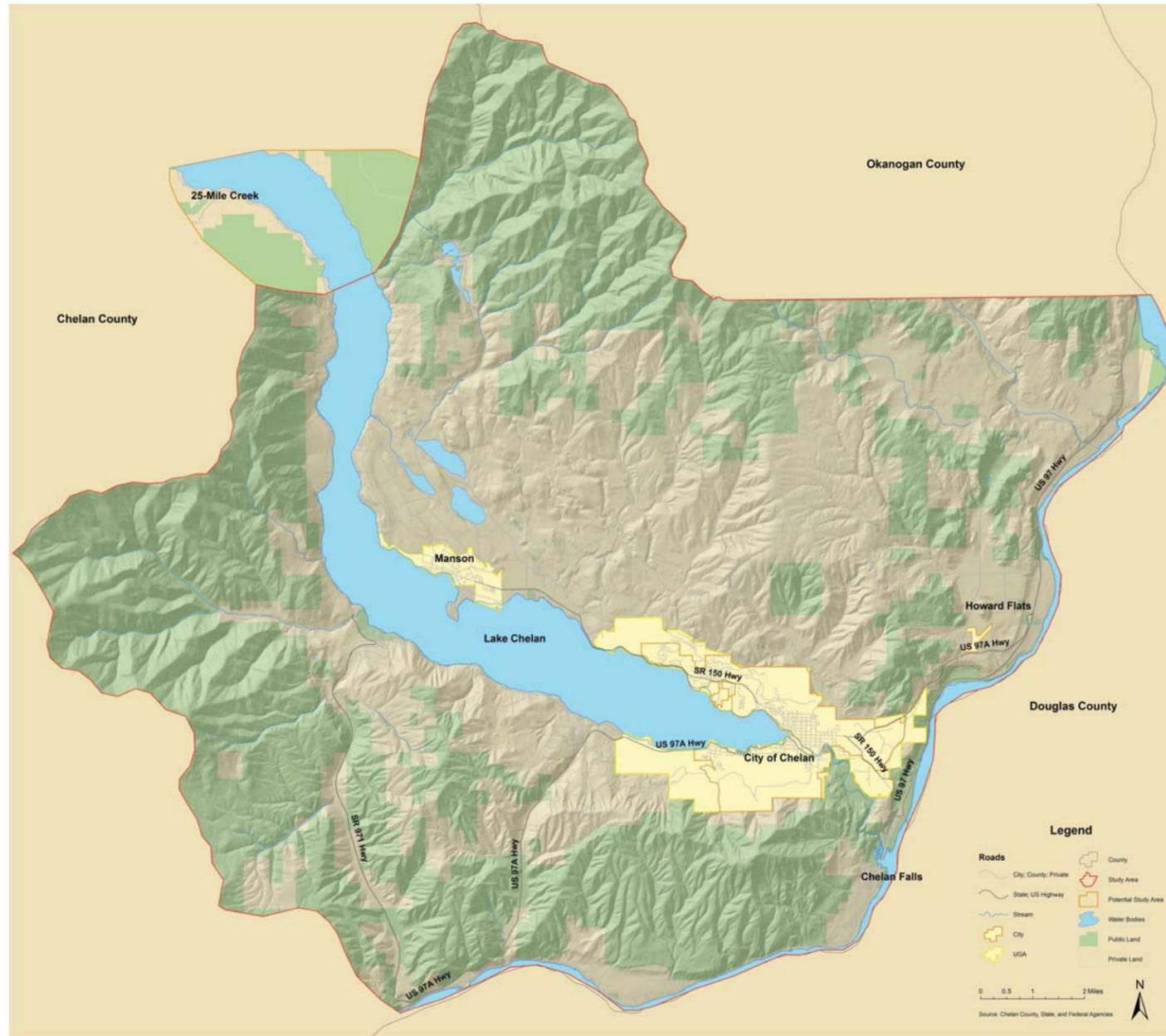


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Source: Chelan County, State, and Federal Agencies



TRANSPORTATION

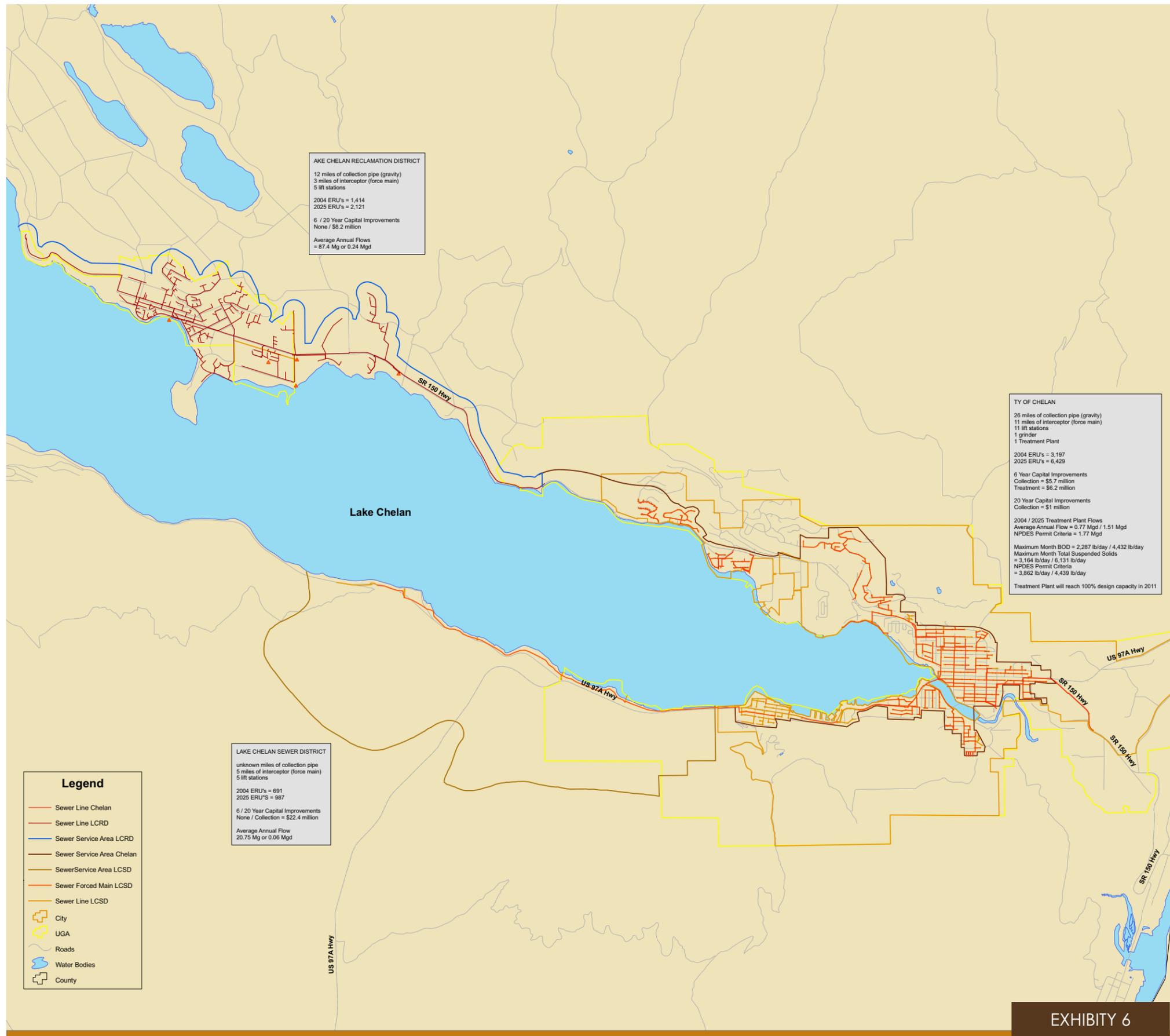


(City Of Chelan And Manson Area Subarea Plans Provided By Transpogroup)



LOWER LAKE CHELAN BASIN REGIONAL PLANNING STUDY





SEWER SYSTEM

LOWER LAKE CHELAN BASIN REGIONAL PLANNING STUDY



0 0.25 0.5 1 Miles

Source: Chelan County, State, and Federal Agencies



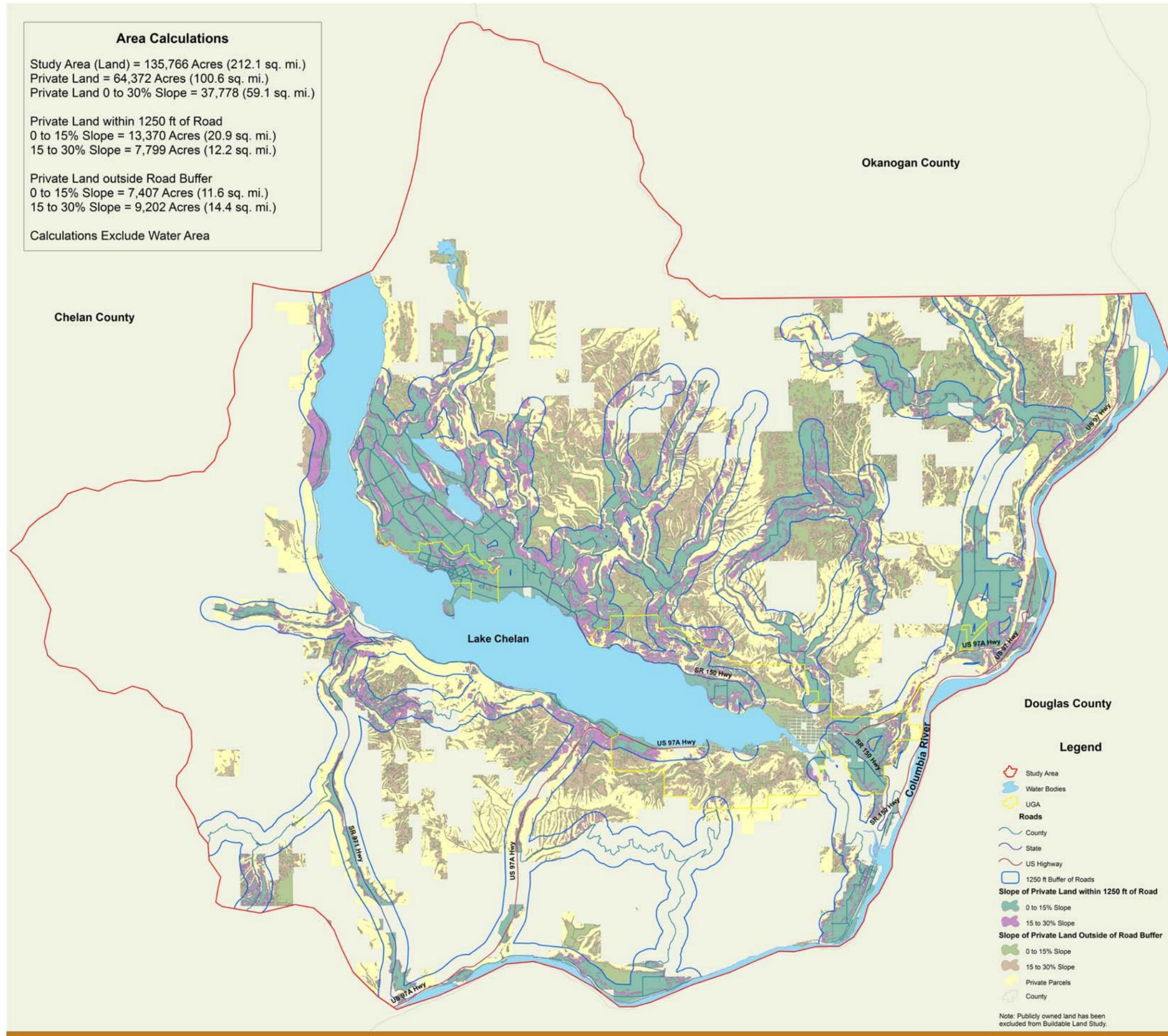
Area Calculations

Study Area (Land) = 135,766 Acres (212.1 sq. mi.)
 Private Land = 64,372 Acres (100.6 sq. mi.)
 Private Land 0 to 30% Slope = 37,778 (59.1 sq. mi.)

Private Land within 1250 ft of Road
 0 to 15% Slope = 13,370 Acres (20.9 sq. mi.)
 15 to 30% Slope = 7,799 Acres (12.2 sq. mi.)

Private Land outside Road Buffer
 0 to 15% Slope = 7,407 Acres (11.6 sq. mi.)
 15 to 30% Slope = 9,202 Acres (14.4 sq. mi.)

Calculations Exclude Water Area



BUILDABLE LAND 'A'

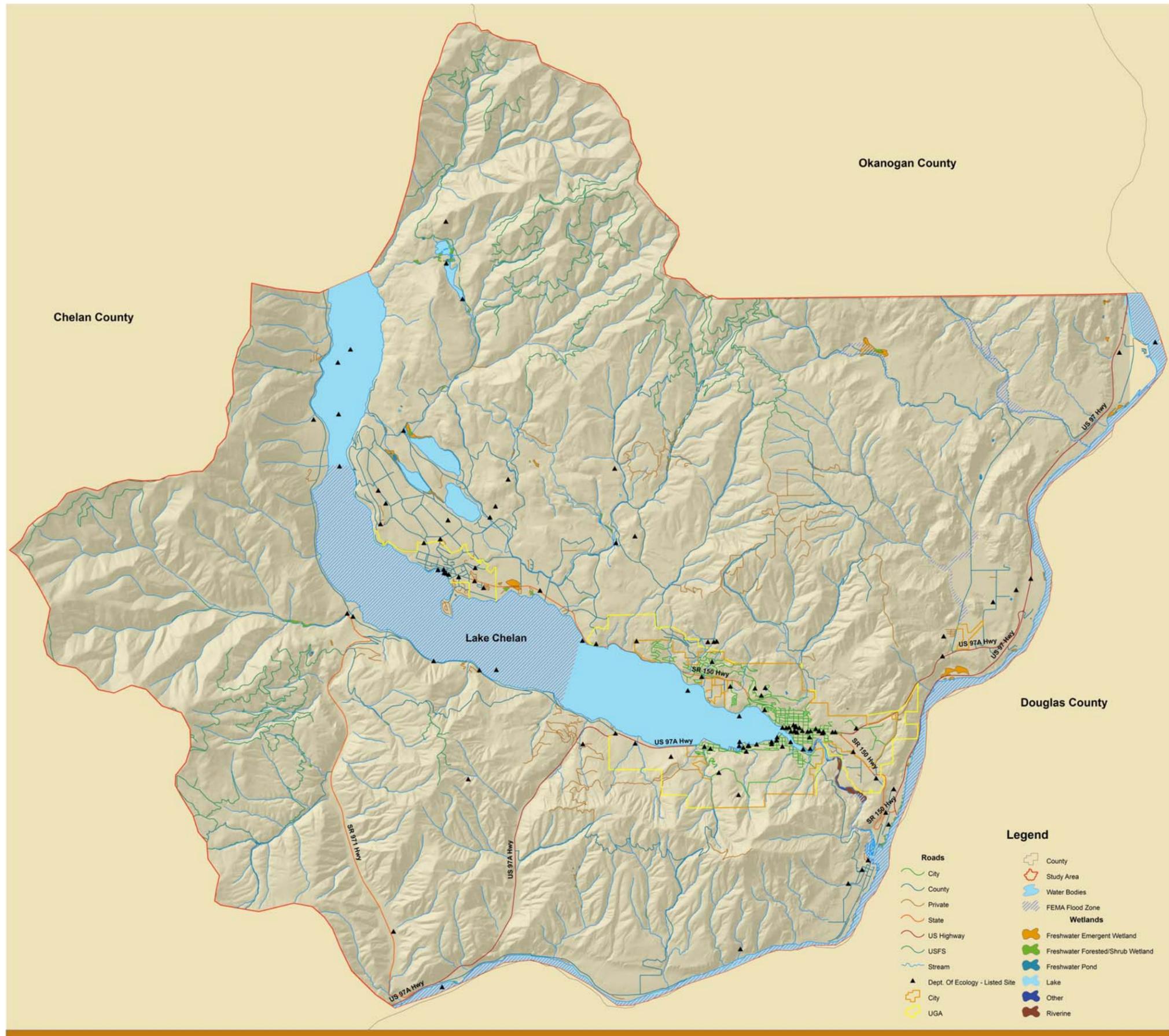
LOWER LAKE CHELAN BASIN REGIONAL PLANNING STUDY



0 0.5 1 2 Miles

Source: Chelan County, State, and Federal Agencies





Environmental Hazards

LOWER LAKE CHELAN BASIN REGIONAL PLANNING STUDY



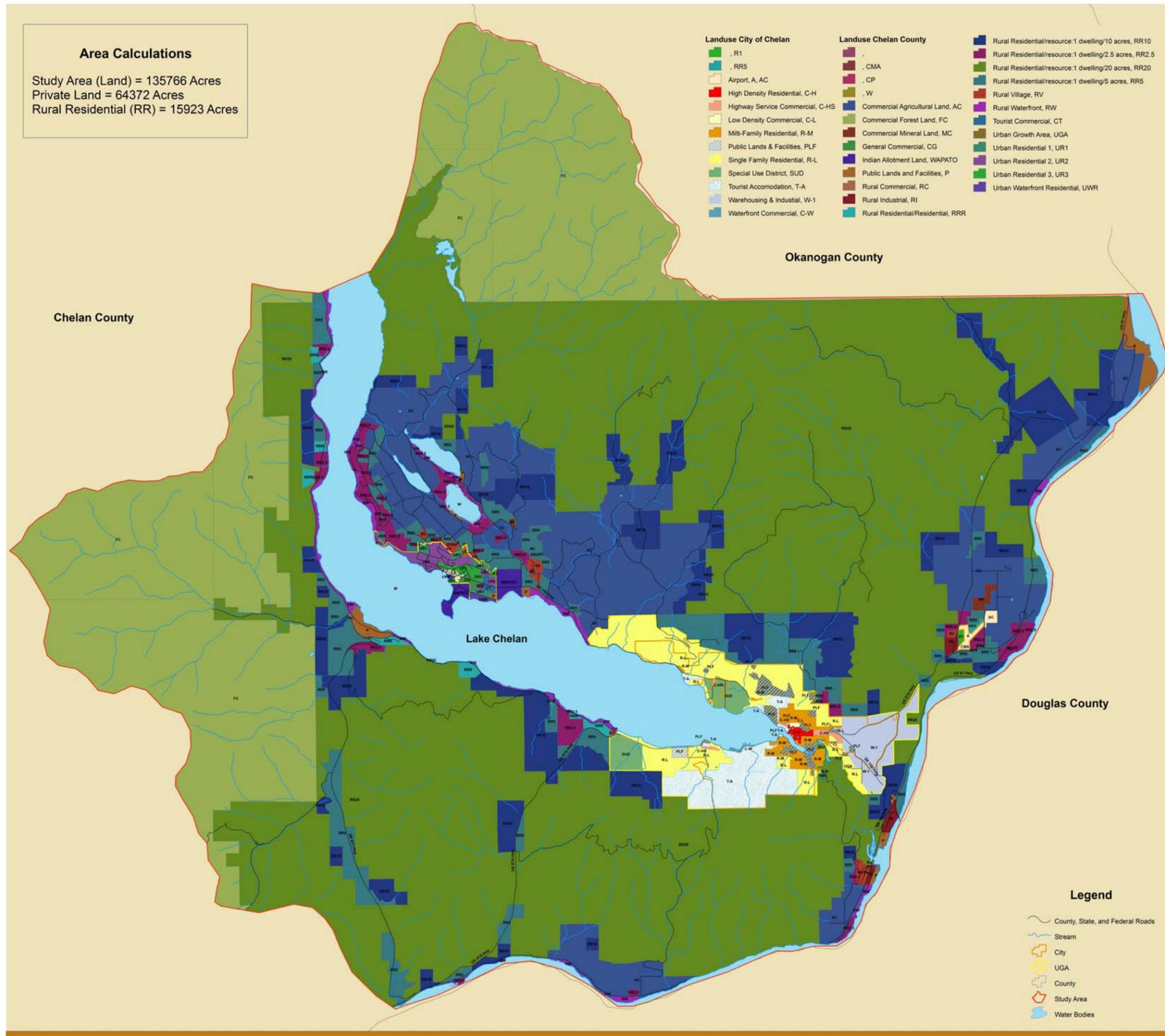
0 0.5 1 2 Miles
Source: Chelan County, State, and Federal Agencies



Area Calculations

Study Area (Land) = 135766 Acres
 Private Land = 64372 Acres
 Rural Residential (RR) = 15923 Acres

- | | | |
|------------------------------------|--------------------------------------|--|
| Landuse City of Chelan | Landuse Chelan County | |
| ■ R1 | ■ CMA | ■ Rural Residential/resource:1 dwelling/10 acres, RR10 |
| ■ RR5 | ■ CP | ■ Rural Residential/resource:1 dwelling/2.5 acres, RR2.5 |
| ■ Airport, A, AC | ■ W | ■ Rural Residential/resource:1 dwelling/20 acres, RR20 |
| ■ High Density Residential, C-H | ■ Commercial Agricultural Land, AC | ■ Rural Residential/resource:1 dwelling/5 acres, RR5 |
| ■ Highway Service Commercial, C-HS | ■ Commercial Forest Land, FC | ■ Rural Village, RV |
| ■ Low Density Commercial, C-L | ■ Commercial Mineral Land, MC | ■ Rural Waterfront, RW |
| ■ Multi-Family Residential, R-M | ■ General Commercial, CG | ■ Tourist Commercial, CT |
| ■ Public Lands & Facilities, PLF | ■ Indian Allotment Land, WAPATO | ■ Urban Growth Area, UGA |
| ■ Single Family Residential, R-L | ■ Public Lands and Facilities, P | ■ Urban Residential 1, UR1 |
| ■ Special Use District, SUD | ■ Rural Commercial, RC | ■ Urban Residential 2, UR2 |
| ■ Tourist Accomodation, T-A | ■ Rural Industrial, RI | ■ Urban Residential 3, UR3 |
| ■ Warehousing & Industrial, W-1 | ■ Rural Residential/Residential, RRR | ■ Urban Waterfront Residential, UWR |
| ■ Waterfront Commercial, C-W | | |



Legend

- County, State, and Federal Roads
- Stream
- City
- UGA
- County
- Study Area
- Water Bodies



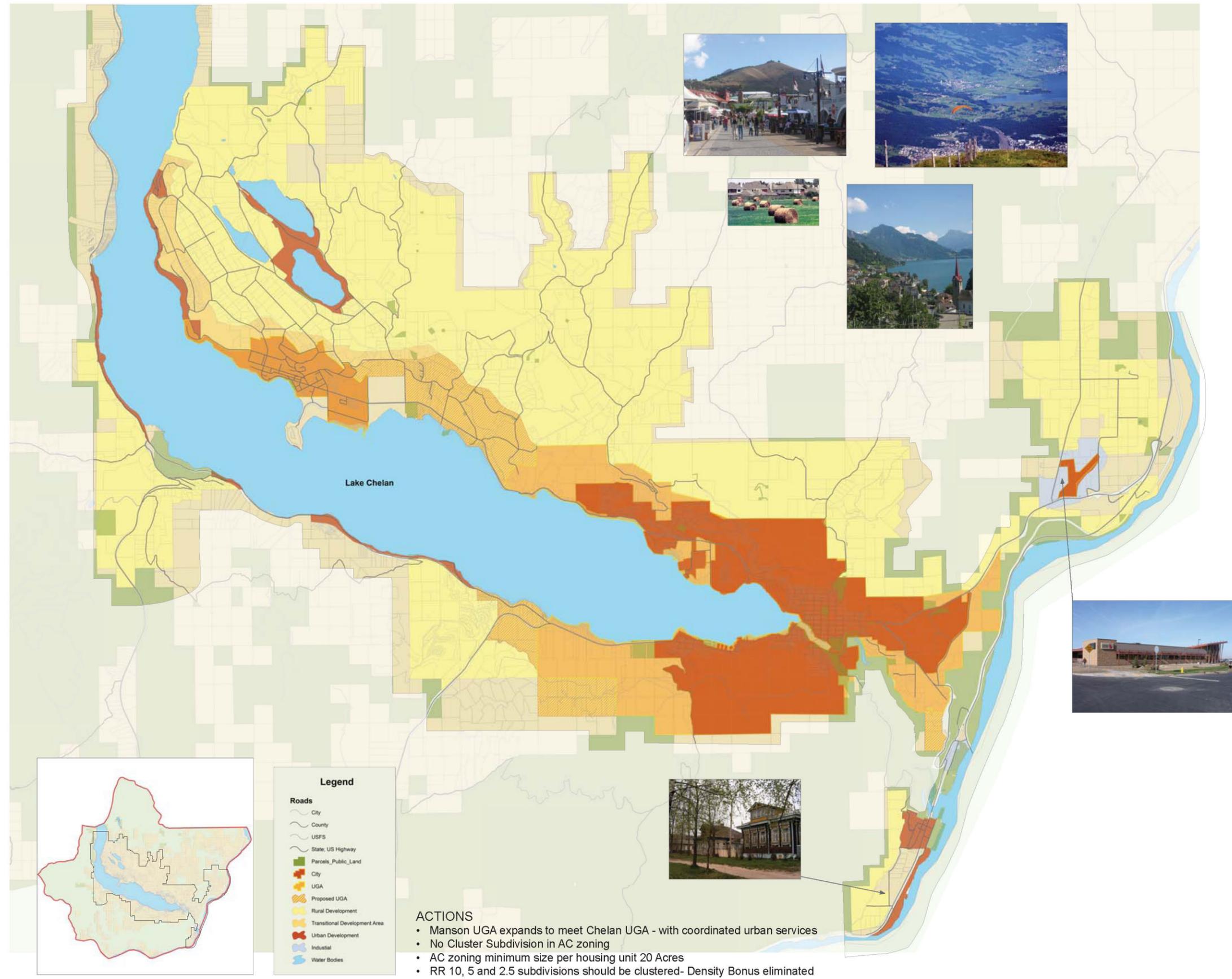
Land Use (Zoning)

LOWER LAKE CHELAN BASIN REGIONAL PLANNING STUDY



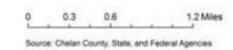
0 0.5 1 2 Miles
 Source: Chelan County, State, and Federal Agencies





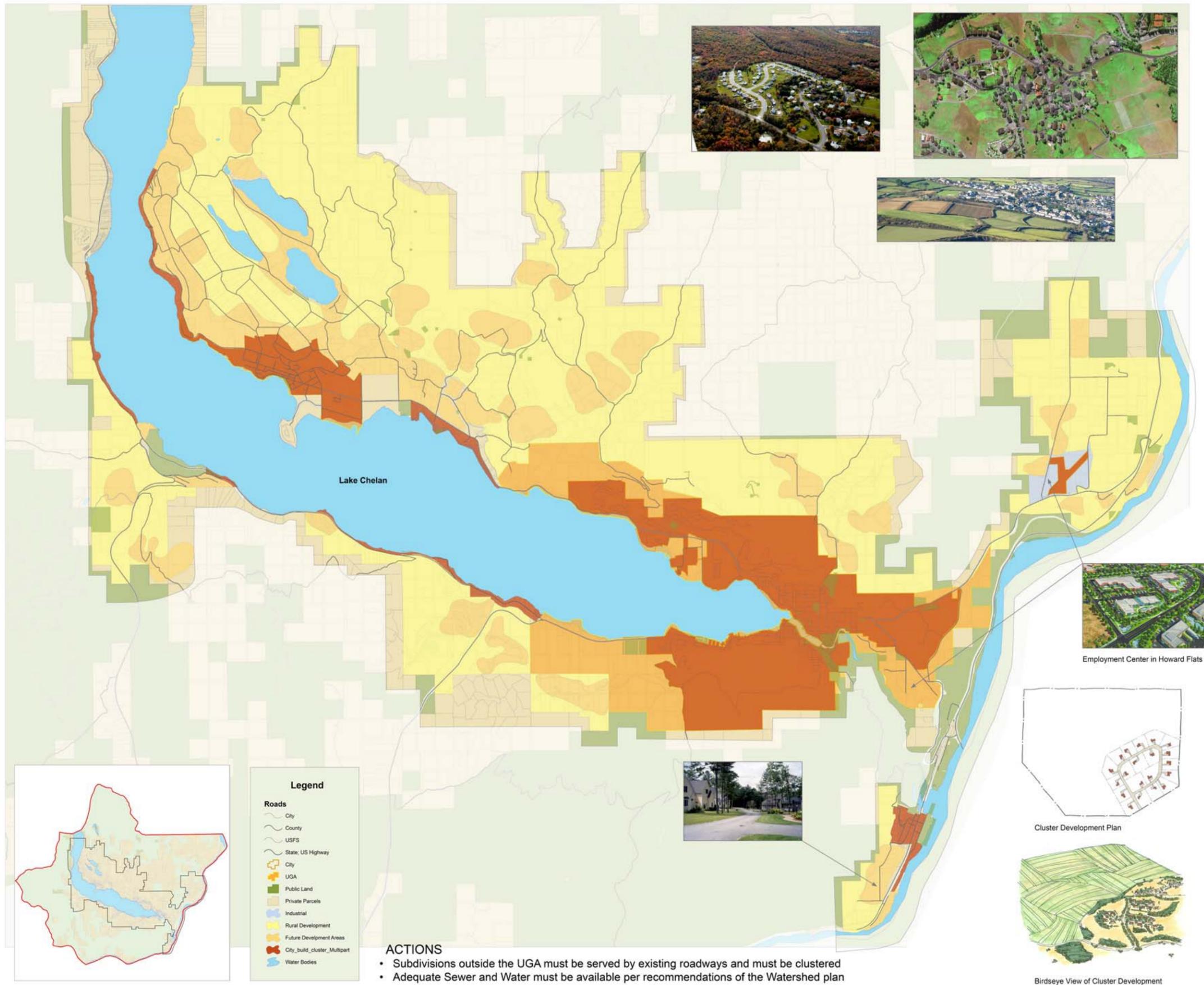
VISION OPTION 1: EXTENDED UGA DEVELOPMENT

LOWER LAKE CHELAN BASIN REGIONAL PLANNING STUDY



Source: Chelan County, State, and Federal Agencies



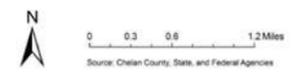


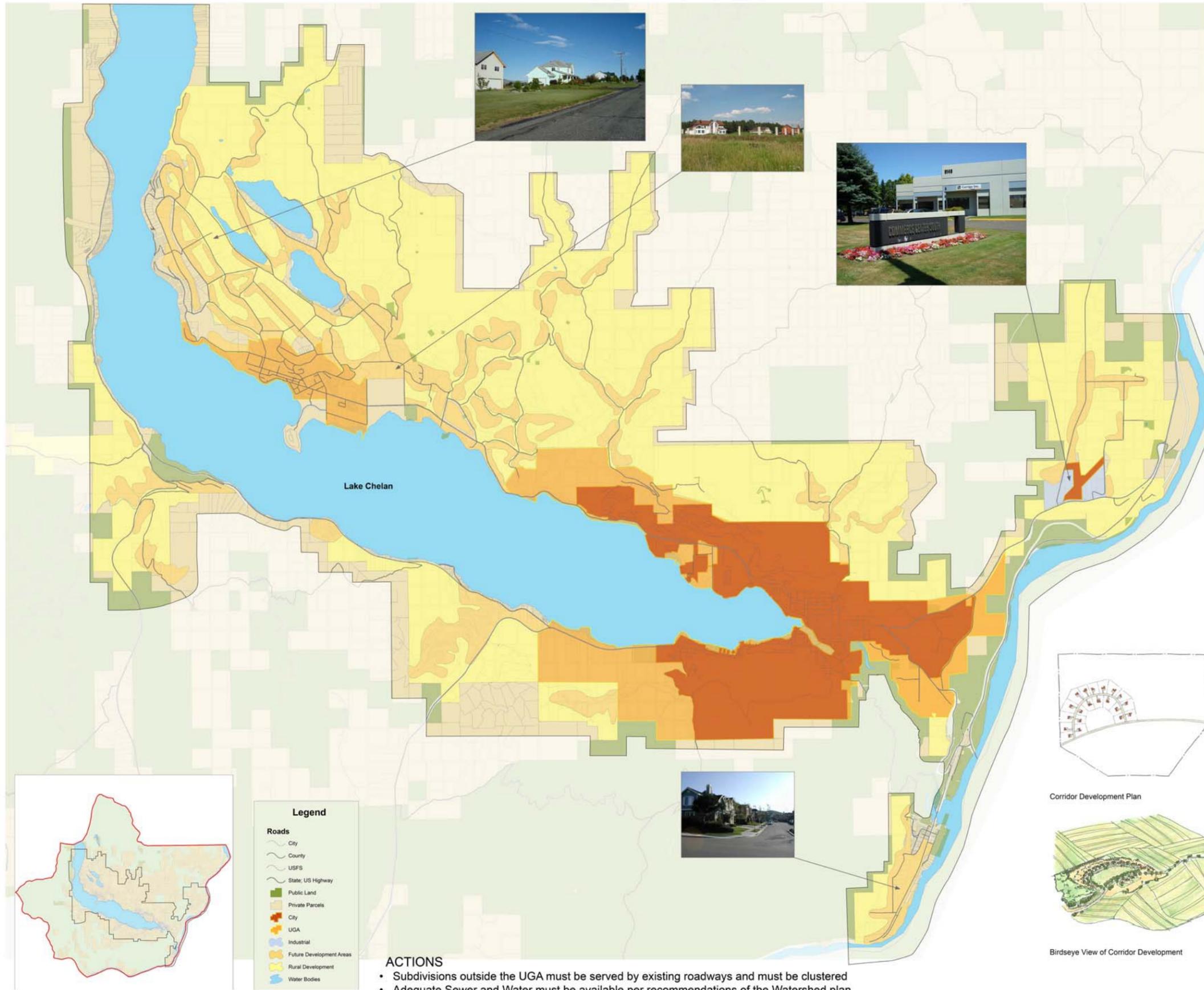
- ACTIONS**
- Subdivisions outside the UGA must be served by existing roadways and must be clustered
 - Adequate Sewer and Water must be available per recommendations of the Watershed plan



VISION OPTION 2: CLUSTER DEVELOPMENT

LOWER LAKE CHELAN BASIN REGIONAL PLANNING STUDY





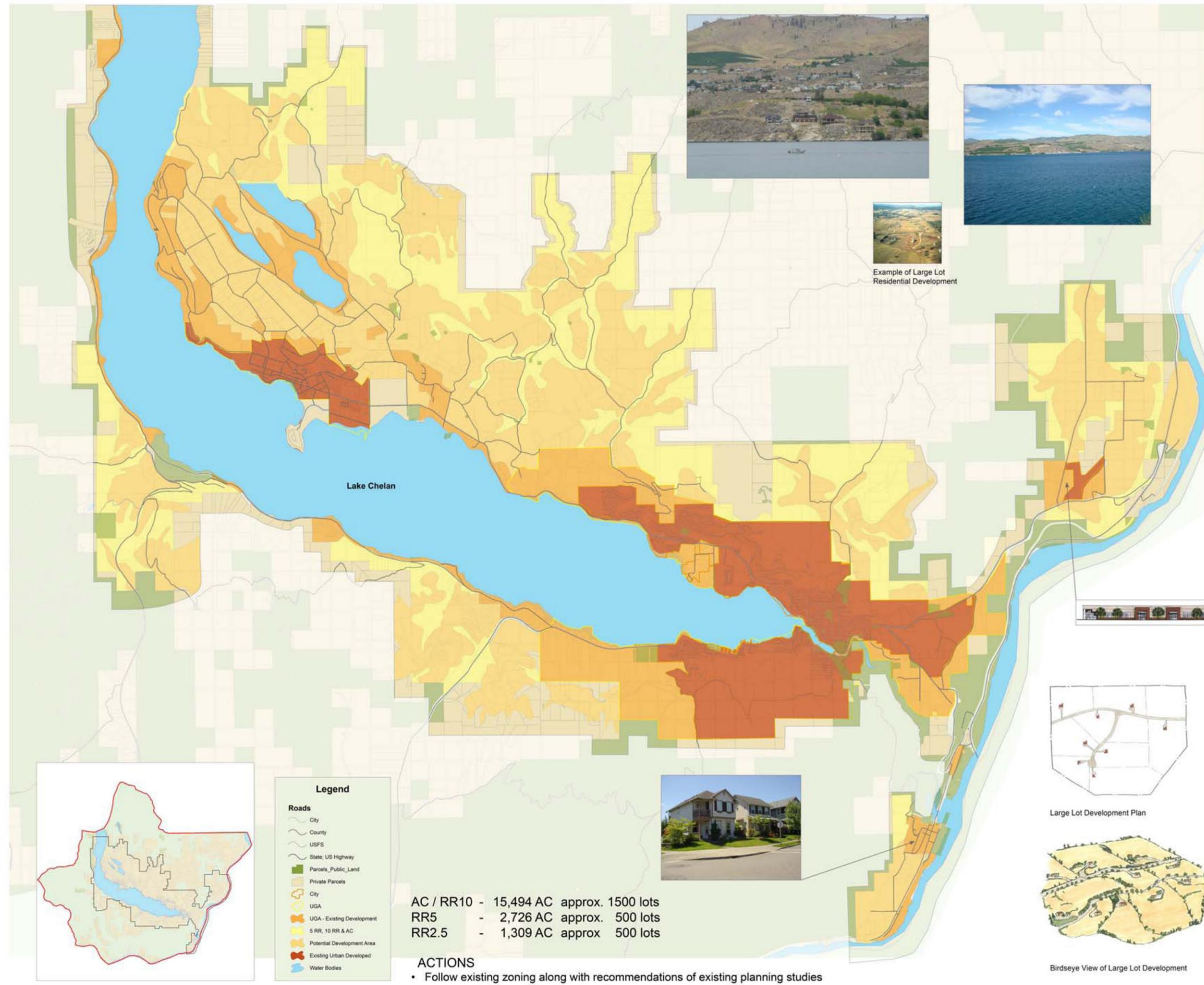
VISION OPTION 3: CORRIDOR DEVELOPMENT

LOWER LAKE CHELAN BASIN REGIONAL PLANNING STUDY



0 0.3 0.6 1.2 Miles
Source: Chelan County, State, and Federal Agencies





VISION OPTION 4: EXISTING ZONING DEVELOPMENT

LOWER LAKE CHELAN BASIN REGIONAL PLANNING STUDY

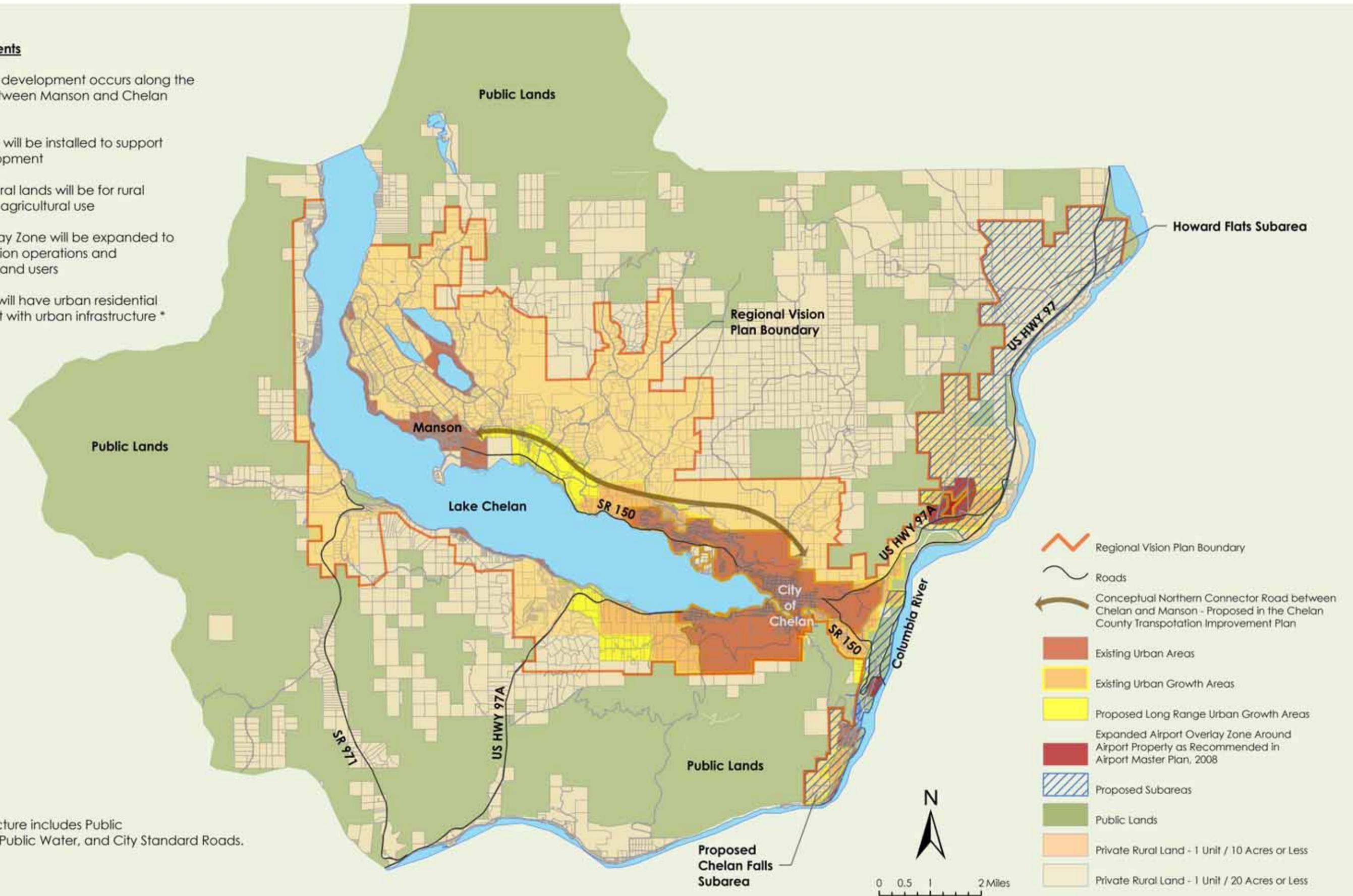


Source: Chelan County, State, and Federal Agencies



Plan Components

- Future urban development occurs along the Lake and between Manson and Chelan
- Infrastructure will be installed to support urban development
- Remaining rural lands will be for rural residential or agricultural use
- Airport Overlay Zone will be expanded to protect aviation operations and neighboring land users
- Chelan Falls will have urban residential development with urban infrastructure *



* Urban Infrastructure includes Public Sanitary Sewers, Public Water, and City Standard Roads.



APPENDIX A

Valley Vision Group's Vision Pillars

- “1. Economic Development: Create a vibrant economy valley-wide by enhancing and promoting the Historic Downtown(s) and establishing a business environment that will allow local businesses to survive and prosper, while striving for an economically diverse community with significant year-round tourist activity, living wage jobs and attractive opportunities for our minorities and youth.
- “2. Recreation, Parks and Land: Be a community committed to recreation, parks and lands. Develop a world-class environmentally responsible system of parks, recreational facilities, urban and rural trails, green spaces and open spaces throughout the Lake Chelan Valley that creates various year-round recreational opportunities, ensures public access to Lake Chelan and preserves the identity of this Valley for Lake Chelan Valley residents and guests.
- “3. Well Planned Community: Develop a well-planned community through development of a cohesive and sustainable growth management strategy (infrastructure, architecture, landscape, land planning and land development) that retains the historic small town charm of the Lake Chelan Valley, and significantly improves the appearance of the community in high-traffic corridors.
- “4. Affordable Housing: Provide diverse affordable options for housing. Promote a variety of residential densities and housing types that provide home ownership and rental opportunities for individuals and families of all socio-economic levels throughout the Lake Chelan Valley.
- “5. Beauty of the Valley: Protect and enhance the natural integrity, diversity and beauty of the Valley. Protect and enhance the natural integrity, diversity and beauty of the Lake Chelan Valley via policies for pollution (noise, air, water and light) and sustainability so as to preserve the Valley’s identity for future generations.
- “6. Healthy Safe Community: Create a healthy and safe environment for our community. Upgrade service levels of all capital facilities to adequately provide for the health, safety, welfare and education of Lake Chelan Valley residents and guests.
- “7. Arts: Encourage a creative, active and learning culture. Encourage a creative, active and learning culture through the development and expansion of a vibrant arts community.
- “8. Transportation: Develop a balanced, multi-modal transportation system. Develop a balanced, multi-modal transportation system. Create a pedestrian and bicycle-friendly Lake Chelan Valley that provides safe, convenient and efficient varying modes of transportation for all Lake Chelan Valley Residents, guests and business owners; that moves pedestrian, bicyclist, cars, transient riders, freight and preserves and enhances our quality of life.”

Valley Vision Pillars source: www.valleyvision.info