

SHORELINE DESIGN AREA PLAN

Sub-Area Plan to Greater East Wenatchee Comprehensive Plan
June 1992

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Douglas County Planning Department
Community Development Building
470 Ninth Street NE
East Wenatchee, Washington 98802

CITIZENS ADVISORY COMMITTEE

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TABLE OF CONTENTS

INTRODUCTION.....1
 Background.....1

Open Space	30
Goal and Policies	31
Design Criteria	32
.....	
.....	
.....	
.....	
40	
ECONOMIC DEVELOPMENT GOAL.....	35
.....	
.....	
.....	45
Commercial/Industrial Sites.....	36
Goal and Policies	39
Design Criteria	40
.....	
.....	
.....	46

TRANSPORTATION	43
.....	
.....	
.....	
.....	54
Transportation/Circulation Network.....	43
.....	
.....	
55	
Wenatchee Area Transportation Study.....	44
.....	
.....	
56	
Street Improvement and Corridor Design.....	44
.....	
.....	
.....	57
Summary Recommendations.....	48
Goal and Policies	48
Design Criteria	49
.....	
.....	
.....	61
TECHNICAL ASSISTANCE	51
.....	
.....	
.....	
64	
BIBLIOGRAPHY.....	53
.....	
.....	
.....	
.....	

INTRODUCTION

Background

In the summer of 1989, the Douglas County Board of Commissioners appointed a 15-member citizen advisory committee to examine an area located along and influenced by the Columbia River shoreline. The citizen advisory committee consisted of representatives from varying backgrounds and interests, including individuals with recreation, environment, and business viewpoints. In addition to these members, six representatives from state, county, and local government were selected to lend expertise to the study. Those members included the Director of Planning, the Director of Public Works, a County Commissioner, a member of the Parks Board, a representative of the City of East Wenatchee, and a representative from the Washington State Department of Transportation.

The committee was formed as part of the implementation of the Greater East Wenatchee Area Comprehensive Plan, adopted in 1988. During the public hearing process, and in response to public comments on the Comprehensive Plan, several policies and implementation criteria were included to address this unique resource. The comments indicated that there was a need to further define and achieve a balance between environmental considerations, recreational activities, and urban development along the Columbia River. The committee's charge was to examine the river resource and to determine long range goals and policies for the area. The initial committee meetings were moderated by Emmett P. Fiske, an organizational effectiveness specialist with the Washington State University Cooperative Extension agency. A scope of work was prepared and study area boundaries were developed during the initial public meetings. The following mission statement represents the committee's vision for its task:

"To develop a comprehensive plan for the Shoreline Design Area based on a review of various elements: wildlife habitat, cultural history, community needs, transportation, recreation, and economic development and to explore alternatives to preserve, develop, maintain, and enhance those elements."

Six subcommittees were formed to address the specific elements identified in the mission statement. These included wildlife habitat, cultural resources, community needs, transportation, recreation, and economic development. Each subcommittee consisted of five to eight members drawn from the general committee. Members were encouraged to participate in as many subcommittees as they wished and to meet as often as necessary to accomplish their task. The subcommittee's main function was to gather background and resource information pertinent to the individual elements, and to prepare specific management recommendations. This included conducting inventories and surveys, and evaluating present trends and potential impacts from growth and development.

Numerous public meetings, workshops, and field trips were a part of their routine. Subcommittee reports were then presented to the general committee for review and evaluation. This Plan represents the culmination of the Shoreline Design Committee's work and sets out goals, policies, and design criteria for land use planning in the Shoreline Design Area.

Purpose and Scope

The Shoreline Design Area Plan represents a long-term vision for the natural and physical enhancement of the area and development that achieves five primary goals. First, the Plan proposes to greatly improve public access to the river and shoreline by encouraging linkages through various types of trail systems between the riverfront and upland areas. Second, preservation of unique and sensitive shoreline areas, wetlands, riparian zones, drainages, gullies, and upland areas is emphasized. Third, the Plan provides for diverse recreational opportunities, both passive and active, for people of all ages and income levels. Fourth, economic diversification is aided by providing opportunities for commercial, industrial, and residential development throughout the Area. Finally, the Plan recommends a transportation and circulation network that would serve both local and regional traffic needs and which would complement existing and future land uses.

Location and Terrain

The Shoreline Design Area lies within the unincorporated area of Douglas County and within a portion of the incorporated area of the City of East Wenatchee. It encompasses an area approximately eleven miles in length, and is bounded by Lincoln Rock State Park to the north and Rock Island Hydro Park to the south. South of 41st Street, the Area extends from the Columbia River east to Sunset Highway (SR 28). North of 41st Street, the Area's eastern boundary is formed by the steep cliffs of the Douglas Plateau.

The Douglas County Shoreline Management Master Program defines the Columbia River shoreline as a Shoreline of State-wide Significance. The river stimulates an interest in recreation, commerce, and view property, and supports a wide array of aquatic and terrestrial wildlife in varied habitats. The Cascade Range to the west of the Shoreline Design Area enhances the natural beauty of the river and surrounding upland areas. The terrain and river exert a strong control over the agricultural economy and transportation network of the area.

Geology and Soils

The surficial geology of the river corridor is dominated by fluvial deposits and alluvial fans of Pleistocene to Recent Age. Rocky outcrops of Cretaceous Age Swakane Gneiss occur just south of the Odabashian-Olds Station Bridge.

The area is dissected by numerous gullies and ravines that drain into the Columbia. Most of these drainages are minor in nature; however, the Blue Grade and Sand Canyon drainage channels have been identified as 100-year flood hazard zones by the U.S. Army Corps of Engineers.

Soils in the area are generally characterized as Pogue-Quincy-Xerorthents, slope-dependent, with varying sand content. They occur between 600 and 1,800 feet in elevation, and are moderately to highly erodible. These soils tend to be very deep and excessively well drained. The high permeability of the soils in the area results in little overland flow of storm water, with rapid percolation into extensive aquifers along the Columbia. These aquifers act as important storage units for area water supplies.

Land Use

The Shoreline Design Area comprises three distinct areas that exhibit urban, agricultural, and natural environmental attributes. Each of these serves a specific function in the community. The first area is characterized by urban development, which is generally defined as more than one unit per two acres. This area is located between the Columbia River and Sunset Highway, north of Rock Island Hydro Park, and south of 41st Street. The extent of this area is 1,050 acres.

The second area is dominated by irrigated agriculture and is located between 41st Street and Lincoln Rock State Park. There are roughly 1,200 acres in this area.

The last area includes the natural environment immediately adjacent to the river and small drainages. This sensitive natural area consists of wetlands, riparian zones, and some upland areas.

Urban Area

The greatest concentration of residential development is located south of 29th Street, although several larger subdivisions have been platted between Crestview and 39th Street. Most of the major subdivisions in this area were developed before 1975 with lot sizes less than one-half acre. As of 1990, approximately 566 acres were developed for residential uses.

Approximately 430 acres are devoted to agricultural activities in this area, with over half that acreage located between 27th Street and the Odabashian Bridge. Smaller

agricultural properties, usually less than five acres in size, are intermixed with residential development south of 27th Street.

In this area, less than 20 acres are devoted to commercial use, and most of that acreage is located at the Grant Road/SR 28 intersection. Roughly, eight acres used for commercial purposes are located north of 20th Street and south of the Odabashian Bridge.

Only a small amount of acreage in the Shoreline Design Area is currently zoned and developed for industrial uses. That area is located south of the Grant Road/SR 28 intersection, and is less than 16 acres.

Rural Area

The area between 41st Street and Rocky Reach Dam is devoted primarily to agricultural activities. At present there are 45 residences, some of which are located together on a single parcel of land. Lot sizes range from 5 to 20 acres, generally becoming larger from south to north. The entire area north of 41st Street is currently zoned Rural Agriculture; however, its Comprehensive Plan designation is Commercial Agriculture.

Natural Environment

Within the Shoreline Design Area, a total of 258 acres is undeveloped at this time. Most of the vacant lands are located next to the river and are owned by the Washington State Department of Transportation. The remaining undeveloped acreage is scattered among residential and agricultural uses.

Factors Influencing Development

Several factors influence development in this area. They include the existing and proposed land use designations, population of the region, mobility, trends in recreation, accessibility, utilities and infrastructure, and the area's resources. The following factors play a significant role within the Shoreline Design Area:

Domestic Sewer

Approximately one-third of the Shoreline Design Area is within the Douglas County Sewer District; however, less than an eighth of the Area is actually served by domestic sewer. Sewer services are nonexistent north of the Porter's Pond area and south of 2nd Street S.E. Septic systems are the norm within those areas. The Sewer District has indicated that there is enough capacity to serve all residential growth and most commercial activities planned for the area south of 41st Street. The Sewer District's Treatment Facility is located west of Sunset Highway approximately .5 mile

north of 9th Street N.E. The treatment plant currently operates at 60% of capacity, and expansion of the system is planned.

Because of soil types, the location of the East Wenatchee Water District's water supply wells, and the presence of aquifers and aquifer recharge systems in the Design Area, development should be limited to lots at least one acre in size if located within .25 mile of the Columbia River. Until domestic sewer is available, the larger lot size would help reduce potential groundwater contamination from on-site sewage systems.

Domestic Water

The East Wenatchee Water District currently serves all locales within the Shoreline Design Area south of 41st Street. Water is available for most future growth, although additional storage reservoirs may be required, depending on the scale of development. Future expansion of the water system within the Shoreline Design Area would occur as growth takes place. However, according to the East Wenatchee Water District Comprehensive Plan, the distribution system is deficient in line size and pressure in many areas, with upgrading necessary. The entire system is served by four wells, three of which are located in the Shoreline Design Area between 19th and 23rd Streets. The static water levels of these wells are approximately 23 feet below ground surface. The fourth well is located at 45th Street. At present, the Water District is test drilling for a new well at 19th Street, but these tests have been inconclusive. Future wells may be drilled in the vicinity of the shoreline. Problems could occur in these areas if ground water becomes contaminated.

The area between 45th Street and Rocky Reach Dam, known as Baker Flats, is presently not served by domestic water, with the exception of a large fruit warehouse, which receives water from the Regional Water Supply. This system is owned and operated by the City of Wenatchee and the Chelan County Public Utility District. It is served by an array of wells located north of Rocky Reach Dam, and water is distributed through a large transmission line that parallels the Columbia River from the wellheads to the Odabashian Bridge. Due to its proximity and capacity, the Regional Water Supply has the potential to serve the entire Design Area.

Transportation System

Within the Shoreline Design Area, there is an established street network, which includes major and secondary arterials, collectors, and local access streets. However, the arterials and collector streets often work independently of each other, resulting in overall poor circulation. They are generally below design standards.

Population

Population projections are used to forecast growth pressures a community is expected to face in the future. Changes in size, composition, and distribution of the

population determine the level of demand for future facilities and services, and assist in anticipating potential problems if population growth is not accommodated in a wise manner. For the purposes of this Plan, population projections are based on land uses designated under the Plan, and allowable as outlined in the Land Use Element, Chapter III. No timeframe is given.

Urban Area

As of December 1991, there were a total of 731 residential dwelling units within the portion of the Shoreline Design Area falling inside the urban growth boundary (see Figure 1). The average density was less than one dwelling unit per net acre. Approximately 1,750 people resided in the area. By excluding those areas that are currently underdeveloped or developed for agriculture, the density increases to two units per net acre, well below the maximum density permissible under the present zoning category (S-R Suburban Residential). Under the current zoning, single family and duplex units are allowed as a permitted use. Multi-family housing (three or more units) is allowed as a Planned Residential Development. The average number of single family residential lots allowed per net acre at 100% of allowable site coverage is 4.6 units if served by domestic sewer, and 3.8 units if on-site sewage systems are used. Therefore, an additional 2,226 to 3,627 dwelling units could be constructed if domestic sewer is utilized, and 1,452 to 1,839 dwelling units if on-site systems are used. The overall projected population of this area under the current zoning is between 5,696 and 11,800 residents. These population figures may vary between 8% and 14%, depending on major topographical constraints. Multi-family development by a Planned Residential Development is not included in these figures, and may vary depending on the densities allowed. The overall projected population figures include areas previously developed as residential.

Final build-out of the study area under the current S-R zoning category would depend on a number of variables, including timing of construction, availability of sewer, water, roads, topography, number of units permitted, and type of zoning categories projected in the future.

Agricultural Area

There are roughly 45 dwelling units located in the agricultural area north of 41st Street. This area is currently in the Rural Agricultural zoning category, which permits all agricultural activities in conjunction with farming practices, including the construction of residential dwelling units. The potential maximum density of this area is undetermined as yet, but is dependent on the availability of infrastructure and public services.

Population Forecast

As noted above, the entire urban area is currently designated as S-R Suburban Residential. Under the proposed land use designations, this area has been divided into

a total of nine land use categories including three residential designations, three commercial designations, an environmental designation, and a parks/open space designation. Between 484 and 750 gross acres are available for development. The maximum density or forecasted population is then determined by the type of zoning designation and degree of current development, less 20% for roads and assuming an average family size of 2.72 persons in residential area. Projected population within the urban area may be between 7,000 and 13,600 persons at maximum development under the proposed land use designations. The increase in population under the proposed land uses is due primarily to density increases allowed in areas designated for multi-family development as opposed to the single-family Suburban Residential classification. Please refer to the land use map, Figure 2, for proposed land use designations.

LAND USE ELEMENT

The purpose of the Land Use Element is to provide policies to assist decision making regarding future land utilization within the Shoreline Design Area. The extent, density, configuration, and interrelationships of these land uses are outlined on the land use map and in the text.

Land Use Map

The land use map presents a generalized land use projection for the Shoreline Design Area and its relationship to land uses identified in the Greater East Wenatchee Area Comprehensive Plan. The designations for the Shoreline Design Area represent land use trends and land capabilities in the area. Goals, policies, and recommendations for the various designations on the map are presented in detail, with accompanying rationale, in the following sections of the Plan.

It should be noted that the map delineations are somewhat generalized in nature. Changing conditions and specific physical site conditions require that a degree of flexibility be maintained in the preparation and interpretation of the land use map. The map should be used and interpreted in conjunction with all the elements of the accompanying text.

Design Criteria

The design criteria establish guidelines for economic development, natural features, linkage/circulation, site and building design, landscaping, and street graphics. The manner in which the design criteria are implemented will determine in large part the shoreline design of the East Wenatchee area. It is intended that the design criteria will assist development in adhering to the desired form of the area as expressed by the Plan's goals and policies. The overall design concept of a project should be evaluated on how the project relates to the design criteria for each element, which includes community needs, environmental conservation, recreation, economic development, and transportation. Additionally, the user or client group should be clearly identified to direct consideration of the design approach, and to assist in the analysis of alternatives should issues in design arise.

The design concept should be harmonious both when viewed in parts and when viewed in context with natural features and the character of development in the area where the project is to be located. No one style of design is encouraged or discouraged by these criteria, as it is recognized that design, materials, and construction methods will evolve over time.

COMMUNITY NEEDS

There are many factors that combine to give a community a unique identity and character. Most of these factors revolve around the physical characteristics of the area, whereas others include more intangible items. In the Shoreline Design Area, the physical properties that help to define its character include the geology of the area, the natural environment and its inherent attributes such as recreational opportunities and wildlife habitat, the layout of the community, including the residential, commercial, and agricultural areas, the transportation network, and the historical and cultural resources of the area. The more intangible items are those dealing with economic viability and development and the overall perceived quality of life.

In September of 1991, a citizens' survey was conducted which yielded some interesting results related to the perceived needs of Douglas County and the Shoreline Design Area. When asked to rank certain issues as either "very important", "important", "unimportant", or "don't know", 90% of those responding from the East Wenatchee area felt that maintaining farmland for agricultural activities was very important or important. Similarly, 80% indicated that preserving Douglas County's rural character was either very important or important. From these results, it appears that a number of people in the East Wenatchee area view the rural, agricultural nature of the community as an identifying characteristic worth preserving.

Economic development has been and continues to be an important issue in the East Wenatchee Area. A survey conducted in April, 1988 had 80% of those responding indicating that increased job opportunities and encouraging development were important to the community. The results of this survey also indicate that new industry should be encouraged to locate in the area (81%). Similarly, in the 1991 survey, increased employment opportunities were seen as "very important" or "important" by 84% of the respondents.

The Shoreline Design Committee conducted a survey of the Eastmont High School students in the spring of 1990. Fifty-nine percent of the total student body completed and returned the questionnaire. Of those responding, 71% indicated that they had been to the East Wenatchee shoreline for a variety of purposes, including walking, bicycling, motorbike riding, horseback riding, and fishing. When asked how important it is to preserve the shoreline's natural riparian areas and need for wildlife preservation, 70% rated it very high. They also would like to see more parks, and feel that the following are missing from our existing park system: volleyball, picnic areas, concessions, swim areas, children's playgrounds, beaches, clean restrooms, tennis courts, parking, and areas for concerts.

As demonstrated by the results of these surveys, the needs of the community are many and varied, and yet the connection and interrelation between these needs is strong. For example, the location of a subdivision or park will inevitably affect the natural environment and the transportation network. Therefore, one unspoken goal of

the Shoreline Design study was to ultimately show the interrelatedness of the diverse factors that give the area its unique character.

Proposed Residential Land Uses

Four land use designations were developed to allow for a diversity of housing options throughout the shoreline Design Area. Within the urban area, maximum densities will be influenced by available utilities, soil conditions, and transportation systems. The type and density of land use activities located near designated environmentally sensitive areas, including the 200 foot shoreline area governed by the Douglas County Shoreline Master Program, as well as critical wildlife habitats and surface water drainages, should be determined during a planned development or special permit process. This process should encourage development to take environmental features, public access, and view corridors into consideration. Another important factor for all land use decisions should be the availability of, or potential for, services to maximize efficiency. Some of these services include public sewer and water systems, schools, roads, and other facilities.

Chapter III sets forth implementation criteria that allow for a diversity of housing options. The following residential categories reflect these criteria. The designations are shown on the land use map.

Residential Low allows single-family and two-family dwellings.

Residential Medium allows single, two-family, and multi-family dwellings.

Residential High allows a variety of activities, such as senior centers, professional and public offices, and some retail activity to support higher density development, along with single, two-family, and multi-family dwellings.

Planned Residential Development is permitted within all residential designations subject to specific criteria which may include buffering between less intensive land uses, landscaping, parking, trail connections, open space, preservation of environmental areas, and recreational amenities.

Proposed Agricultural Land Uses

Two agricultural land use designations were developed for the area north of 41st Street. The designations related directly to the varying intensity of agricultural activity in the area. The agricultural activity is considered the primary use of the land, with residential uses considered secondary. Public facilities and services should be provided at levels appropriate for rural uses. The density standards for residential uses should be designated to reduce conflicts with agricultural activity by developing

appropriate buffering setbacks, natural boundaries, or both. These land use designations are shown on the land use map.

Suburban Agricultural allows general farming, horticulture, and the raising of livestock for personal use as primary uses. Family dwellings are permitted as a secondary use provided that only one dwelling unit is permitted per five acres.

Commercial Agricultural allows similar uses as above, except to allow the commercial raising of livestock. Family dwellings are permitted at a density of one unit per ten acres.

COMMUNITY NEEDS GOAL:

To maintain and improve the quality of life, attitude, and character of the community by encouraging long term public commitment to the stewardship of the shoreline; and by ensuring adequate facilities, and cooperation between public and private entities.

Policies:

1. Emphasize the coordination of existing programs, facilities, resources, and materials to the extent that they support the whole river system concept.
2. Pursue a wide variety of private and public funding sources and encourage business and community service organizations to develop trails, facilities, and amenities to enhance and protect areas within the Shoreline Design Area.
3. Encourage the County Commissioners to establish a Task Force to implement and coordinate public/private agencies, service organizations, and individuals to develop facilities, amenities, and research funding sources within the Shoreline Design Area. The Task Force should include some members of the Shoreline Design Committee to help maintain the integrity of the Shoreline Design Area Plan.
4. The Shoreline Design Area Plan should be reviewed and updated at least every five years. All plan revisions should be evaluated in light of current activities and new actions proposed on a yearly basis in order to evaluate the cumulative impacts.
5. The Planning Commission shall be responsible for coordinating plans and actions and mediating conflicts relating to the Shoreline Design Area.
6. Encourage the development of local regulations to require all stream banks, steep slopes, environmental areas, and drainageways to be

maintained and enhanced in a timely manner in conjunction with development.

7. Encourage public/private organizations and individuals to develop programs on the Columbia River for educational purposes.
8. Encourage education, interpretive sites, signs, and brochures that identify river resource opportunities, hazards, and user responsibilities. Emphasize the Columbia River shoreline as a whole system with particular focus on natural resources, archaeological and cultural history, recreation, and economic activities. This information should be coordinated between agencies and be compatible from site to site.
9. Coordinate land use activities with available infrastructure such as water, power, sewer, parks, streets, and school facilities.
10. Encourage new development to occur in such a manner as to promote neighborhood identity and pride, an attractive living environment, and minimizing land use conflicts.
11. Encourage development of support programs for senior citizens that will improve access to services and provide recreational opportunities.
12. In all cases of residential development adjacent to sensitive areas and the shoreline environment, landscape buffering, berms, and/or natural features should be used to mitigate potential impacts. Adjacent to environmentally sensitive areas, landscape buffering should include plants similar in nature to the area being protected and/or plants indigenous to the Columbia River.
13. Encourage the usage and development of ordinances and regulations that would prohibit the use of projectile weapons within the area now known as the Department of Transportation right-of-way.
14. Public facilities should be coordinated to provide opportunities for all users regardless of age, income, race, sex, or disability.
15. Preserve the character of the area by maintaining significant trees, tree lines, and wooded groves to the maximum extent necessary when developing parks and industrial, commercial, and residential properties.
16. Remove physical obstacles for people with disabilities and elderly persons in pedestrian facilities, private and public buildings.

17. Residential development should promote variety and innovation in design, relationship to public facilities, trails, parks, and environmentally sensitive areas.
18. All residential and multi-family development should be encouraged to connect to the sewer due to sensitive lands and inadequate soils along the shoreline.
19. Septic tank use should be permitted only in low-density areas with less than one dwelling unit per acre.
20. Maintain natural areas on site to protect steep slopes, streams, wetlands, wildlife habitat, and drainages, and revegetate these areas.
21. Coordinate proposed development with current site planning and development efforts in adjoining areas to take advantage of opportunities to mutually improve development design.
22. Trail systems established north of Odabashian Bridge should occur in a manner that will be compatible with orchard operations. This may include establishing adequate buffering between these uses through landscaping and fencing.
23. All development proposals within the Shoreline Design Area shall demonstrate at the planning stage that such development complies with the adopted goals, policies, and design criteria of the 1988 Greater East Wenatchee Area Comprehensive Plan, the Douglas County Shoreline Master Program, and the Shoreline Design Area Plan.

ENVIRONMENTAL CONSERVATION

Natural Resources and Environment

The Columbia River and its shoreline are critical components of the area's natural resource system and environment. The Shoreline Design Area sustains a wide variety of plant and animal life because it provides a diversity of habitats. Habitat types vary due to moisture levels, soil types, and topography. The principal habitats along the river consist of wetland, riparian, upland steppe, agricultural, and urban areas. In many locations, these habitats are integrated into one another. Internal variation within habitat types is also important from the standpoint of wildlife.

Key areas for wildlife and wildlife habitat are found within wetlands and riparian zones adjacent to the Columbia River, and in gullies and some upland areas. These areas are important due to their proximity to water, adequate food supplies, and cover for nesting, safety, and shelter. Allowable land uses in these areas should be limited to those that are compatible with and/or beneficial to wildlife.

Each wildlife species has distinct habitat requirements. Wildlife habitat must be located properly and maintained in sufficient quantity and quality if it is to support a wealth and variety of wildlife species. The arrangement of habitats is also important, because most animals require more than one type of habitat to survive. Where two or more habitat types come together, there is an ecotone, or "edge". The border between riparian and upland areas is an example of an edge. Such areas are extremely valuable to wildlife because they satisfy diverse needs in one location.

Wetlands

Numerous wetland areas were identified during a 1985 environmental review by the Washington State Department of Transportation. Wetlands are generally defined as areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. They are distinguished from riparian zones by the degree of adaptation of vegetation to saturated soil conditions.

Most of the wetlands in the Shoreline Design Area are found near the Columbia River. There is very little open water in the Shoreline Design Area; however, high river levels, groundwater, and irrigation overflow provide moisture levels sufficient to foster a dense, lush shrub-grass understory and stands of cottonwoods and poplars. The predominant vegetation is willow, cottonwood, and reed canary grass.

Wetlands serve several functions: sediment retention, groundwater recharge, floodwater storage, food production, fish and wildlife habitat, open space, and

aesthetic appeal. They have considerable water absorption and storage capacity, thus are capable of reducing erosion and flood damage. Wetlands in this area are especially valuable to wildlife because of the developed nature of the uplands and rarity of wetlands in a shrub-steppe environment. The wetlands are an important visual element in the Shoreline Design Area.

Riparian Areas

Vegetation in the riparian areas generally consists of a cottonwood, poplar, willow, dogwood, hawthorn, wild rose, snowberry, and reed canary grass association with moderate to heavy ground cover. Riparian areas occur intermittently along the shoreline and in drainageways. In mature stands, cottonwood trees form a fairly complete canopy and may reach 60 to 70 feet in height. The canopy creates its own environment, with increases in humidity and modifications of temperature. In this area, riparian vegetation is striking because of the contrast with the upland steppe vegetation.

Upland Steppe

Upland steppe vegetation consists primarily of a sagebrush, rabbitbrush, and bunchgrass association occurring in scattered locations along the shoreline, extending laterally away from the river. Smaller trees and shrubs such as black locust, Russian olive, Columbia River juniper, Ponderosa pine, and serviceberry also occur in these areas.

Other

Other types of habitat also exist within irrigated agriculture and urban residential areas. Water impoundments, seeps, canal rights-of-way, fencerows, and the variety of natural and ornamental landscaping provide habitat for nesting, rearing of young, and wintering wildlife.

Animals

Birds are the most common form of wildlife seen along the river corridor. Ground nesting birds, waterfowl, shorebirds and birds of prey share the habitat with small mammals and fish which depend on such areas for food, nesting, and cover. The occurrence of birds and other vertebrates was studied over a five-year period and has been described by season in the Rock Island Dam Pre-flood Wildlife Inventory. Another study conducted on bald eagles is summarized in this section.

California quail, cottontail rabbit, muskrat, striped skunk, beaver, raccoon, river otter, and meadow mice are the most abundant mammals, although mule deer are occasionally seen along the shoreline. Mallard ducks, ring-necked ducks, American wigeons, and Canada geese are the most numerous waterfowl. Common flickers, white crowned sparrows, juncos, doves, horned larks, sparrows, house finches, and varied thrushes are the most numerous songbirds. Red-tailed hawks, Cooper's hawks,

sharp-shinned hawks, marsh hawks, and American kestrels also frequent that area. In all, 160 bird, 35 mammals, seven reptile, and three amphibian species were recorded for the shoreline areas of the Rock Island pool, many of which would be found in the Shoreline Design Area. Most of these species can co-exist with man if sufficient natural habitat remains.

Bald Eagles

The U.S. Fish and Wildlife Service, and the Washington Department of Wildlife classify the bald eagle as threatened in this portion of its range. Bald eagles use the mid-Columbia River as a wintering area. They arrive in October, with peak abundance occurring during January and February. All but resident eagles leave in March and April for nesting areas. The factors that appear to be responsible for the winter distribution of bald eagles include prey base or food supply and availability of perch sites. Throughout the Shoreline Design Area, eagles hunt for aquatic and terrestrial prey and perch in trees along the river's edge. Because large trees are relatively scarce along the shoreline, they are of great importance. Stands selected for use by bald eagles are usually made up of mature Ponderosa pines and cottonwoods with well developed canopies and strong limbs about 60 feet high. The trees provide the eagles physical protection and a good view of the surrounding area.

Known perch sites include the riparian area south of Rocky Reach Dam, the Cottonwood Grove, an area north of the Odabashian Bridge, Cox's Pond, the Blue Grade drainage, Porter's Pone, and an area south of 15th Street. All these areas parallel the shoreline.

Environmentally Sensitive Areas

Six specific areas and a linear corridor along the steep bank of the river shoreline were identified and designated as environmentally sensitive. Although these areas were each assessed independently, the interrelationship of habitat types is important to wildlife. It is also important to maintain contiguous habitat areas. Large, contiguous areas support a more diverse wildlife community, provide increased buffers from disturbance, generally contain more than one type of habitat, and provide travel corridors for a variety of wildlife. Most of the areas identified as environmentally sensitive are not necessarily limited to the 200-foot shoreline jurisdiction, nor are these ecosystems confined to the eastern bank of the Columbia River. In addition to the areas listed below, a strip approximately 100 feet wide and extending east and west of the gun shop at Baker Flats should be considered as a possible open space corridor.

Wildlife habitat and sensitive areas were identified on the basis of their value to wildlife and their relationship to the area's ecosystem as a whole. Local biologists assisted in ranking these areas according to wildlife habitat value, proximity to urbanizing areas, degree of disturbance, and known nesting sites and eagle perch sites.

The environmentally sensitive areas are ranked as high, medium, or low in wildlife habitat value.

Environmentally Sensitive Area #1-Cottonwoods

This area comprises two sites that essentially function as one unit. The cottonwood grove is connected to a large ravine or drainage area. Both these sites are located downstream of Rocky Reach Dam, adjacent to the Columbia River, and west of SR 97/2. The majority of the cottonwoods are located below the 640-foot elevation; the drainage system includes areas up to 670 feet in elevation. Riparian, wetland, and some upland habitats are evident in this area. The tree grove consists mainly of black cottonwoods with some Russian olive and Ponderosa pine, whereas the drainage system is dominated by shrub willow, boxelder, dogwood, and other shrub species. Both areas support a wide range of wild life including waterfowl, raptors, songbirds, cavity nesters, small furbearers, and deer. The drainage system acts as a wildlife corridor between the river environment and the upland areas of Badger Mountain.

The “Cottonwoods” was rated as first in priority because of its high wildlife value, productive vegetation, and low degree of human disturbance. At no time should fallen debris or snags be removed from this area, as they serve as important habitat and are vital to regeneration of new cottonwoods and other vegetation.

Environmentally Sensitive Area #2-Cox’s Pond

This site is located adjacent to the Columbia River at river mile 470, and west of Cascade Avenue. Most of this area lies below the 640-foot elevation line. Cox’s Pond forms a “C” or crescent-shaped peninsula extending .25 miles southerly into the Columbia River. The low bank peninsula is characterized by cobblestones and is a noted haven for Great Blue herons. Away from the shore is a parallel slough of lesser dimension, separated from the outer bay by a narrow neck of land and marshy area in the high water zone. Of the two bays, this inner waterway constitutes a more complex ecosystem, and supports a diversity of vegetation and wildlife. The extreme northern portion of this area exhibits dryland vegetation of grasses, low shrubs, some juniper, and Ponderosa pine.

This area was ranked as having a high wildlife habitat value because it contains productive riparian, wetland, and upland habitats, and it is relatively undisturbed by humans. It harbors migratory waterfowl, raptors, songbirds, furbearers, and deer.

Environmentally Sensitive Area #3-15th Street

This site is located south of 15th Street and runs parallel to the Columbia River south to the Douglas County Sewer District facilities. This area is unique in that most of it is separated from development by a steep bank and the Sunset Highway corridor. This site contains pristine wetland areas and riparian habitat. The vegetation consists of very large black cottonwoods and other Populus species, willows, apple trees, reed

canary grass, and many small shrub species. Numerous wildlife species, including migratory waterfowl, raptors, songbirds, quail, and beaver have been noted in this area.

This area was rated as having a high value due to its isolation from urban development, extensive wetlands, abundant vegetation, and minor disturbance levels.

Environmentally Sensitive Area #4-Porter's Pond

This site is composed of the Porter's Pond area and the Sand Canyon drainage. The site is located adjacent to the Columbia River and west of the East Wenatchee Water District wells and 19th Street, extending south to 17th Street (if extended). Most of the Porter's Pond area is located below the 645-foot elevation line, and both wetlands and riparian habitat are present. The Sand Canyon drainage extends easterly from the Columbia River to the 1,400-foot elevation.

This site was rated as having a medium wildlife value due to the level of disturbance, its easy accessibility, and encroachment of urban development.

Environmentally Sensitive Area #5-32nd Street

This site is located between 32nd Street and 27th Street adjacent to the Columbia River. It consists of three drainages and connecting shorelines. The largest drainage is located at 32nd Street, with two smaller drainages in the proximity of 27th Street. The corridor between the drainages and adjacent to the Columbia River is very steep with an approximate slope of 30 to 40 percent. These areas exhibit a variety of habitats including wetlands, riparian zones, and an uplands area. Typical vegetation from the river to the uplands area consists of small shrubs, some black cottonwoods, aspen, lack locust, Russian olive, blackberry, sagebrush, and grasses. Numerous wildlife species are present in the area. Considerable dumping and filling has occurred in association with nearby residences.

These sites were rated as having a medium to low wildlife value. However, due to the steep slopes, diversity of habitat, and the character of the corridor along the river, it was considered a viable wildlife area for migrating waterfowl and small animals.

Environmentally Sensitive Area #6-South of Odabashian Bridge

This site is located within the Blue Grade drainage as identified by the U.S. Army Corps of Engineers, and is parallel to the Odabashian Bridge. During the summer months this drainage is used as an overflow from the Wenatchee Reclamation District irrigation canal. Most of the vegetation occurs west of the 700-foot elevation line, and is located primarily within the flood plain boundary, before spreading out at the mouth of the drainage along the Columbia River. This area has been degraded by human disturbance including the construction of the Odabashian Bridge and by motorized vehicles. Due to these factors and the type of soils in the area, wind erosion is a major problem at this site.

This area was ranked as having a low value to wildlife due to the relatively high disturbance factor. However, this area has been identified as sensitive because of the location of the Blue Grade floodplain. Recommendations for the area include restriction of motorized vehicles below the 680-foot elevation, a cultural/natural resource interpretive center, and an arboretum featuring vegetation indigenous to the Columbia River's system.

Environmentally Sensitive Area-Linear Shoreline Corridor

The linear corridor extends from Rocky Reach Dam south to the Rock Island Hydro Park in areas with steep banks of 25% or greater. These sites are an important wildlife travel corridor linking the environmentally sensitive areas.

Summary Recommendations

Existing uncontrolled use of some areas along the shoreline and other locations in the Shoreline Design Area has resulted in the destruction of a significant amount of wildlife habitat, and has had detrimental impacts on wildlife. Human interaction with wildlife often constitutes encroachment, and results in depletion of the very resource which first gave a wildlife habitat its value. It is hoped that a combination of access devices including interpretive centers, concealed observation platforms, and non-disturbing nature trails can best insure wildlife's sustained yield along the shoreline and in related habitats. Trail access or other recreational use should be designed to bypass or skirt these sensitive areas and limit line of site exposure. Human intrusion should be limited or discouraged unless the access system is designed to limit adverse impacts. Any development in the Shoreline Design Area will need to access the potential impacts created by that development to wildlife, wildlife habitat, and corridors. Mitigation criteria include minimum setbacks, landscape buffering, berms, replacement of disturbed vegetation, and enhancement of habitat. Locations such as Cox's and Porter's Ponds should be protected with a buoy system to discourage encroachment into pond and slough areas by boaters.

ENVIRONMENTAL CONSERVATION GOAL:

To determine, maintain, and enhance the present and future wildlife and their habitat, taking into account compatibility with other affected elements within the Shoreline Design Area.

Policies:

1. The Shoreline Design Committee has identified several sites as environmentally sensitive. These are should be preserved with special

vigilance and care, including mechanisms to protect, manage, and guard against human/livestock disturbances.

2. Enlist public and/or private agencies to promote educational and interpretive programs to inform students and the general public of the importance of ecology, wildlife, plants, and habitat.
3. Encourage property owners to enhance and maintain wildlife and wildlife habitat.
4. Develop, where necessary, new regulations, conditions on development proposals, and/or provide special incentives for the protection and management of specialized wetlands, and threatened/endangered species.
5. Establish regulations, which limit boating and/or river access points to sensitive coves and slack waters to reduce human disturbance and encroachment.
6. Special projects in environmentally sensitive areas may be encouraged and include such provisions as nest boxes, perch sites, bird blinds, etc.
7. Persons or special interest groups should coordinate activities with the Chelan County PUD and the Department of Wildlife.
8. Establish buoys or float markers around sensitive area to prohibit the encroachment of boats and other types of watercraft.
9. Encourage the establishment of natural vegetation in sensitive areas, drainage/flood plains and immediate shoreline. Plants that are indigenous to the Columbia River should be selected and arranged to be harmonious and provide a balanced composition to the shoreline and adjacent development.

DESIGN CRITERIA:

1. Document the potential effect of public or private land management decisions and actions on environmentally sensitive areas, endangered/threatened and sensitive species, and their habitat.
2. Provide buffering separation through open space and physical and/or visual barriers to partially conceal or totally block incompatible adjacent land uses such as parking lots, residential subdivisions, commercial, industrial, and some recreational activities from environmentally sensitive areas, wetlands, and riparian habitats.

3. Preserve as much desirable vegetation as possible with preference given to native plants.
4. Locate interpretive structures within view corridors and where they are least destructive to sensitive areas.
5. Outstanding natural site features should be selected upon initial site design, development designed to include and enhance these features.
6. Buffer strips and existing vegetation shall be left in an undisturbed condition along the adjacent Columbia River shoreline and drainage areas.
7. Any proposed trail access, recreational use, or development shall be designed to bypass, skirt, or cause as little disturbance as possible to areas identified as environmentally sensitive and commercial orchard operations.
8. A buffer area should be established around the perimeter of designated environmentally sensitive areas in order to protect and restrict uses, which may be destructive to wildlife and/or habitat.
9. All development proposals within or adjacent to the 200 foot shoreline jurisdiction and environmentally sensitive areas should avoid disturbance to these areas and shall demonstrate at the planning stage that such development will not destroy, reduce, or otherwise deplete natural habitat and associated wildlife species.
10. Nature trails located in sensitive areas should accommodate pedestrian access only, and should create a harmonious feeling of the natural environment. Wildlife and habitat preservation should be the first priority. The following criteria are set forth for the design of a natural trail:
 - a. Provide well-designed trails, which consider the terrain, natural features, shoreline configuration and connections to the improved trail or interpretive sites, and viewing platforms.
 - b. Minimize steep gradients and avoid cuts and fills in slope areas.
 - c. Allow safe, efficient access for all age groups and the disabled.
 - d. Discourage linear trails along the environmentally sensitive areas, and sensitive nesting and perch areas.
 - e. Minimize disturbance of the natural areas by proper trail alignment, log curbing, and signing.
 - f. Plan each phase of the nature trail by on-site evaluation and coordination with the Department of Wildlife and Chelan County PUD.

- g. Provide interpretive signing of various plant species and unique wildlife areas.
- h. Nature trails should be a maximum of four (4) feet wide and improved with a bark, hard packed, or gravel surface.
- i. Bicycles, domestic animals and livestock use shall be prohibited in nature trail areas. Primary use should be for foot traffic only.
- j. Preserve and retain the nocturnal integrity of the environmentally sensitive areas.

CULTURAL RESOURCES

The Columbia River valley has been a focal point for all types of human activity, from prehistoric times to the present. There is evidence of human habitation from as long as 11,000 years ago. Dispersed throughout the region are sites thought to be winter base camps, fishing stations, hunting and skin processing camps, and seed and vegetal processing camps.

Although there are many recorded prehistoric sites along the banks of the Columbia River, less is known about the adjacent upland areas. It is believed, however, that other significant sites may exist in both environments. In both the East Wenatchee area and across the state, most surviving cultural sites are either marine or riverine in nature. Given that Douglas County has riverine locales on three sides, the possibility for discovery of more sites is great.

Some of the known cultural sites in the East Wenatchee area are or may be eligible for listing on the National Register of Historic Places (NRHP). Any site that has the possibility of yielding information important to the history or prehistory of the area may be considered eligible for inclusion on the NRHP. However, many sites are not eligible because they have been extensively disturbed. Many sites have been removed or disturbed by thousands of years of erosion and fluvial activity, but significant disturbance has also occurred due to present-day human activity. Infrastructure and residential construction, relic collecting, agricultural practices, and garbage dumping have all contributed to the degradation of existing and potential archaeological sites.

CULTURAL RESOURCES GOAL:

To maintain and enhance the cultural resources of the area by preserving existing and future documented sites and emphasizing to the public the importance of our heritage as it relates to the river.

POLICIES:

1. Encourage the distribution of promotional material on existing cultural sites in relation to their significance and type.
2. Create attractive, informative interpretive sites, which are consistent throughout the shoreline area and are harmonious with surrounding uses.
3. Promote conditions in which historic and cultural properties can be preserved in harmony with modern society.
4. Encourage preservation and wise use of our historic resources.

5. Adopt a cultural resource program, which meets prescribed standards for making them eligible for special grant and technical assistance under the State and National Historic Preservation Acts.
6. Encourage local private and public agencies to consider cultural and historic sites when planning actions, which may affect them.

RECREATION

The Columbia River is a popular recreational area. It is excellent for water sports such as waterskiing, sailing, windsurfing, canoeing, sport fishing and boating. On lands adjacent to the river, hiking, horseback riding, bicycling, and wildlife observations offer a diverse choice of recreational opportunities. Peak recreational use along the Columbia River occurs from April through September. An increase in recreational needs and demands has resulted in considerable use of undeveloped and unregulated recreational sites, and some users now travel off-road to access the river. During high use weekends, recreationists line the shore wherever they may gain access. Factors that contribute to the area's popularity include:

- Varied recreational opportunities available throughout the year;
- Hot, dry summers with frequent sunny days;
- Large reservoirs providing many different recreational uses concurrently;
- Accessibility through interstate transportation and state highways;
- Unique land forms and geology;
- Remote, open areas; and
- Availability of public lands

Since the enactment of the Shoreline Management Act of 1971, many shoreline sites have been acquired and developed for local, regional, and statewide recreational needs. Most of these recreational opportunities in the Wenatchee area have been accomplished through "Exhibit R" funding by the Chelan County Public Utility District and its ratepayers. This has been a great boost to waterfront recreation development and tourism in the area, particularly on the Wenatchee side of the Columbia River.

The central focus of the Shoreline Design Committee has been to develop a comprehensive plan for public access, parks and the preservation of environmentally sensitive areas. The key elements for this Plan are governed by the Shoreline Management Act, the principal goal of which is "to protect natural areas and the ecology of the shoreline, increase public access, and increase recreational opportunities for the public in the shoreline."

To achieve this program, an assessment was made of present conditions and characteristics of the shoreline, past trends, the sensitivity of the shoreline ecology, and review of community needs. Due to the high demand for a variety of both active and passive recreational activities, a full range of uses is proposed. The majority of the proposed recreational uses are located on publicly owned or controlled land, and within the 200-foot shoreline jurisdiction. This creates a unique opportunity for shaping shoreline developments in the public interest. Proposed recreational activities include wildlife parks, neighborhood parks, community parks, viewpoints, pedestrian and equestrian trails,

cultural resource preservation areas or special interest areas, boat launching facilities, and others.

Emphasis has been placed on maintaining the natural resource value and ecology of the shoreline area. This has been accomplished through design criteria and the placement of more intense recreational uses in areas or nodes that are less sensitive from a wildlife or conversation perspective. The primary objective is to create a balance between the natural environment and more intense development, thereby reducing potential conflicts between land uses. Those areas that have significant natural resource values have been designated as environmentally sensitive.

Recreational Sites

A series of proposed recreational sites has been identified; the locations of the proposed sites are shown on Figure 3.

Parks accessed from public roads should provide public restrooms, potable water, and adequate public parking. In addition, recreational sites should provide a balanced system and opportunities for a variety of activities, age groups, income levels, and interests. It is important that these sites be unified by common detailing and signage. Wildlife resource areas would have naturalistic design characteristics, whereas recreation areas may be more intensely developed.

The development of each recreational site can be undertaken without detriment to the others, because each as a certain “fit” with the riverscape. Each function “belongs” in a certain place dictated by natural systems, access, stability, or man-made features. The recommended plan is best understood by noting its ingredients: community image and tourism, recreation, and stewardship.

Site #1 Rocky Reach Dam Park-Trail Head and Rest Area

This area is located at the extreme northern edge of the Shoreline Design Area just south of Rocky Reach Dam and west of SR 97/2. This park should be designed to accommodate the traveling public and to provide equestrian access to trails. It should be designed to be compatible with Lincoln Rock State Park.

Design Features:

- Picnic areas with shelters and barbecues;
- Loading and unloading facilities for equestrian use;
- Hitching posts and watering facilities;
- Natural buffers should be maintained adjacent to the large ravine and the designated environmentally sensitive areas.

Site #2-Future River Park

This area is located adjacent to the Columbia River approximately 2.5 miles south of Rocky Reach Dam, at river mile #475. This site is characterized by some riparian vegetation and sand dunes along the river shoreline. Small beaches and coves along the river are frequented by recreational boaters in the summer.

This site is identified as a future park and should be improved at the time the land use in the area is changed to an appropriate classification, although some consideration should also be given to the summer boaters who now use it. Major design features should include the preservation and enhancement of the sand dunes and the riparian habitat immediately adjacent to the Columbia River. A buffer should also be established between the park and other activities to the east.

Design Features:

- River-related picnicking and boating;
- Playfields for volleyball, soccer, etc.;
- Reclamation and enhancement of the sand dunes, shoreline, and vegetation.
- Other features should be designed to meet recreational needs determined at the time of development.

Immediate Action:

- Remove junk cars, trash, and shacks in the area to discourage overnight and summertime camping;
- Trash containers should be made available for boaters.

Site #3 Olds Bridge-Boat Launch Area

This area is located north of the Odabashian-Olds Station Bridge adjacent to the Columbia River. Access to this site is across Department of Transportation right-of-way via 37th Street N.W. It is currently used by area fishermen and boaters as a boat access to the river.

This park should incorporate a boat launch, equestrian activities, and an RV park. Uses should be properly buffered and should not be allowed to intrude into the Cox's Pond area.

Design Features:

- Picnicking facilities with shelters and barbecues;
- Boat launching and parking facilities large enough to accommodate boat and horse trailers;
- Enhancement of the riparian vegetation along the shoreline

Site #4 Olds Bridge-Columbia River Arboretum

This area is located south of the Odabashian – Olds Station Bridge between the Columbia River and the 680-foot elevation line. Geologic features are varied and include the Blue Grade flood drainage, large gneiss outcrops, and sand dunes. Riparian vegetation is evident along the river and at the mouth of the Blue Grade drainage. A small cove and beach area is frequented by boaters and families coming to picnic along the river's edge. The entire area offers a spectacular view of the confluence of the Wenatchee and Columbia Rivers.

This park's main feature would be a Columbia River arboretum and cultural resource/open-air amphitheatre center. This site would become the central focus or gateway to Douglas County and would be an introduction to our unique shoreline resources. The proximity to major highways, size, and topography of the site lends itself to passive recreational facilities such as nature trails, scenic vistas, small picnic areas, and general education on the ecology and geology of the Columbia River system.

Design Features:

- Nature trails along the edge of the arboretum to the beach area;
- Reclamation and enhancement of the sand dunes and beach area;
- Picnic areas for boaters and people using the nature trail;
- Cultural resources/amphitheatre and visitor center located at the eastern edge, overlooking the river and arboretum;
- Cultural and natural resource information signage;
- Small, natural picnic areas in conjunction with scenic vistas;
- Road access (32nd Place N.W. extended) and parking for residential use should be located at the old gravel pit site and sized to accommodate residential parking only;
- Parking areas adjacent to the Tourism Commercial area should be established for and in conjunction with Tourism Commercial uses in order to allow access to the river;
- A 50 to 100 foot landscaped linear greenway designed and located next to the improved trail system and cultural resource/amphitheatre should be established adjacent to the Tourism Commercial area.

Site #5 23rd Street-Community Park

This area is located between 23rd and 25th Streets, west of Columbia Street. No unique topographical features exist, as it is located away from the steep bank of the Columbia River. The majority of this site is located on publicly owned lands, with the remainder on private lands.

The proposed park should be designed to accommodate a broad range of

active recreational uses. It is considered a prime location, in part because of its accessibility from surrounding neighborhoods and its relative distance from environmentally sensitive areas.

Design Features:

- Playing fields for volleyball, softball, soccer, etc., and playgrounds;
- Picnic areas;
- Parking facilities.

Site #6 Porter's Pond – Nature/Wildlife Area

Two areas are recommended as parks in the vicinity of 19th Street and Cascade Avenue. The first area is located north of Porter's Pond and in the vicinity of 21st Street, north of the East Wenatchee Water District building and west of Cascade Avenue. The second site is located in the center of the Porter's Pond area, north of the Sand Canyon drainage, and southwest of 19th Street.

These two sites should be designed as primitive natural areas with strong emphasis on natural resource education. The area to the north would act as a buffer between more intensive land uses. Existing vegetation should be enhanced and incorporated into the overall design. As wildlife biologist Gaylin Woodard notes,

“Having an area so rich in cover and food and available water and supporting such high and varied populations of wildlife in such close proximity to the urban area is a great nature asset to not only people in the local communities, but also those who travel distances to such a unique area. It would indeed be not only a serious loss but also a poor reflection upon the people of the state if this area were altered in any way that would cause the loss of any of the wildlife established thereon.”

Design Features:

- Improvement should consist of natural/interpretive trails, with scenic vistas and access for the disabled;
- Reclamation of disturbed environments;
- Enhancement of wildlife diversity;
- Parking areas should be located away from the area and south of 19th Street;
- Access to sensitive areas should be limited.

Site #7 16th Street-Neighborhood Park

This area is between 15th Street and 17th Street (if extended), south of the

Sand Canyon drainage and approximately .5 mile north of the Pedestrian Bridge. This site is a flat, sandy area with a low bank beach. The beach is currently used by the public during the summer months.

This area should be developed as a neighborhood park to accommodate nearby residents. The site would be an excellent rest area for pedestrians along the improved trail system.

Design Features:

- Non-motorized boat access;
- Expanded day-use functions (playgrounds, picnicking, etc.);
- Access from 17th Street with parking facilities.

Trail System

A pedestrian/non-motorized trail network is addressed in Chapter 4. It includes a trail along the Columbia River from Rocky Reach Dam to Rock Island Dam, and also incorporates the existing Wenatchee Reclamation District irrigation canal and natural drainages as part of the network linking the community. These linkages would directly tie to the Columbia River shoreline, and to residential, recreational, and commercial areas. This Plan takes this concept one step further by providing specific design and construction criteria.

Three types of trails are proposed along the shoreline area. These include an improved pedestrian/bicycle path, an equestrian trail, and unimproved nature trails. Of these, the canal and improved path are specifically located. The equestrian and nature trail systems would be located at the time the trail proposals are developed. Trails should adhere to the design criteria set forth for those types of projects.

The improved pedestrian/non-motorized path is proposed to extend from Lincoln Rock State Park to Rock Island Hydro Park in order to provide linkages between recreational sites, development activities, and individual neighborhoods or communities. The equestrian trail would extend from the Rocky Reach Dam area south to 21st Street. Stock loading and unloading facilities would be located at Rocky Reach Dam and the Odabashian-Olds Station Bridge area. Equestrian trail ride-on access for residents will also be allowed along the trail south of the Odabashian Bridge. Nature trails will be confined to specific locations for wildlife observation, education and scenic vistas. Trail systems established north of the Odabashian Bridge should occur in a manner that will be compatible with orchard operations. This may include establishing adequate buffering between these uses through landscaping and fencing.

Open Space

The parks and recreational sites described here are interspersed along the length of the shoreline and are linked by the pedestrian/non-motorized trail network.

The lands between the park sites should be designated as open space. Open space areas that have been damaged should be rehabilitated or enhanced, and all open space areas should be preserved to reflect the natural state of the river ecosystem.

These open space areas are important in maintaining the overall theme of the Shoreline Design Area, and they act as buffer zones between more intensive land uses.

RECREATIONAL GOAL:

Develop a recreation plan for the study area that considers community image, tourism, recreation, and stewardship; and which recognizes the inherent suitability of the natural systems to dictate appropriate uses that maximize the natural characteristics of the area, while also maximizing shoreline recreation and access without undue impacts on other appropriate land uses.

POLICIES:

1. Recreational facilities should be designed so as to have no substantial adverse effect on unique cultural, environmentally sensitive areas, or geologic features. They should be signed so as to promote responsible use of river and facilities.
2. Revitalize derelict riverside lands which lend themselves to passive or active recreational uses.
3. Develop and implement a long term and comprehensive acquisition, dedication and management program for open space, passive and active recreational parks. Private/public landowners should be encouraged to contribute properties for these above uses.
4. Encourage low maintenance designs for parks and recreational facilities.
5. Residential and commercial development should be encouraged to provide land for parks, trails, walkways, and open space in relation to the density of development and where consistent with enacted plans.
6. Enhance site access by linking waterways, bikeways, equestrian trails, and parking areas to adjoining development and to transit systems.
7. Equestrian trails should be provided where appropriate, consistent with the design criteria of the Shoreline Design Area Plan, and be located north of 21st Street, which shall be utilized as a turn-round area only. Parking and loading areas should be located in appropriate areas.

8. Provide pedestrian and equestrian amenities such as benches, planters, plazas, drinking fountains, water features, exercise stations, hitching rails, and waste receptacles along park/trail development.

Design Criteria:

1. Provide design interest in balance with natural surroundings, maintaining simplicity of building design; building form should be free of confusing, cluttering, or unnecessary complex elements.
2. Use planters, rails, retaining walls, and other raised surfaces for seating. Structures should be uniform throughout the Design Area, with a height between 12 and 24 inches and a width of 8 to 24 inches.
3. Locate seating throughout the Design Area where view can be taken advantage of, and near to activity centers and intersecting walkways. Clustering of some seating to accommodate groups of people is also appropriate.
4. Use building materials and building techniques for durability and high quality standards for all structures.
5. Provide a diversity of plantings that effectively accommodate a change in design between adjacent sites and from native vegetation areas.
6. Signs should be used primarily for the purpose of identification, conveying recognition of a particular enterprise, group of enterprises, etc.
7. The shape and size of a sign should strive for harmonious relationship and be in balance with all elements of the building site and adjacent land uses.
8. All parking lots should be paved to a hard surface and allow easy ingress and egress. Buffering or a separation from the public road should also be encouraged for pedestrian safety.
9. Base recreational buildings such as restrooms, sports, complexes, etc., on a unified design concept throughout the Design Area.
10. Illuminated signs should not provide harsh, uncomfortably bright light, and be arranged so the light source is shielded from view. Light should not be projected beyond the immediate sign location.
11. Sites with unique resource areas such as steep slopes, ravines, watercourses and wetlands should be designated open space and be preserved or enhanced in a natural state.

12. Improved pedestiral/bicycle paths should meet the following criteria:

Construction:

- a. 10-foot wide asphalt trail with 12-inch shoulders.
- b. Maximum grade of 5% with turnouts unless unusually steep terrain dictates otherwise. (Will be determined.)
- c. Must be accessible by the people with disabilities throughout the length of the path system. (Disabled permits may be required at a later date for motorized chairs.)
- d. Bridges required at major drainage locations (To be determined.)
- e. Rest areas located near natural vistas.
- f. Path built to sustain emergency vehicles
- g. Boardwalk at designated locations. (Sand dunes area.)
- h. Access to path system to provide linkages between other uses in designated locations.
- i. Path barriers for access control by parking lots, natural trails, etc.
- j. May prohibit bicycles, motorized vehicles (except disabled), and livestock where appropriate.

Path Amenities:

- a. Benches must be provided along path.
- b. Picnic tables interspersed throughout path system. Must be uniform in construction.
- c. Bike rack/stand location at intersecting trails and outside of sensitive areas.
- d. Signs uniform in construction and spacing. To dictate trail use, education, safety, animals, etc.
- e. Workout stations through path system, may be used for seating.
- f. Natural screening or buffering between adjacent trail and other uses.
- g. Refuse containers, uniform construction and harmonious with path character.
- h. Drinking fountains where appropriate, uniform construction.
- i. Telephone emergency stations, 911 calls only.
- j. Lighting on timers in parking lots only. Must be low intensity, and uniform in construction. To be located at designated areas.

Path Uses:

- a. No motorized vehicles.
- b. Domestic animals on leash only.

13. Equestrian trails shall conform to the following criteria:

Construction:

- a. Eight foot wide dirt trail with two-foot shoulders and a clear height of ten feet.
- b. Equestrian trails should be separated and placed a minimum distance of 16 feet from the centerline of the improved pedestrian/bicycle path. If placed closer, safety precautions and/or screening necessary.
- c. Grades should be kept to a minimum. Erosion control measures should be addressed throughout the trail system.
- d. Directional and informational signage will be uniform in construction and should be placed at the intersection of trails.
- e. Horses shall be prohibited south of 21st Street.
- f. Joint usage of the bridges should be considered.
- g. Hitching posts should be provided at restrooms and loading/unloading areas.
- h. Screening and buffering required where determined.
- i. Domestic animals on leash only.
- j. Watering horses shall be prohibited in drainages, the river, and creek areas to prevent damage to those systems.
- k. Loading and unloading areas should be large enough to accommodate trailers. Rooms should be provided for 10 to 12 units and arranged in a pull through manner.

ECONOMIC DEVELOPMENT

The economy of the East Wenatchee area as well as the Wenatchee Valley in general is based primarily on housing and the construction industry, aluminum, mining, financial and health institutions, food, fruit, tourism, and public agencies. Many of these companies benefit from the availability of low cost hydropower. Fruit processors benefit from a location central to orchards and shipping facilities. The area's financial and health institutions have grown by serving a large market area stretching north to the Okanogan and east to the Columbia Basin. Retail trade holds a large share of local employment as well, as demonstrated by the importance of tourism expenditures and the area's central location within a multi-county trade area. As the market expands with growing population, significant employment growth can be expected in service categories which are currently under-represented compared to the states as a whole. With the expectation of growth, additional commercial and industrial properties are needed in order to maintain the existing employment status and the overall well being of the residents.

According to the community attitude survey conducted in 1988 as part of the Greater East Wenatchee Area Comprehensive Plan, 81% of the respondents indicated that business and industrial activities should be encouraged to locate here. This would also enhance employment opportunities.

East Wenatchee's economic well being is determined by both internal and external forces. The total market area extends into Douglas, Chelan, Okanogan, and Grant Counties. From 1992, the primary market population is projected at 75,000 with a secondary market of 50,000 persons. Regional influences on employment, population, income, and growth were considered throughout the planning process.

Additional commercial properties are needed over the next 20 years to support the growing population of the valley and consumer demand. It has been determined that there are enough available (vacant) commercial properties around the existing business core to last between five and seven years. Additional conversions of land adjacent to the commercial core beyond that designated in the 1988 Greater East Wenatchee Area Comprehensive Plan would severely impact several neighborhoods and/or displace residents.

The success of commercial and industrial activities is partly dependent upon convenient access, making siting along major transportation corridors and intersections desirable. However, care must be exercised to ensure that commercial and industrial uses are located properly and harmonize with the area as much as possible. Development should occur in a manner consistent with the Plan's goals, policies, and design criteria. Therefore, it is desirable to centralize or cluster commercial and industrial activities, and to prevent linear strip development along the arterial street network. An interior road network should be established in areas designated on the land use map in order to promote compact cluster development.

Commercial/Industrial Sites

Several areas were identified as being feasible for commercial and industrial development and in keeping with the goals and policies of this Plan and the Greater East Wenatchee Area Comprehensive Plan. These areas are designated on the accompanying land use map and are categorized into five designations. They include a medium industrial area, tourist commercial, commercial, professional office, and recreation commercial.

Area #1 – Medium Industrial

This area is located east of SR 97/2, and west of the 700-foot contour line. It exhibits some topographical changes, sloping from east to west. The basalt cliffs serve as its eastern boundary. This site consists of some industrial activities, orchards, and unimproved properties. This site makes an ideal location for industrial activities due to its proximity to a major highway system, availability of domestic water, location to service centers, and it is buffered on three sides by topographical constraints. Factors considered ranged from the location of major orchards and agricultural activities to the north (Bray's Landing, Bridgeport, Chelan, and the Okanogan Valley), lack of appropriately zoned industrial properties and the need to preserve other prime agricultural lands in the Baker Flats area.

This site should be developed as an industrial park. Design features should include provisions for perimeter landscaping with a buffer strip adjacent to SR 97/2 and other land uses identified in the Comprehensive Plan. The buffer strip shall consist of a berm measuring a minimum of 30 feet wide, 10 feet high, and landscaped with trees, shrubs, and ground cover. Additionally, an interim 100-foot buffer will be required adjacent to agricultural uses, incumbent upon the industrial user. Access from SR 97/2 should be limited with connections to interior roadways. Ingress and egress along the designated industrial area should be limited to no more than two or three approaches from the highway in order to minimize turning movements and congestions. Road approaches on the highway should be designed for truck traffic with appropriate channelization including acceleration and deceleration lanes. A minimum setback of 100 feet from the highway should be established for all structures. All uses located within 300 feet of exterior boundaries adjacent to public roads should be completely enclosed in the structure and emphasis should be placed on the height of outside storage. Special site plan approval is required for all uses to ensure proper linkages to the internal road network, intersection improvement, trail system, extensions to existing roadways, adequate parking, landscaping, protection of sensitive areas, and continuity in overall project design. Industrial land uses should be permitted on the east side of SR 97/2 only, and at no time should industrial uses be allowed west of the highway.

Area #2 – Commercial Recreation (Golf Course)

This site is located between Cox's Pond, east to Cascade Avenue and north of 40th Street. Approximately 160 to 180 acres is necessary for an 18-hole golf course. A golf course would buffer the adjacent Cox's Pond environmentally sensitive area from intrusive human activity. Other considerations were the demand for additional golf courses in the area and its close proximity to existing and future major hotel/motel accommodations and services.

Development of a golf course would be by special permit only. Design features would include a minimum of a 100-foot buffer zone between the fairway and the 640-foot elevation line adjacent to Cox's Pond, and linkage to the trail system. The intended use of this site would be for either a public or private golf course and accessory uses necessary for its operation.

Area #2 – Tourist Commercial

Two tourist commercial sites are designated, one on either side of the Odabashian-Olds Station Bridge. The topography here is unique; slopes vary from as little as 7% to as much as 20%. For this reason, it is considered an excellent site for hotels or motels, offering a view of the river and distant mountains, while maintaining a view corridor for residences further to the east. When the potential for a tourist commercial area was reviewed, it was evident that on the eastern shore of the river, appropriate sites for these uses are very limited. Other factors considered include the location of a major highway system (especially in winter when the North Cascades Highway is closed), the attributes of the Cascade Loop, Mission Ridge, and the trade area, which attracts consumers from outlying areas. The need to locate small business was also addressed.

This designation would allow activities associated with tourism and the traveling public, as well as water-related activities. Development in this area would be by special permit to facilitate linkages with the overall transportation and circulation system, including the trail systems, and to ensure that the design includes appropriate landscaping, buffering from adjacent land uses, and aesthetics of buildings. Setbacks from public street should be a minimum of 10 feet and structures should be encouraged to use common walls. Pedestrian malls and courts should also be encouraged.

Retail activities should be limited to 5,000 square feet per use, and include commercial/retail trades such as barber shops, gift shops, specialty stores, art and antique stores, restaurants, sport shops, gas stations (except repair), laundry facilities, and amusement centers. The maximum floor size would not apply to hotels, motels, convention centers, or grocery stores. Outdoor storage would be prohibited.

Area #4 – Commercial

It is recognized that some commercial services are appropriate near the Odabashian-Olds Station Bridge and Cascade Avenue. Because utility studies, transportation plans, and land use/revenue projections and allocations necessary for implementation of the Growth Management Act are not complete, it is inappropriate to designate a specific size area for commercial uses at this time. Therefore, the Special Commercial designations near the Odabashian Bridge set out in the 1988 Greater East Wenatchee Area Comprehensive Plan will be included in the Shoreline Design Area Plan.

However, design features for commercial development should include landscaping, linkage to trail systems, adequate parking, design consistency between adjacent buildings, establishment of an interior road network, and buffering from adjacent residential areas. Direct individual driveway access from Sunset Highway and the Odabashian Bridge would be prohibited. A full range of utilities and infrastructure such as water, sewage disposal, power, and roads should be available for commercial development as identified in the Comprehensive Plan. Buffering methods should include a 30-foot wide sight-obscuring landscaped screen (to include a combination of trees, shrubs, and ground cover), and may include a masonry fence to help mitigate potential impacts. This land use designation may be further buffered by high and medium density residential land uses in order to mitigate potential impacts to low-density residential areas.

Area #5 – Professional Office

This site is located in the vicinity of 19th and 16th Streets, west of Sunset Highway and south of the commercial area designated as Area #4. The designation of this area for professional office uses was determined by the dwindling supply of office space, lack of appropriately zoned lands, and adjacent land uses, particularly the Porter's Pond environmentally sensitive area. It was concluded that professional offices and services would create a lesser impact to the environmentally sensitive area compared to other types of uses. This was based on the conclusion that office use is usually conducted during the daytime only, Monday through Friday. There was also concern by area wildlife experts regarding the impacts to wildlife by pets and other domestic animals usually associated with single-family residential development. The site's proximity to the existing commercial core and the commercial area designated as Area #4 was also a principal consideration.

Design features include a buffer between office development and environmentally sensitive areas, landscaping around the perimeter of the site and in parking areas, limited access to the Sunset Highway corridor, and improvement and extension of the interior street. Landscaping immediately adjacent to the environmentally sensitive area should incorporate a variety of similar vegetation and/or

plants indigenous to the Columbia River ecosystem. Permitted uses would include multi-family residences, professional offices, public utilities, local government office and services, bus terminal, senior citizen facilities, and similar uses. Specialty shops and restaurants would be permitted only if constructed in the same building and operated in association with the above uses.

ECONOMIC DEVELOPMENT GOAL:

To establish a multi-use land development strategy to attract and support local economic growth and the hospitality industry, while enhancing, maintaining, and protecting the integrity and tranquility of residential neighborhoods and the natural environment in the Shoreline Design Area.

POLICIES:

1. Recognize future potential for development of economic resources while maintaining the viability of currently developed economic resources.
2. Provide environmental guidelines as a framework for development, recognizing that the quality of the environment makes an important contribution to economic value.
3. Encourage the location of business and industry that provides jobs for local residents, including the youth.
4. Special development permit review and approval should be required for all commercial and industrial development in order to promote uniformity and consistency within the Design Area and to assure adequate infrastructure availability.
5. Development should be encouraged to concentrate in centers or clusters in order to provide intensive retail, financial, government, and professional services, and cultural and entertainment activities that serve the community.
6. Commercial and industrial development should be designed to enhance vehicular circulation and pedestrian safety in order to provide a quality living environment for the shopper and nearby residents.
7. Orient buildings to encourage pedestrian circulation, enhance the appearance of buildings, and provide unified design elements to offset architectural styles.
8. Development should be encouraged to provide continuity of walkways to adjoining property and scenic views or vistas.

9. Signs which indicate the type of business should be architecturally integrated with the structures with which they are associated.
10. Parking interior and exterior lots should be landscaped in order to break up large expanses of paved areas, reduce thermal heating by shading pavement, and reduce negative visual impacts.
11. A variety of buffering techniques should be employed to protect the integrity of environmentally sensitive areas and areas of less intensive land uses. Design features should include a minimum 30 foot buffer area, berms, and/or natural features. Landscaping should employ a variety of trees, shrubs, and ground cover. Areas adjacent to environmentally sensitive areas should in part be planted with like vegetation and/or plant species indigenous to the river environment.

DESIGN CRITERIA:

1. Coordinate proposed development with current site planning and development efforts in adjoining areas to take advantage of opportunities to mutually improve development design.
2. Properly link proposed development to walkways, trails, and streets in the surrounding area. Assure efficient continuation of such systems to adjacent properties.
3. Provide intensively landscaped buffers and/or walks when commercial or industrial uses abut residential, agricultural, or recreational uses, as needed to minimize noise, visual, and other potential impacts and nuisances.
4. Screen parking and service areas, rooftop equipment, solid waste receptacles, and outdoor storage to minimize negative visual impacts.
5. Design a proposed development in context with its surroundings. Provide visual linkages between existing buildings, sites, and landscape designs so as to create a cohesive, overall effect and impression of unity.
6. Orient buildings to front on interior streets rather than on exterior arterial streets. This will help minimize the potential of strip development and provide easily identifiable and accessible pedestrian entranceways.
7. Commercial and industrial developments shall provide an interior road network which will facilitate cluster development and discourage strip

development potential. Direct private individual driveway access shall be prohibited on major arterials.

8. Development shall be responsible for providing a complete traffic analysis and impact study consisting of site access, on-site circulation, parking, and layouts of affected streets. This will help form a credible basis for estimating roadway improvement requirements attributable to a particular project, and access compatibility with local transportation plans.
9. Improve the safety and appearance of walkways when crossing parking, street, and driveway areas by varying paving materials, texture and color of walkways.
10. Locate parking behind buildings and away from areas of high public visibility, where possible.
11. Integrate parking area design with landscape design in a way that reduces the visual impact of impervious surfaces, and provides screening of parking from public view. Parking areas should provide for landscaping next to buildings and alongside walkways.
12. Incorporation of special design features and site amenities to highlight a project is encouraged. Such features could include plazas, open space areas, recreational areas, and architectural design.
13. Avoid the use of false or ostentatious building elevations and large, blank walls.
14. Select muted colors using accent colors in a way to enhance or highlight building design, and not in a manner which creates clutter or otherwise detracts from building design.
15. The landscape plan should complement the overall site and architectural style of the proposal, and address such criteria as visual appearance, function, horticulture, maintenance and irrigation.
16. The planting design should include a suitable combination of trees, shrubs, ground cover plants, vines, lawn and herbaceous material.
17. Signs should be harmonious with building design, surrounding structures, and be appropriate to the type of activity to which they pertain. Design elements and arrangements should present a professional and quality appearance.

18. Open space, with landscaping features and berming, should be located to buffer proposed development from neighboring development, especially where there is a significant contrast in type or intensity of land use.
19. Incorporate the storm drainage system into the natural drainage pattern whenever possible to minimize impacts to water quality.

TRANSPORTATION

The transportation/circulation system in the Shoreline Design Area exists as part of a broader regional system which includes the internal street system and the state highway system. This network involves a unified system of highways, streets and roads which enables people to move between various sections of East Wenatchee and Wenatchee and outlying areas. The system provides the means by which people can get to work, shops, social engagements, and recreation. Existing and proposed land uses are integral components of the transportation system. The transportation system should integrate commercial and industrial development, schools, parks, residential areas, and highways. Particular emphasis should be placed on the linkages between the Shoreline Design Area and neighboring areas and jurisdictions, and regional needs. This relationship would ensure continuity and efficiency of traffic flow.

Several factors influence the design of the transportation network within the area. The transportation/circulation system is largely dependent on the characteristics of the existing urban landscape and street network, population density, modes of travel, and nature of traffic movement. Transportation planning must consider activities that generate traffic, trip purpose, trip length, and modes of travel. The design of the system has a close relationship between type and distribution of the street network. Individual streets and roads do not serve travel independently; rather, the movement of people and goods involves movement through a network of different kinds of roads. Streets, the principal component of the circulation system, can be divided into four categories; local, collector, secondary arterial, and primary arterial. Each category defines the function that a particular road or street should play in the flow of traffic through the transportation network. The functional classification of road types is defined in detail in the Circulation Element, Chapter IV.

Transportation/Circulation Network

Internal Street System

Within the Shoreline Design Area, there is an established street network including major and secondary arterials, collectors, and local access streets. However, the secondary arterials and collector streets often work independently of each other, resulting in poor overall circulation. Many of these streets do not meet current design standards, with deficiencies in both roadway width and pavement condition. Improvements to road alignment and extension of arterials would increase traffic flow and circulation.

Major considerations also include motorized and non-motorized access to the Columbia River. (See "Recreation" in regard to non-motorized access and trail systems). In order to provide physical access to the river and shoreline area, access roads should be provided at one-mile intervals along the trail system. The improved pedestrian trail system should travel from Rock Island Hydro Park to Lincoln Rock State

Park, with provisions for an equestrian trail between 21st Street and Lincoln Rock State Park.

Regional System

East Wenatchee and Wenatchee are located along three major highway corridors: the east-to-west corridor of State Highway 2 between Seattle/Everett and Spokane; the north-to-south corridor of State Highway 97 connecting Yakima/Ellensburg and the Canadian border; and State Highway 28 between East Wenatchee and Spokane. The primary purpose of the state highway system is to provide mobility and linkages for goods and services with other areas of the state.

Due to increase in growth and issues of safety in the Wenatchee Valley area, in the late 1960's the Washington State Department of Transportation undertook a study to determine the feasibility of locating a highway within right-of-way acquired in the early 1950's. This study recommended the construction of a four-lane highway along the shoreline in Douglas County. In 1985 an Environmental Impact Statement (EIS) was issued on the project. The EIS discussed six highway alternatives, the feasibility of each alternative, and environmental considerations. As a result, the EIS for the preferred shoreline, or river grade route was approved. However, the project was denied a permit required under the Shoreline Management Act of 1971. The state Shorelines Hearing Board determined that the river grade route was an incompatible use within a shoreline of statewide significance. To date, the location of a highway corridor has not been resolved.

Wenatchee Area Transportation Study

The Wenatchee Area Transportation Study (WATS) is a comprehensive approach to identifying the current and future transportation needs and the deficiencies of the arterial street network within the greater Wenatchee area. Participating jurisdictions include the Washington State Department of Transportation, Chelan and Douglas Counties, the city of East Wenatchee, and the City of Wenatchee. The WATS plan will form the basis of a comprehensive multijurisdictional transportation plan. The plan is scheduled for completion in early 1993.

Street Improvements and Corridor Design

All arterials, collectors, local streets, and intersections should be improved to county road standards with walkways and bicycle lanes. This would increase pedestrian, bicycle, and non-motorized safety, improve circulation and traffic flow, and provide linkages to the existing system. Listed below are specific recommendations for improvements to existing streets and future street extensions, by classification, within the Shoreline Design Area.

Local System

Primary Arterial

- a. Sunset Highway, south of the Odabashian – Olds Station Bridge:
 - Improve to a two-lane roadway with a two way turn lane or left turn channelization at major intersections. Bus turnouts should also be provided. Intersection improvements are necessary on all intersecting streets, east and west of this corridor.

Secondary Arterial

- a. Cascade Avenue south of the Odabashian - Olds Station Bridge:
 - Improve to a two-lane roadway with a two way turn lane or left turn channelization at major intersections.
 - Realign Cascade Avenue with 19th Street N.W. intersection with a radius curve to eliminate right angle turns.

Collector Streets

- a. Cascade Avenue north of the Odabashian – Olds Station Bridge:
 - Extend Cascade Avenue north approximately one mile and intersect with SR 97/2 to serve anticipated growth. The extension would begin at the intersection of Cascade Avenue before the “S” turn, then continue north to the highway.
 - Study the intersection of Cascade Avenue and SR 97 for possible grade separation or restriction of turning movements.
- b. Empire Avenue:
 - Extend north using an underpass, past the Odabashian – Olds Station Bridge to connect with Cascade Avenue to serve projected land uses.
 - Realign Empire Avenue with 27th Street to Cascade Avenue.
 - Connections from Empire Avenue to the Odabashian – Olds Station Bridge should be prohibited.
- c. 27th Street (proposed corridor):
 - Extend 27th Street from Cascade Avenue to Sunset Highway.
 - Improve intersection design at 27th Street, east of Sunset Highway.
- d. 35th Street
 - Upgrade 35th Street to a collector street and extend said street west to Empire Avenue from Cascade Street to serve designated land uses and enhance circulation.
 - Improve intersection design at all intersecting streets.
- e. Proposed Street:
 - Extend (Cascade Avenue intersection) a roadway across SR 97/2 north and south along or below the 680 to 700 foot elevation line on the east side of the highway and re-connect to highway. This road

would serve as an internal roadway for anticipated industrial development.

- Improve intersection design at both highway access points. Intersections should be designed to accommodate truck traffic.

Local Streets

- a. 17th Street (proposed corridor)
 - Extend west of Sunset Highway to serve proposed land uses.
 - Care should be taken with the Sand Canyon drainage area.
- b. 32nd Place:
 - Extend west of Fir Avenue to the gravel pit to provide access to the shoreline area and recreational parking.
- c. Proposed corridor between 32nd Street N.W., south to 30th Street N.W. and west of Empire to serve proposed land uses.
- d. Fir Street:
 - Extend Fir Street north and reconnect to Empire Avenue south of the Odabashian-Olds Station Bridge, then extend under the bridge to serve proposed land uses. (Dependent upon state highway solution).
- e. Proposed new road between Cascade Avenue and SR 97/2 within the Patterson Orchard Tracts, north of the Odabashian-Olds Station Bridge to provide access to lots adjacent to the highway. Access to the state highway should be restricted.

Regional System

The Greater East Wenatchee Area Comprehensive Plan sets forth implementation recommendations to study this issue during the special Shoreline Design Area study. Due to the complexity of this task and the lack of updated materials, it is recommended that a series of highway alternatives be forwarded to the Wenatchee Area Transportation Study (WATS) committee.

Alternative

This alternative would use the existing SR 97/2 corridor from Rocky Reach Dam to the Odabashian – Olds Station Bridge Area. Modifications would include increasing the existing roadway to provide frontage roads for existing businesses. Also, in order to avoid extensive construction costs in the area approximately .5 mile north of the bridge intersection, the northbound lane should utilize the old state corridor and then proceed through the gneiss outcropping.

Alternative

This alternative would be a modified river grade route located outside the 200 foot shoreline jurisdiction beginning at Rocky Reach Dam and the Odabashian-Olds Station Bridge area. Design features would include physical access to the shoreline for pedestrian, non-motorized, and equestrian trail systems.

Alternative

This route would provide a link between the existing SR 97/2 corridor and the proposed interchange at the Odabashian-Olds Station Bridge. This route would begin at the Cascade Avenue-SR 97/2 intersection in the Baker Flats area and generally follow the toe of the hill at about the 640 to 660 foot elevation line (avoiding deep cuts and blasting of major rock outcrops) to the proposed interchange at the Odabashian-Olds Stations Bridge. Design features include a four-lane corridor.

Alternative

This proposed route is located above the existing Sunset Highway corridor and generally follows the 950 to 1050-foot elevation line in a northeasterly direction to Eastmont Avenue. From Eastmont Avenue, it proceeds to Kentucky Avenue, then turns in a more easterly direction to connect with Grant Road at the airport, thence proceeding along Grant Road, 4th Street S.E., and Battermann Road before connecting into SR 28 near the town of Rock Island. Design features include several connections to the existing local street system to improve overall circulation. This route would promote cross-connections with the airport and residential areas and would funnel traffic to the Odabashian – Olds Station Bridge, thus reducing congestion of the South Columbia Bridge.

Alternative

This alternative would be a modified river route located outside the 200-foot shoreline jurisdiction beginning at the Odabashian – Olds Station Bridge, south to 11th Street. Design features include underpasses to the river to provide access to the shoreline and parking areas.

Alternative

This route is the existing Sunset Highway located between the Odabashian Olds Station Bridge and the South Columbia Bridge. This alternative should be designated as a Business Route with the following design features:

- Immediate improvement to the three-lane roadway, in conjunction with or prior to the construction of a highway (alternative).

- Intersection improvements at major streets.
- Limited access, except to major street intersections.

A major highway system within the urban growth boundary should be designed to include landscaping along the highway corridor and a boulevard landscape strip. If a fence is to be erected, it should be constructed of wood or masonry. The right-of-way corridor should be wide enough to accommodate a four-lane highway.

Summary Recommendations

The transportation/circulation network in the Shoreline Design Area is closely linked to other areas and neighboring jurisdictions, including the state highway system. This element makes no attempt to address the engineering aspects of the transportation network. Recommendations for new facilities and improvements to existing facilities are made in order to correct circulation problems and to meet transportation needs generated by future development. An underlying policy regarding new facilities is that the transportation system should not encourage development in inappropriate areas. The Transportation/Circulation Element therefore sets forth desired goals and policies, and uses the recommendations of the Land Use Element as a basis for identifying the types and distribution of future land uses that will need to be served by the circulation system.

More specifically, this element is intended to (1) establish the overall concepts governing the configuration of arterials and streets for both regional and local circulation, (2) identify some of the new local facilities and improvements to existing facilities that continued growth will make necessary, and (3) identify in a generalized manner the alternative locations for major transportation corridors. It is proposed that the recommended corridor alignments, new construction and design standards in this element be used to guide future transportation studies and strategies.

TRANSPORTATION GOAL:

To provide and integrate an overall circulation and access system which takes into account safety, and the efficient, economic, and orderly development of the shoreline Design Area and influence area. Promote short and long-range solutions for present and future land use needs.

POLICIES:

1. Streets and roads should be well designed and consider terrain, along with connections to streets or adjacent sites.

2. Promote safety through adequate sight distance, channelization, separation of vehicles and pedestrian/non-motorized traffic, and avoidance of difficult turning and merging patterns.
3. Provide street access locations in areas where joint use with other properties may occur in order to limit the number of curb cuts.
4. Encourage transportation management plans, i.e., WATS, as part of the Master Plan process or specific development proposals.
5. Encourage the development of a beautification program along major and minor arterials, such as Sunset Highway, Cascade Avenue, and Empire Street, and state highways, to promote the quality of the area.
6. Encourage the Department of Transportation and the Douglas County Public Works Department to use larger street name signs and better illumination on arterial and collector street systems for easy identification. Encourage numbers on houses to facilitate identification.
7. Provide a variety of parking lot sizes adjacent to the shoreline area to provide direct access to the trail systems. (See "Recreation" for trail discussion and criteria). Parking lot size should be dictated by intensity of use anticipated in the area, neighborhood locations, accessibility, and terrain.
8. Encourage accommodations for transit, such as the provision of shelters, benches, and turnout lanes, when warranted by high levels of ridership.
9. Encourage the development of the shoreline trail as a multi-modal element of the transportation network.

DESIGN CRITERIA:

1. Minimize disturbance of water courses and drainage systems by avoiding filling and grading.
2. Adequate provisions should be made by the developer to improve the design capacity on all streets and roads affected by their development. Improvements shall consist of sidewalks, curbs, gutters, pavement width and landscaping to assure public safety.
3. Street improvements shall not be limited to adjacent streets, but also apply to connecting streets and intersections if the capacity of the roadway is increased beyond its level of service.

4. Develop linkages to adjacent development to avoid congestion and provide cohesive circulation patterns.
5. Accommodate disabled persons' access at intersections and crosswalk locations and along the shoreline trail.
6. Assure convenient access to residential neighborhoods, and to employment and retail centers by providing linkage of local, collector, and arterial streets, and other multi-modal systems.
7. Consider bicycle corridors and sidewalks along street corridors to facilitate a continuous system.
8. Transportation plans should ensure that site access is coordinated with adjacent office complexes and other nearby land uses. Access between office clusters, whether by frontage road, sidewalks, or side access points, should be designated to minimize travel time.

TECHNICAL ASSISTANCE

Sue Barker, *Wenatchee Chamber of Commerce*

Michael Burke, *Network Development Group*

Frank Delong, *Executive Director, Washington State Horticulture Association*

Paul Fielder, *Wildlife Biologist, Chelan County Public Utility District No. 1*

Tony Eldred, *Wildlife Biologist, Washington State Department of Wildlife*

Emmett Fiske, *Facilitator Specialist, Washington State University*

Greater Wenatchee Complete the Loop Coalition

Virginia Greene, *East Wenatchee Chamber of Commerce*

Charlie Howard, *Planning Studies Manager, Washington State Department of Transportation*

Bob Hughes, *Planning Director, City of Wenatchee*

David Kaumheimer, *Fish and Wildlife Biologist, U.S. Department of the Interior*

Jim Kropf, *Area Extension Agent, Cooperative Extension, Chelan-Douglas Area*

Rod Mack, *Program Manager, Shoreline Division, Washington State Department of Ecology*

Doug Pineo, *Plan Reviewer, Shoreline Division, Washington State Department of Ecology*

Jim Pope, *Recreation Planner, Chelan County Public Utility District No. 1*

Ron Rodriguez, *Executive Director, NCW Economic Development Council*

Ron Skystead, *Washington State Department of Transportation*

Marc Smiley, *Yakima Greenway Foundation*

Larry Wadkins, *Wildlife Biologist, retired*

Cliff Weeds, *Pest Management Division, Department of Agriculture*

TECHNICAL ASSISTANCE (cont.)

Karrie Wilkinson, *Tourism Division, Washington State Trade and Economic Development*

Bill Zook, *Fish and Wildlife Biologist, Washington State Department of Fisheries*

East Wenatchee Water District

Douglas County Sewer District

Chelan-Douglas Health District

Douglas County Public Utility District No. 1

BIBLIOGRAPHY

Bieler, V.E., 1981, *Soil Survey of Douglas County, Washington*. U.S. Department of Agriculture Soil Conservation Service.

U.S. Department of Commerce National Oceanic and Atmospheric Administration, Office of Coastal Zone Management, 1980. *Improving Your Waterfront: A Practical Guide*. Washington, D.C.

U.S. Environmental Protection Agency, 1978. *Action Handbook, Managing Growth in the Small Community, Getting the Community Involved and Organized*. U.S. Government Printing Office, Washington, D.C.

American Society of Planning Officials, 1975. *Performance Controls for Sensitive Lands: A Practical Guide for Local Administrators*. Report Nos. 307, 308, Planning Advisory Service, Chicago, Illinois.

American Planning Association, 1979. *The Practice of Local Government Planning*, Municipal Management Series.

Gallion, A.B., and S. Eisner, 1980. *The Urban Pattern city Planning and Design*, 4th Edition. Van Nostrand Reinhold Co.

Stover, V., and F.J. Koepke, 1988. *Transportation and Land Development*. Institute of Transportation Engineers.

Washington State Patrol. *Summary of Reported Accidents from 1986 to 1989*. Olympia, Washington.

Washington State Department of Transportation, 1985. *Final Environmental Impact Statement SR2/SR28, East Wenatchee Vicinity*. Olympia, Washington.

Washington State Department of Ecology, 1989. *Shoreline Public Access Handbook*. Shorelands and Coastal Zone Management Program, Olympia, Washington.

Chelan County Public Utility District No. 1, 1978. *Exhibit R Recreation Plan, Rock Island Hydroelectric Power Project Columbia River F.E.R.C. Project No. 943*. Wenatchee, Washington.

Douglas County Parks Department, 1991. *Douglas County Parks and Recreation Comprehensive Plan*. East Wenatchee, Washington.

Alternatives for Washington Statewide Citizen Task Force, 1985. *Citizens' Recommendation for the Future, Report No. 1*. Office of Program Planning and Fiscal Management, Olympia, Washington.

Washington State Office of Financial Management, 1986. *1990 Population Trends for Washington State*. Office of Financial Management, Olympia, Washington.

City and County of Yakima, 1976. *The Yakima River Regional Greenway*. Yakima, Washington.

Industrial Council, 1975. *Industrial Development Handbook*. The Urban Land Institute.

International City Managers' Association, 1968. *Principles and Practice of Urban Planning*. Municipal Management Series.

U.S. Army Corps of Engineers, 1978. *Floodplain Information – Douglas County, Washington*. U.S. Department of the Army, Seattle, Washington.

Nisqually River Task Force, 1987. *Nisqually River Management Plan*. Washington State Department of Ecology, Olympia, Washington.

City of Wenatchee Planning Development, 1986. *Partners in Success, Wenatchee and Business*. Wenatchee, Washington.

Seattle Engineering Department, 1987. *Evaluation of the Burke-Gilman Trail's Effect on Property Values and Crime*. City of Seattle, Office for Planning, Seattle, Washington.

Washington State Department of Transportation, 1989. *Public Transportation Systems in Washington State*. Research and Public Transportation Division, Olympia, Washington.

Douglas County Public Works, 1990. *Six Year Transportation Improvement Program 91 to 96*, Douglas County, Waterville, Washington.

State of Washington Environmental Hearings Office, 1988. *SHB Nos. 86-34, 86-36, 86-39 WEC, et al v. Douglas County and City of East Wenatchee*.

Metron, Inc., 1989. *Greater Wenatchee Area Community Activities Center Study – Survey Results December 1989*.

Douglas County, 1972. *Douglas County Shoreline Master Program*. Waterville, Washington.

City of East Wenatchee, 1987. *City of East Wenatchee Comprehensive Plan*. East Wenatchee, Washington.

City of Wenatchee and Chelan County, 1988. *Wenatchee Urban Area Comprehensive Plan*. Wenatchee, Washington.

Douglas County Citizen Advisory Committee, 1987. *Greater East Wenatchee Area Community Attitude Survey, 1987*. Douglas County, Waterville, Washington.

Douglas County Citizen Advisory Committee, 1990. *Eastmont School District Shoreline Design Area Survey, 1990*. Douglas County, Waterville, Washington.

Economic Development Service, 1985. *An Economic Development Strategy for North Central Washington*. Wenatchee, Washington.