

ORDINANCE NUMBER 49-96

MASON COUNTY COMPREHENSIVE PLAN ADOPTION ORDINANCE

AN ORDINANCE adopting a new Mason County Comprehensive Plan; replacing the Comprehensive Plan of Mason County, approved on November 16, 1970; replacing the Southeast Mason County Subarea Plan, approved December 20, 1993; and replacing the Mason County Interim Urban Growth Ordinance Number 03-96, but re-adopting Part V Development Regulations of said Ordinance, under the authority of Chapters 36.70 and 36.70A RCW.

WHEREAS the plan is the culmination of several years of effort and many public meetings and workshops;

WHEREAS, the Board of County Commissioners are aware of the content of the plan and the record which supports it;

WHEREAS, the Board of County Commissioners held a public hearing on April 2, 1996, to consider the recommendations of the Planning Commission, the Mason County Department of Community Development and citizens on the proposed comprehensive plan;

WHEREAS, the Mason County Planning Commission formulated its recommendations after a public hearing on March 18, 1996;

WHEREAS, these hearings were duly advertised public hearings;

NOW, THEREFORE, BE IT HEREBY ORDAINED, that the Board of County Commissioners of Mason County hereby ADOPTS the Mason County Comprehensive Plan, as described by motion of the Board.

This ordinance shall be in full force and effective on this date.

DATED this 2<sup>nd</sup> day of April, 1996.

Board of County Commissioners  
Mason County, Washington

Mary Jo Cady  
Mary Jo Cady, Chair

Marv Faughender  
Marv Faughender, Commissioner

William O. Hunter  
William O. Hunter, Commissioner

ATTEST:

Rebecca S Rogers  
Clerk of the Board

APPROVED AS TO FORM:

[Signature]  
Prosecuting Attorney

c: Planning  
General Services  
Health Services  
File

ATTACHMENT TO  
ORDINANCE NO. 49-96  
MASON COUNTY COMPREHENSIVE PLAN

# Mason County Comprehensive Plan

Prepared By  
Mason County  
Department of Community Development

April, 1996

# **Mason County Comprehensive Plan**

## **Mason County Board of Commissioners**

*Commissioner Marv L. Faughender, District 1*

*Commissioner William O. Hunter, District 2*

*Commissioner Mary Jo Cady, District 3*

## **Mason County Planning Commission**

*Jay Allen*

*Pat Byrne*

*Fred Boysen*

*Rick Coleman*

*Jim Connolly*

*John Hays*

*Raymond Dingfield*

*Robert Sund*

*Mildred Warnaca*

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Clerk of the Board

APPROVED AS TO FORM:

[Signature]  
Prosecuting Attorney

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# GLOSSARY

**Accessory Dwelling Unit:** A second dwelling unit added to, created within, or detached from an existing single-family detached dwelling for use as a completely independent or semi-independent unit with provisions for shelter, cooking, sanitation, and heating; and subject to specific development, size, design, and owner-occupancy standards.

**Adequate Public Facilities:** Facilities which have the capacity to serve development without decreasing levels of service below locally established minimums. (WAC 365-195-210)

**Affordable Housing:** A residential housing unit that is rented or owned by a person or household whose monthly housing costs do not exceed thirty percent of the household's income.

**Agricultural Lands:** Properties enrolled in the Open Space Agricultural property tax classification program pursuant to Chapter 84.33 RCW.

**Airport Influence Zone:** A zone around airports designating building height restrictions, noise levels, and safety considerations as necessitated by aircraft operations.

**Aquifer:** A water-bearing layer of permeable rock, sand, or gravel.

**Aquifer Recharge Area:** The area above an aquifer through which water is filtered.

**Available Public Facilities:** Indicates that facilities or services are in place or that a financial commitment has been made to provide that facilities or services within a specified time. In the case of transportation, the specified time is six years from the time of development. (WAC 365-195-210)

**Best Management Practices:** A physical, structural, or managerial practice which has gained general acceptance for its ability to prevent or reduce environmental impacts.

**Buffer or Buffer Zone:** A neutral area between two areas of concern of sufficient width and quality to ensure that activities on one property does not negatively impact the other. The buffer might consist of open space, landscaped areas, undisturbed areas of natural vegetation, fences, walls, berms, or any combination thereof.

**Capacity:** The measure of the ability to provide a level of service on a public facility.

**Capital Improvement:** Land, improvements to land, structures (including design, permitting, and construction), initial furnishings and selected equipment. Capital improvements have an expected useful life of at least 10 years.

**Carrying Capacity:** The intrinsic constraints on the development of an area. The development that may be allowed without an (unacceptable) significant adverse impact, on a cumulative basis, on an environmental or social value intended to be protected by the comprehensive plan. Carrying capacity in the biological sciences is the population of a species in a particular environment which can be sustained on an on-going basis. "The maximum number of inhabitants that an environment can support without detrimental effects." (Websters II) For human populations, this concept is less useful in the sense that resources which are locally in short supply can be transferred from anywhere in the world, and the level of impact that human society has on the environment is variable based on the technology used and the way that technology and other human activities are managed. Humans do not have the limited range of behaviors other species have. Examples of values to be protected in the plan would be native fisheries or rural character.

**City:** Any city or town, including a code city. (RCW 36.70A.030)

**Clustered Development:** Grouping the allowed development on only a portion of the site in such a way that a significant proportion of the site remains in common open space, recreation, resource-based use, any combination of those uses, or remains undeveloped with some kind of restriction on additional development.

**Commercial Uses:** Businesses involved in: 1) the sale, lease or rent of new or used products to the consumer public; 2) the provision of personal services to the consumer public; 3) the provision of leisure services in the form of food or drink and passive or active entertainment; or 4) the provision of product repair or servicing of consumer goods.

**Community on-site Sewage Systems:** A sewage system used to serve multi-family residential complexes or groups of individual residences.

**Comprehensive Land Use Plan, Comprehensive Plan, or Plan:** A generalized coordinated land use policy statement of the governing body of a county or city as adopted pursuant to the Growth Management Act.

- Concurrency:** Adequate public facilities are available when the impacts of development occur. This definition includes the two concepts of "adequate public facilities and of "available public facilities" as defined in this section. (WAC 365-195-210)
- Consistency:** A term which means that no feature of a plan or regulation is incompatible with any other feature of a plan or regulation. Consistency is indicative of a capacity for orderly integration or operation with other elements in a system. (WAC 365-195-210)
- Contiguous Development:** Development of areas immediately adjacent to one another. (WAC 365-195-210)
- Cottage Industry:** A business, occupation, or profession that is incidental to a residential use and is carried on by a member or members of the household living in the residential unit on the site. There may be up to five employees working on the site who do not reside on the site. Cottage industries may be conducted within the residential dwelling or within an accessory structure.
- Critical Areas:** Areas which include the following areas and ecosystems: (a) wetlands; (b) areas with a critical recharging effect on aquifers used for potable water; © fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas. (RCW 36.70A.030)
- Density:** A measure of the intensity of development, generally expressed in terms of dwelling units per acre. Density can also be expressed in terms of population (i.e., people per acre).
- Design Guidelines:** A set of guidelines defining parameters to be followed in site and/or building design and development.
- Design Standards:** A set of standards defining parameters to be followed in site and/or building design and development.
- Development:** The construction, reconstruction, conversion, structural alteration, relation or enlargement of any structure, and any mining, excavation, filling, or other associated land disturbance.
- Development Regulations:** Any controls placed on development or land use activities by a county or city. Including, but not limited to, zoning ordinances, subdivision ordinances, and binding site plan ordinances. (RCW 36.70A.030)



**Domestic Water System:** Any system providing a supply of potable water which is deemed adequate pursuant to RCW 19.27.097 for the intended uses of a development. (WAC 365-195-210) (NOT USED IN PLAN)

**Easement:** A covenant which grants or restricts a specific right of use.

**Environmental Impact Statement (EIS):** A document detailing the expected environmental impacts of a proposed action.

**Erosion Hazard Areas:** Those areas that because of natural characteristics, including vegetative cover, soil texture, slope gradient, and rainfall patterns, or human-induced changes to such characteristics, are vulnerable to erosion.

**Erosion:** The wearing away of the earth's surface as a result of the movement of wind, water, or ice.

**Essential Public Facilities:** Those facilities that are typically difficult to site, such as airports, state education facilities, state or regional transportation facilities, state and local correctional facilities, solid waste handling facilities, and in-patient facilities including substance abuse facilities, mental health facilities, and group homes.

**Facilities:** The physical structure or structures in which a service is provided.

**Fauna:** Animal life.

**Federal Aviation Administration (FAA):** The federal agency responsible for implementing regulations pertaining to aviation.

**Federal Highway Administration (FHWA):** The federal agency responsible for implementing regulations and administering federal moneys for highways.

**Fire Flow:** The amount of water volume needed to provide fire suppression. Adequate fire flows are based on industry standards, typically measure in gallons per minute (gpm). Continuous fire flow volumes and pressures are necessary to insure public safety. The fire flow volume shall be in addition to the requirements of the water system for domestic demand.

**Floodplain:** That area of land adjoining a body of water that has been or may be covered by floodwater.

**Flora:** Plant life

**Fully Contained Community (FCC):** A reserved capacity for new urban development that will be characterized by urban densities and intensities, urban governmental services, and meets the criteria established in the comprehensive plan and in RCW 36.70A.350.

**Functional Classification:** A designation assigning categories to transportation facilities based on a facility's role in the overall transportation system.

**Geologically Hazardous Areas:** Areas that because of the susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to the siting of commercial, residential, or industrial development consistent with public health or safety concerns. (RCW 36.70A.030)

**Greenbelt:** A linear corridor of open space which often provides passive recreation and non-motorized transportation opportunities, serves as a buffer between developments and varying land uses, or creates a sense of visual relief from urban landscapes.

**Groundwater:** Water that fills all the unblocked pores of material lying beneath the water table.

**Growth Management Act (GMA), or Act:** The Growth Management Act as enacted in 1990 and subsequently amended by the State of Washington.

**Home Based Business:** A business, occupation, or profession that is incidental to and carried on within a residential dwelling unit by a member or members of the household. The business may have up to three employees in addition to members of the household.

**Household:** All persons who occupy a housing unit which is intended as separate living quarters and having direct access from the outside of the building or through a common hall. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements. (U.S. Department of Commerce, Bureau of the Census)

**Impact Mitigation:** The mitigation of the negative impacts of a development proposal. Mitigation includes, but is not limited to the following: avoiding the impact through change in the proposal, minimizing the impact through changes to the proposal, rectifying the impact by repairing, rehabilitating or restoring the affected environment, reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action, compensating for the impact by replacing, enhancing, or providing substitute resources or environments, and monitoring the impact and taking appropriate corrective measures. The term includes both voluntary and mandatory actions to compensate for the costs of reducing impacts; including traffic impacts.

**Infill:** The development of housing or other buildings in vacant sites in an already developed area.

**Infrastructure:** Facilities and services needed to sustain industry, residential, and commercial activities. Infrastructure may include, but not be limited to, water and sewer lines, streets, and communication lines.

**Inholding Land:** Blocks of land that are surrounded on all sides by designated Long-Term Commercial Forest Lands and are crucial for conservation of those lands but are not directly of long-term commercial significance for forestry.

**Intensity:** A measure of land use activity based on density, use, mass, size and impact.

**Level of Service (LOS):** An established minimum capacity of public facilities or services that must be provided per unit demand or other appropriate measure of need. (WAC 365-195-210); A qualitative measure describing the operational conditions within the traffic stream, and their perception by motorists and passengers.

**Local Improvement District (LID):** A special taxing district formed by landowners to finance and construct a variety of physical infrastructure improvements benefiting its members.

**Long-Term Commercial Forests or Long-Term Commercial Forest Land:** Land so designated by the county in order to provide special protection for the continued use of the land for the production of timber. Land primarily devoted to growing trees for long-term commercial timber production on land that can be economically and practically managed for such production as defined in RCW 36.70A.30 (8) and (10).

**Long-term Commercial Significance:** The growing capacity, productivity, and soil composition of the land for long-term commercial production, in consideration with the land's proximity

to population areas, and the possibility of more intense uses of the land. (RCW 36.70A.030)

**Lot:** A designated parcel, tract, or area of land established by plat, subdivision, or as otherwise permitted by law, to be used, developed or built upon as a unit.

**Low Profile Recreation:** Recreational uses such as swimming, fishing, hunting, camping, and hiking.

**Low-intensity Land Uses:** Those land uses which can be supported by the carrying capacity of the land and which do not require urban levels of service.

**Major Arterial or Principal Arterial:** Roads which convey traffic along corridors to areas of a high density of commercial or industrial activity. Major arterials or principal arterials emphasize mobility and de-emphasize access.

**Master Planned Resort:** A self contained and fully integrated development in a setting of significant natural amenities that includes short-term visitor accommodations associated with a range of developed on-site indoor or outdoor recreation facilities. It may also include permanent residential uses as an integrated part of the overall resort development. (WAC 365-195-210)

**Median Income:** The income level which divides the income distribution of a given area into two equal parts, one having incomes above the median income and the other having incomes below the median income. For households and families, the median income is based on the distribution of the total number of units including those with no income. (U.S. Department of Commerce, Bureau of the Census)

**Minerals:** A term which includes gravel, sand, and valuable metallic substances. (RCW 36.70A.030)

**Minor Arterial or Secondary Arterial:** Roads which link activity centers and convey traffic onto major arterials. Minor arterials provide both mobility and access.

**Mixed Use:** Development that combines two or more different land uses in the same project. For example, a mixed use project may include both retail uses and residential uses.

**Mobile Home Park:** A tract of land occupied or designed for occupancy by two or more mobile homes.

**Mobile Home:** A factory-assembled structure, transportable in one or more sections, that is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, and electrical systems contained therein.

**Multi-Family:** A structure containing three or more joined dwelling units.

**Multimodal:** Two or more modes or methods of transportation. Examples of transportation modes include: bicycling, driving an automobile, walking, bus transit or rail.

**Non-Clustered Single Family Housing:** Division of a parcel into lots for single family development without the grouping of lots to achieve common, open space, recreation, resource-based use, or any combination of those uses.

**Non-motorized:** Any mode of transportation that utilizes a power source other than a motor. Primarily, non-motorized modes include walking (pedestrian), horseback riding (equestrian), and bicycling.

**Non-traditional Housing Types:** Dwelling types other than on-site built housing units. Non-traditional housing types include, but are not limited to, manufactured housing, mobile homes, and houseboats.

**Nonconforming Land Use:** A use or activity that was lawful prior to the adoption, revision or amendment of the comprehensive plan but fails by reason of such adoption, revision or amendment to conform to the present requirements of the comprehensive plan.

**Non-point Source Pollution:** Pollution that enters a water body from diffuse origins on the watershed and does not result from discernible, confined, or discrete conveyances.

**Office:** A structure that generally houses a business, government, professional, medical or financial institution for the non-daily needs of individuals, groups or organizations.

**Open Space:** There are three kinds of open space land: private, common use, and public open space. Private open space includes farms, forest lands, and other parcels of undeveloped land. Common use open space is land within a residential development or other development which is designated for common access by the residents of the development or by the general community. Public open space is publicly-owned land available for recreational use of the

entire community. Open water area, such as the Hood Canal or lakes, is also often considered as open space because it creates a sense of openness.

**Peninsula Regional Transportation Planning Organization (PRTPO):** The area-wide metropolitan planning organization responsible for regional planning on the Olympic Peninsula. The PRTPO is responsible for distributing federal transportation funds to local jurisdictions.

**Per Capita Income:** Per Capita Income is the mean income for all men, women and children in a particular group. It is computed by dividing the total income of a particular group by the total population in that group.

**Performance Districts:** Performance Districts are areas in which a variety of development options are allowed if they are consistent with the purpose of the district.

**Performance Standards:** Criteria that are established and must be met before a certain use will be permitted. These measures are designed to guide development of property and include, but are not limited to, open space requirements, water and wastewater requirements, buffer zones, screening, size and heights limits for buildings, noise, vibration, glare, heat, air or water contaminants, and traffic.

**Planned Unit Development (PUD):** A residential development that includes a mix of housing types such as single family, townhouses, and other multifamily, and groups uses to provide common open space or to include recreation such as golfing as part of the development.

**Planning:** The use of scientific and technical knowledge to provide choices for decision making as well as a process for considering and reaching consensus.

**Planning Period:** The 20 year period following the adoption of a comprehensive plan.

**Plat:** A map or plan, especially of a piece of land dividing into building lots.

**Primary Treatment:** The first step in wastewater treatment in which solids in a wastewater stream are allowed to settle out. The suspended solids and the BOD (Biochemical Oxygen Demand) are reduced by 25 to 40 percent.

**Public Facilities:** Public facilities provided by the county include wastewater/sanitary systems, roads, water supply systems, stormwater management facilities, parks and recreational

facilities, county administrative buildings, police and criminal justice buildings, and solid waste facilities. Non-county facilities include fire stations, airports, hospitals, ports and schools.

**Public Services:** Public Services include fire protection and suppression, law enforcement, public health, education, recreation, environmental protection and other governmental services. (RCW 36.70A.030)

**Public Water System:** Any systems of water supply intended or used for human consumption or other domestic uses, including source, treatment, storage, transmission, and distribution facilities where water is being furnished to any community, collection, or number of individuals, but excluding a water systems serving on single family residence. (WAC 248-54)

**RCW:** Revised Code of Washington.

**Rehabilitation:** The physical improvement, remodeling, or partial reconstruction of existing structures rather than their demolition and replacement.

**Resource Lands:** Those lands designated and protected by the county as lands with long-term commercial significance for resource use.

**Resource-Based:** A use that is dependent upon, or supports uses that are dependent upon, natural resources including, but not limited to, forestry, agriculture, aquaculture, horticulture, and mineral extraction.

**Resource-Based Industrial:** A resource-based industry is a manufacturing, industrial, or commercial business which requires a location near agricultural land, forest land, or mineral resource land or aquicultural area upon which it is dependent or supports. Examples include sawmills, plant nurseries, feed stores.

**Resource Conservation Master Plan (RCMP):** Resource Conservation Master Plan areas provide the opportunity for well planned development, consistent with rural character, within Rural Lands. They may be developed through a Planned Unit Development (PUD) or a mixed use development. RCMPs would require a 20-acre minimum parcel size, clustering, open space, and a portion of the site to remain in a resource use such as forestry, mineral extraction, horticulture, agriculture, or aquaculture.

**Right of Way:** Land owned by a government or an easement for a certain purpose over the land of another, used for a road, ditch, electrical transmission line, pipeline, or public facilities

such as utility or transportation corridors.

**Riparian Areas or Zones:** Lands situated along the banks of streams, rivers and lakes and their associated wetlands.

**Road Adequacy Standards:** Standards by which government agencies can assess whether adequate road facilities are being provided and regulated.

**Runoff:** Water from rain, snowmelt, or irrigation that flows over the ground surface and returns to streams.

**Rural Activity Center (RAC):** Concentrated settlements within Rural Lands that may include a variety of residential, small scale commercial, resource-based and rural light industrial, recreation, and public uses. They may also include a compact, pedestrian-oriented core. They may be served by community water systems and have community sewage treatment facilities but have only rural governmental services. They reflect an existing development pattern, but they are not intended to expand.

**Rural Areas:** Rural Areas in Mason County include those areas not designated as Urban Areas, Resource Lands, RACs, RCCs, WRAs, or RCMPs. They currently provide for rural residential, farming, forestry, recreation, and single-purpose commercial, retail, and industrial uses. These uses are expected to continue and increase over the next 20 years. In Rural Areas, the rural landscape will remain dominant, and include a variety of protected natural features.

**Rural Community Centers (RCC):** Rural Community Centers are intended to provide a focal point and community identity for surrounding rural area, while they meet some of the immediate needs of rural residents, resource dependent industry, and visitors. They may include one or two civic, community, or retail uses such as post office, community center, church, grange, gas station, or small convenience store. Residential uses are not included in Rural Community Centers. They may be served by community water systems and community sewage treatment facilities but have only rural governmental services.

**Rural Lands:** Those areas outside of designated Resource Lands and Urban Growth Areas. Natural features contribute significantly to rural character of these lands. These features include, but are not limited to, forests, farmlands, and farm buildings, pastures, meadows,



shorelines, wetlands, streams, lakes, hills and mountains. Types of uses within Rural Lands include resource-based land uses, recreational uses, residential uses, and low intensity non-residential uses. Rural Lands can be served by rural governmental services and include Rural Activity Centers, Rural Community Centers Commercial Centers, Working Rural Areas, and Rural Areas.

**Sanitary Sewer Systems:** All facilities, including approved on-site disposal facilities, used in the collection, transmission, storage, treatment or discharge of any waterborne waste, whether domestic in origin or a combination of domestic, commercial or industrial waste. (WAC 365-195-210)

**Secondary Treatment:** The second step in purifying sewage which uses biological processes in addition to settling and provides purification from 85 to 95 percent.

**Seismic Hazard Areas:** Areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, or soil liquefaction.

**Sewer:** The closed pipe which carries raw sewage from a home or business to a treatment facility.

**Sight Distance:** The length of a roadway required which is sufficient enough to ensure safe operation of a motor vehicle at posted speeds.

**Single Family (detached):** A detached building containing one dwelling unit.

**Small Scale:** A term which indicates that development regulations will limit the intensity size, scale, number of uses and other factors of a particular development.

**Solid Waste:** All putrescible and nonputrescible solid and semisolid wastes, including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, demolition and construction wastes, abandoned vehicles or parts thereof, and recyclable materials. (RCW 70.95.030)

**Special Needs Housing :** All housing that is designed for an individual or family who requires supportive social services in order to live independently or semi-independently. These households require all types of housing including emergency, transitional and permanent housing. Special needs groups include, but are not limited to the homeless; elderly; AIDS victims; single parents; runaway and homeless youth; severely physically handicapped;

mentally and emotionally disturbed; chronically mentally ill, developmentally disabled; farm workers (migrant labor households) and persons with substance abuse problems. (Washington State Department of Community Development, Assessing your Community's Needs, A Practical Guide to Preparing Housing Assessments under the GMA and CHAS Requirements, June 1992.)

**State Environmental Policy Act (SEPA):** . A Washington state law requiring the systematic assessment of the environmental impacts of any action that is expected to significantly affect the environment.

**Subdivision:** The division of a lot, tract, or parcel of land into two or more lots, plats, sites, or other divisions of land for the purpose of sale, lease, or transfer of ownership, unless specifically exempted in RCW Chapter 58.17.040.

**Surface Waters:** Streams, rivers, ponds, lakes or other waters designated as "waters of the state" by the Washington Department of Natural Resources (WAC 222-16-030).

**Tertiary Treatment:** The third step in purifying sewage that removes additional nutrient levels.

**Through Traffic:** Traffic traveling through a specific area to a destination beyond that area.

**Transportation Demand Management (TDM):** An array of strategies intended to lead to a reduction in the number of vehicles using the road system while simultaneously serving the same number of travelers.

**Transportation Improvement Plan (TIP):** A jurisdiction's long range programming document for transportation facilities.

**Transportation System Management (TSM):** The use of low capital expenditures to increase the capacity of the transportation system. TSM strategies include but are not limited to signalization, channelization, and bus turn-outs. (WAC 365-195-210)

**Urban Governmental Services:** Include those governmental service historically and typically delivered by cities, and include storm and sanitary sewer services, fire and police protection services, public transit services and other public utilities associated with urban areas and normally not associated with non urban areas. (RCW 36.70A.030)

**Urban Growth Area:** Those areas designated by a county pursuant to RCW 36.70A.110.

**Urban Growth:** Growth that makes intensive use of land for the location of buildings, structures, and impermeable surfaces to such a degree as to be incompatible with the primary use of such land for the production of food, other agricultural products, or fiber, or the extraction of mineral resources. When allowed to spread over wide areas, urban growth typically requires urban governmental services. "Characterized by urban growth" refers to land having urban growth located on it, or to land located in relationship to an area with urban growth on it as to be appropriate for urban growth. (RCW 36.70A.030)

**Urban Level of Facilities and Services:** Those services defined as "urban governmental services" with levels of service as defined within Capital Facilities Element of the Mason County Comprehensive Plan.

**Utilities or Public Utilities:** Enterprises or facilities serving the public by means of an integrated systems of collection, transmission, distribution, and processing facilities through more or less permanent physical conditions between the plant of the serving entity and the premises of the customer. Included are systems for the delivery of natural gas, electricity, telecommunications services, and water for the disposal of sewage. (WAC 365-195-210).

**Vehicle Miles Traveled (VMT):** An engineering measure of the demand on a transportation system.

**Visioning:** A process of citizen involvement to determine values and ideals for the future of a community and to transform those values and ideals into manageable and feasible community goals. (WAC 365-195-210)

**Water Dependent Use:** A use or portion of a use which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations. Examples of some water dependent uses include: boat ramps, swimming areas, aquaculture, marinas, water intakes and outfalls, fish pens and fish screens.

**Watershed:** Region drained by or contributing water to a stream, lake or other body of water.

**Wetland or Wetlands:** Areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Wetlands do not include those

artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas created to mitigate conversion of wetlands. (RCW 36.70A.030)

**Working Rural Area (WRA):** Eligible area for the Working Rural Area designation include forested areas not included in Forest Resource Lands, that are likely to remain in forestry or other resource-based use during the next 15-20 years. Lands designated as Working Rural Areas may convert out of that designation through a variety of development options including, but not limited to, Planned Unit Developments, Mixed Use, Commercial Recreation, Master Planned Resorts, Fully Contained Communities, and commercial and industrial uses.

**WSDOT:** Washington State Department of Transportation.

**Zoning:** The process by which a county or municipality legally controls the use of property and physical configuration of development upon tracts of land within its jurisdiction. The City of Shelton is the only jurisdiction in Mason County that has a zoning ordinance.



# Chapter I

## INTRODUCTION

### **I-1 THE MASON COUNTY COMPREHENSIVE PLAN**

#### *Why Mason County Is Planning.*

The comprehensive plan serves to guide public decision making in Mason County. The plan states the goals for the future that have been identified by the citizens of the county or specified by the state in the Growth Management Act as state-wide goals. Mason County is growing, and the comprehensive plan looks ahead to the year 2014 and sets policies for county investments in roads, water, sewer, parks, and all other public facilities provided by the county. It projects what demands will be created by population increases in that time and how best to respond to these needs. It guides the land development regulations which will manage private growth and ensures that the resource lands and the environment are protected, efficient provision for public services are made, and that progress is made on the other goals of county and its citizens.

#### *How is the comprehensive plan organized.*

The first chapter of the Mason County Comprehensive Plan is a general introduction to the plan and the county. The second chapter discusses how the plan was created and what the county's goals and county-wide planning policies are. In the third chapter of the plan, there are planning policies for various subject areas. The next several chapters each address particular subjects or elements of the plan. These elements of the comprehensive plan are land use and rural lands, housing, capital facilities, utilities and transportation.



## **I-2 THE GROWTH MANAGEMENT ACT PLANNING PROCESS**

### **GMA Overview**

Mason County is planning under the authority and requirements of the Growth Management Act. The Act establishes a number of requirements for local comprehensive planning. It identifies specific goals that comprehensive plans are to achieve, prescribes the elements each plan is to contain, establishes requirements for regulations, mandates the "urban growth area," requires local governments to demonstrate how they will pay for the improvements and facilities called for in their plans, and requires extensive public participation in the planning process.

### **Relationship of the Plan Elements**

All of the elements of the comprehensive plan must be consistent with each other and with the goals and policies identified in the plan. The land use element provides the basis for other elements of the county's comprehensive plan. Consistency with other plan elements is, therefore, crucial to the success of the comprehensive plan.

### **Land Use**

The Land Use Element provides for enough developable land to meet the County's 20-year population forecast and the related demand for housing, transportation, capital facilities, and utilities. If sufficient land is not identified in the land use element, the County must revise one or all of the plan elements to ensure that there is sufficient land base to meet the physical requirements of all plan elements.

### **Housing**

The Housing Element identifies the county's demand for housing over the next 20 years. It then analyzes the ability of the county to accommodate the projected housing needs. This analysis provides the basis for the allocation and distribution of residential land uses in the land use element. Housing goals and planning policies are developed to meet the needs identified in the element.

### **Capital Facilities**

The Capital Facilities Element identifies the facilities such as water, wastewater disposal, criminal justice facilities necessary to support the anticipated development. It also defines the level of service for each type of facility and service. The Capital Facilities Element then determines the needed improvements, the costs associated with meeting the need, and the financial ability of the county to pay for those needs. Goals and policies are established to guide public investment decisions and land use decisions. Public services



which are necessary to meet the expected growth must be available as development happens, or within a reasonable time afterwards.

*Utilities*

The Utilities Element identifies services provided to Mason County residents by private utilities providers and the associated service areas thereof. The Land Use element of the plan identifies areas for potential concentration of development. Private utilities providers may, through the use of the Land Use element, identify areas where utilities provision may fall short of future demand and consequently plan for future growth.

*Transportation*

As with both the Utilities and Capital Facilities Elements, the Land Use Element, to a large extent, will determine the need for transportation system upgrades. The Transportation Element determines the ability of the existing and planned transportation network to accommodate anticipated growth throughout all areas of the County at the level of service desired by the community.

**GMA Requirements**

The Growth Management Act establishes 13 statewide goals with which local comprehensive plans and regulations must be consistent. The goals are established in the following areas:

- |                           |                                |
|---------------------------|--------------------------------|
| Urban Growth              | Sprawl                         |
| Transportation            | Housing                        |
| Economic Development      | Property Rights                |
| Permits                   | Natural Resource Industries    |
| Open Space and Recreation | Environment                    |
| Citizen Participation     | Public Facilities and Services |
| Historic Preservation     |                                |

These goals are discussed in Chapter II.

GMA requires local governments to adopt interim regulations to protect critical areas and natural resource lands. Mason County adopted an ordinance for this purpose, Ordinance No. 77-93, on August 3, 1993. Both resource lands and critical areas are discussed in the land use chapter.

GMA required comprehensive plans of counties, and cities or towns within those counties,

to be consistent with one another. This purpose is met with the coordination and review process, which was followed in the development of this plan.

GMA required Counties and cities or towns to agree on and justify Urban Growth Areas "within which urban growth shall be encouraged and outside of which growth can occur only if it is not urban in nature." The Urban Growth Area must be able to accommodate growth that is expected to occur over 20 years. Urban growth areas are discussed in the land use chapter.

GMA required Counties and cities or towns to jointly adopt countywide planning policies which establish guidelines on how their comprehensive plans will be developed in order to be consistent. This was done with county-wide planning policies which the City of Shelton and Mason County adopted August 21, 1992. These policies are summarized in the next section, and given in detail in Chapter II.

GMA required local governments to establish processes for "early and continuous" public participation in the GMA planning process. Mason County established a intensive public participation process, only part of which is described in the comprehensive plan.

### *Comprehensive Plan Amendments*

The Growth Management Act provides that the comprehensive plan and implementing regulations are subject to continuing evaluation and review, and that the comprehensive plan shall only be amended through established procedures.

Mason County establishes the following procedures for its comprehensive plan amendments:

1. Amendments may be considered no more frequently than once a year.
2. All proposals shall be considered concurrently so that the cumulative effect of the various proposals can be evaluated.
3. The county shall establish and disseminate procedures for the amendments which establish the form of the application for amendments, the timing of applications, and the process of the review and public participation.
4. Exceptions to these general procedures shall be allowed when:
  - a. An emergency exists,
  - b. The revisions are proposed to resolve an appeal of the comprehensive plan filed with the growth management hearings board or court,
  - c. The proposal is an initial adoption of a subarea plan, or
  - d. The adoption or amendment is of a shoreline master program under the procedures set forth in chapter 90.58 RCW.



### **I-3 COUNTYWIDE PLANNING POLICIES**

#### **Overview**

GMA required development and adoption of countywide planning policies in all counties planning under the Act. Within each county, cities or towns and the county were to develop and adopt written policy statements (joint policies) which promote consistency between their comprehensive plans, and coordination of their planning efforts. The Countywide Planning Policy contain policies intended to guide the planning process for the City of Shelton and Mason County. Those policies address the following issues:

Urban growth area designations and distribution of population forecasts

Rural area designations

The means to promote contiguous and orderly development and provide for urban services

Siting of public facilities of County or state significance

Transportation facilities and strategies

Need and Distribution of Affordable housing

Joint procedures for planning within Shelton urban growth areas

Economic development

Fiscal impacts

Planning Process

#### ***Public Process***

The formal review period for the Countywide Planning Policies began in May, 1992 and continued through August, 1992. Public hearings were held in May and June of 1992. The Countywide Planning Policies were revised to reflect input received through the public review process and the public hearings. Mason County and the City of Shelton jointly adopted the Countywide Planning Policies on August 17, 1992.



## **I-4 MASON COUNTY OVERVIEW**

### **Geography**

Mason County is situated along the southwestern portion of Puget Sound, and encompasses roughly 968 square miles. It borders on Jefferson County to the north, Grays Harbor County to the west and southwest, Thurston County to the southeast, Pierce County to the east, and Kitsap County to the northeast. Mason County remains a predominantly rural county despite the urban spillover from both Thurston and Kitsap Counties. The City of Shelton, the only incorporated area in Mason County, includes approximately 4.77 square miles, or less than one percent of the County's total land area. Two Native American Tribes, the Skokomish and the Squaxin Island Tribes, have reservations within the boundaries of Mason County.

Three geological provinces combine to form Mason County. They include the Puget Sound Lowland, the Olympic Mountains, and the Black Hills. Additionally, Seven watersheds exist within Mason County. They include Case Inlet, Chehalis, Lower Hood Canal, Oakland Bay, Skokomish, Totten-Little Skookum, and West Hood Canal. Mason County also includes over 90 miles of marine shoreline, nearly 100 freshwater lakes, two major rivers, and a number of smaller tributaries and creeks.

Mason County's rich natural resources and open spaces predominate the County's landscape. Combined national, state, and private forests currently account for about 82 percent of the County's land. Mineral deposits underlie Mason County's top soils. At present these deposits support 21 surface mining operations. Agricultural and aquaculture areas contribute both to the County's natural beauty and its economy. Mason County also includes substantial open space. Open space within the County hosts wildlife habitat, undeveloped natural areas, and many developed park and recreation sites. These open space areas include 101 sites managed by federal, state, county, municipal, and private interests.

### **Climate**

Mason County's climate can be characterized as moderate-maritime, influenced by the Pacific Ocean, yet sheltered by the Olympic Mountains. Average temperatures range from a high of 78° F. in July to 32° F. in January. The average daily temperature in Mason County is 51° F. The County receives an average of 64 inches of precipitation annually, with average monthly rainfalls ranging from a low in July of 0.8 inches, to a high of 10.4 inches in January.

### **Population**

Mason County's 1995 population is 45,300 and is expected to grow to 81,102 by the year 2014, reflecting the present annual growth rate of 3.13%. The County has experienced rapid population growth since the 1960s. Between 1960 and 1990, the County's total population grew by roughly 136 percent. From 1990 to 1994, the County's population grew by 15.5 percent at an annual average rate of 3.7 percent. Historically, the bulk of the Mason County's population growth has occurred in the unincorporated areas of the County. The City of Shelton and the Community of Belfair, however, are expected to attract a larger share of Mason County's population growth in the future.

### **Economy**

Natural resource industries currently support Mason County's economy and are expected to be as important in the future. The County is highly specialized in the production of forestry and aquaculture commodities. This specialization focuses on both raw materials and value added products in these industries. Heavy construction and government service also anchor the County's economy.

Government is the County's largest employer. Over 22 percent of Mason County's total employment in 1992 was provided by the government sector. The service industry was the largest private employer, followed closely by the retail industry.

## Chapter II

# PLANNING GOALS AND THE INTEGRATED PLANNING PROCESS

### II-1 INTRODUCTION

Mason County used an integrated GMA/SEPA process in its comprehensive planning effort. This integrated approach has allowed the County to meet its GMA and SEPA requirements through a single, unified process. Mason County's unified process includes public participation, documentation of existing conditions, establishing goals and objectives, identifying alternatives, conducting impact and consistency analyses, identifying mitigation measures, and preparing documents. This chapter presents an overview of Mason County's integrated process and related public involvement. It also presents the goals developed for the plan, and the county-wide planning policies which guided the plan's formation and are integrated into it.





## **II-2 PUBLIC PARTICIPATION**

### **Overview**

Both GMA and SEPA recognize public participation as a critical aspect of the planning process. Both acts provide wide latitude in creating the public participation and agency coordination process to suit the needs of individual jurisdictions. GMA requires, and SEPA encourages, early and continuous public participation in the development and amendment of comprehensive plans and development regulations. Further, GMA's Procedural Criteria strongly recommend engaging the community in a "visioning" process to identify common community values and ideals, and to describe an image of the community's future. In addition, SEPA requires notice, comment, agency coordination, public meetings, and public hearings.

Mason County framed its public participation strategy to comply with these requirements. The strategy included a Growth Management Advisory Committee (GMAC) representing all sub-areas of Mason County, an Ad Hoc Committee, and the Mason County Planning Commission. It also included general public involvement during the following key steps of its Comprehensive planning process:

- I. Community Visioning
- II. Community Goals/Countywide Planning Policies
- III. Plan Objectives and Alternatives
- IV. Designation of Critical Areas and Resource Lands
- V. Impact Analysis and Mitigation
- VI. Comprehensive Plan and EIS Documents

The community visioning process and expanded scoping process are summarized here. The public participation activities for Community Goals/Countywide Planning Policies are described in section II-3, Plan Goals. Similarly, the public participation activities for Plan Objectives and Alternatives, Impact Analyses and Mitigation, and Comprehensive Plan and EIS Documents are described in those corresponding sections of this chapter.

### Community Visioning

Mason County's Vision Statement translates the community's values, hopes and goals into a unified vision for the future. The county involved a broad range of community members in its visioning process. The process included a vision survey, public meetings, and a random sample telephone survey of registered voters. The vision statement provides a guide to the comprehensive plan.

#### *Mason County Vision Statement*

*Mason County will remain a primarily rural county where residents will enjoy peace and quiet, privacy, natural views, and rural enterprise. Although rural character means different things to different people, aspects of it include: natural vistas, wildlife, and natural ecosystems; fewer restrictions and more privacy than in an urban area; the easy operation of resource based industries such as timber, mining and agriculture; and the close ties of family and community to the land.*

#### *The Urban Areas*

*The City of Shelton and the community of Belfair will serve as the County's principal economic, civic, and social centers. Each will have a core business area anchored by retail, service industries, government, and education facilities. Shelton will also hosts a multi-county medical industry that serves the Olympic Peninsula region, and regional retail centered in the City's Olympic Highway North area. The two urban areas will provide a strong employment and tax base.*

#### *The Rural Areas*

*Natural resources will continue to provide the foundation of the County's economy. Forestry, agriculture, aquaculture including shellfish and other fisheries industries, Christmas tree farming and mining will provide employment for County residents. The County's abundance of natural amenities including mountains, lakes, rivers, and wildlife will continue to support the County's thriving tourist industries, including Master Planned Resorts. The County's land use regulations will protect natural resource lands and industries against encroachment from incompatible, competing uses.*

### *Housing*

*Residential growth within the County will be centered in Shelton urban area, the community of Belfair, a new fully contained community, Working Rural Areas and Resource Conservation Master Planned communities. Mason County will offer a range of affordable rural and urban housing choices including single family, multifamily, and mixed-use.*

### *The Environment and Open Space*

*Mason County will protect the environment in a way which is compatible with the needs of a growing population. One focus will be watersheds and their water quality. The county will also conserve an open space network that will include wildlife habitat and corridors, greenways, estuaries, parks, trails and campgrounds. This system will help preserve the County's environment and rural character, support the County's tourism industry, and meet the recreation needs of County residents.*



**II-3 PLAN GOALS**

**Overview**

The Growth Management Act identifies thirteen goals to guide counties and cities in the development and adoption of comprehensive plans. These thirteen goals pertain to: urban growth, reduction of sprawl, transportation, housing, economic development, property rights, permits, natural resource industries, open space and recreation, environment, citizen participation and coordination, public facilities and services, and historic preservation. Mason County's Countywide Planning Policies (CWPPs) evolved from GMA's thirteen goals and the public input gained through the County's Visioning Process. Further, Mason County and the City of Shelton jointly participated in formulation of Mason County's Countywide Planning Policies (CWPPs). These policies have served as the underlying goals for preparation of Mason County's draft Comprehensive Plan.

**Public Participation**

Mason County organized a public process for developing the Countywide Planning Policies (CWPPs). That process established a Joint City/County Elected Official Review Board (Board). This Board included the commissioners from both Mason County and the City of Shelton. The Board was guided by the requirements of House Bill 1025 and the Mason County/City of Shelton Regional Strategy Agreement.

In addition, the Board used a twelve-step process for preparing the CWPPs. The approach focused on coordination among Mason County, the City of Shelton, and other public agencies. TABLE II.2 identifies the groups that participated in the preparation of the CWPPs:

|  |  |
|--|--|
| Sewer Districts  | Water Districts  |
| Fire Districts   | School Districts   |
| Port Districts   | Hospital Districts                                       |
| Squaxin Island Tribe   | The Skokomish Tribe                                      |
| County/City Public Works Depts.                                | Mason County Fire Marshal                                |
| Public Utilities District No. 1                                | Public Utilities District No. 3                          |
| County/City Budget Directors                                   | County/City Planning Departments                         |
| Shelton Planning Advisory Committee                            | Economic Development Council                             |
| City of Shelton Fire Department                                | County/City Parks Departments                            |
| Shelton/Mason Chamber of Commerce                              | County/City Criminal Justice Dept.                       |
| Peninsula Regional Transportation Planning Organization (RTPO) | Mason County Growth Management Advisory Committee (GMAC) |

The first draft of the CWPPs was completed in late January, 1992. The draft went through an informal review and revision period that ended in March of 1992. The formal review period for the CWPPs began in May, 1992 and continued through August, 1992. Public hearings were held in May and June of 1992. CWPPs were revised to reflect input received through the public review process and the public hearings. Mason County and the City of Shelton jointly adopted the Countywide Planning Policies on August 17, 1992.

Community Goals/Countywide Planning Policies

Mason County's Comprehensive Plan addresses each of the thirteen GMA goals according to the vision shared by County residents. The following discussion identifies Mason County's Countywide Planning Policies, organized by the GMA goal they address. The policies appear as adopted.

*Urban Growth*

GMA encourages concentrating development in urban areas where adequate public facilities and services exist, or can be provided within a reasonable amount of time. In conjunction with the City of Shelton, Mason County adopted County-Wide Planning Policies (CWPP), some of which deal specifically with the issue of urban growth and are designed to alleviate negative aspects of growth.

- CWPP 1.1 Designate Urban Growth Areas around incorporated cities where:
  - infrastructure exists;
  - infrastructure is planned, as identified in an approved Capital Facilities Plan; or,
  - services can be reasonably and economically extended.
  
- CWPP 1.4 Mixed use developments, multi-family developments, employment centers, and other intensive land uses are appropriate development to be encouraged within designated Growth Areas, in order to protect rural character in the remainder of the County.
  
- CWPP 3.8 Encourage development in Growth Areas where:
  - infrastructure exists or is planned; or
  - infrastructure is provided by the developer according to locally established minimum standards

### *Reduce Sprawl*

GMA discourages the inappropriate conversion of undeveloped land into sprawling, low density development. Several of Mason County's CWPPs are designed to reduce the impacts of growth, including sprawl, in areas outside of UGAs.

CWPP 2.1 Rural areas now exist throughout Mason County that contribute a large measure of the quality of life enjoyed by residents. These areas are characterized by low housing densities, wilderness and semi-primitive recreational living opportunities, and open space. Other rural qualities include peace and quiet, low traffic volumes, natural views, privacy, and personal freedom. Intensive development will not be encouraged in these rural areas due to the difficulty of providing cost-effective services, or because their disappearance from the landscape would seriously detract from the desired character of the county. Rural areas of Mason County should be designated as such and protected from encroachment by intensive development. Rural areas include those portions of the County that lie outside designated growth areas, master planned communities, and destination resorts, and may have lower standards of infrastructure and service that reflect and maintain this rural character.

CWPP 2.2 Comprehensive plan policies will be designed to protect rural lifestyles and values.

CWPP 5.3 Establish Level of Service standards in Growth Areas that ensure adequate services to prevent out-migration due to congestion.

### *Transportation*

GMA encourages development of efficient, multi-modal transportation systems that are based on regional priorities and are coordinated with county and city comprehensive plans.

CWPP 5.1 Encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans.

CWPP 5.2 Establish Level of Service standards that encourage densities in Growth Areas where services as public transit, pedestrian, car-pooling, etc., are available.

CWPP 5.3 Establish Level of Service standards in Growth Areas which ensure adequate service to prevent out-migration due to congestion.



- CWPP 5.4 Protect functions of designated high volume corridors by restricting individual access points.
- CWPP 5.5 Promote interconnecting street networks which provide alternative routes.
- CWPP 5.6 Encourage alternative transportation modes by providing service in growth areas such as bikeways, sidewalks, transit, etc.
- CWPP 5.7 Policies from the Peninsula Regional Transportation Policy Organization will be incorporated and applied where appropriate.
- CWPP 5.8 The County and the cities and other community growth areas therein should work cooperatively with the Mason County Transit Authority (MCTA) to provide equitable public Transit throughout the County.

**Housing**

GMA encourages the availability of affordable housing to all economic segments of the population, promotes a variety of residential densities and housing types, and encourages preservation of existing the housing stock.

- CWPP 6.1 Encourage the availability of affordable housing to all economic segments of the population, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.
- CWPP 6.2 Define and establish the need for affordable housing through development of a Housing Plan.
- CWPP 6.3 Encourage affordable housing through innovative land use techniques such as clustering, planned unit development, infill housing incentives, density bonuses, etc.
- CWPP 6.4 The housing and land use elements of the Comprehensive Plans for Mason County and its cities will include an assessment of land availability and general criteria for siting special purpose housing within the Urban Growth Areas to ensure that such housing can be accommodated.
- CWPP 6.5 Within the Urban Growth Areas, a wide range of housing types, densities, and mixtures will be encouraged.

- CWPP 6.6 As part of a comprehensive program to address the affordability issue, examine current local regulations and policies for impacts on housing cost. Prior to adoption of any new ordinance or regulation affecting home-building, evaluate the impact on the provision of affordable housing options.
- CWPP 6.7 To avoid tightening of the urban land supply and rising housing cost, Growth area boundaries may be drawn to accommodate a county-wide population greater than Office of Financial Management (OFM) projections. It is recognized that growth will occur outside of Growth Areas.
- CWPP 6.8 Affordable housing should be convenient to public transportation, major employment centers, and public services.
- CWPP 6.9 Affordable housing needs will be examined in both city and rural contexts. Strategies to address housing affordability will reflect local definitions of affordable housing, urban and rural values, cost and availability of land, infrastructure cost, private property rights, and broad-based citizen involvement.

*Economic Development*

GMA encourages economic development that is consistent with adopted comprehensive plans, promotes economic opportunity for all citizens of the County, especially for unemployed and disadvantaged persons, and encourages growth in areas experiencing insufficient economic growth, all within the capacities of the County's natural resources, public services and public facilities.

- CWPP 8.1 Encourage economic development throughout the County that is consistent with adopted comprehensive plans, promote economic opportunity for all citizens of the County, especially for unemployed and disadvantaged persons, and encourage growth in areas experiencing insufficient economic growth, all within the capacities of the County's natural resources, public services and public facilities.
- CWPP 8.2 Maintain and enhance natural resource-based industries including productive timber, agriculture, and fisheries industries. Encourage the conservation of productive forest lands and productive agricultural lands, and discourage incompatible uses.
- CWPP 8.3 Establish coordinated incentives to promote economic development with respect to Vision Statements and Goals for each community.

- CWPP 8.4            Promote economic development activities where services needed by such activities already exist or can be easily and economically provided.
  
- CWPP 8.5            Promote economic development where off-site impacts, such as transportation, can be effectively managed.
  
- CWPP 8.6            Discourage development activities in environmentally sensitive areas which may have a detrimental effect on public health, safety, environment, and fiscal integrity of the area.
  
- CWPP 8.7            Increase economic vitality in Mason County through the creation of jobs that provide livable wages and which promote economic diversity, stabilization, and maintenance of a high quality environment.
  
- CWPP 8.8            Support school district, post secondary, and higher education efforts including vocational education training, and education of a highly trained, technically skilled citizenry.

*Property Rights*

GMA states that "property rights of landowners shall be protected from arbitrary and discriminatory actions. Further, Private property shall not be taken for public use without just compensation having been made.

- CWPP 10.1           Property rights of landowners shall be protected from arbitrary and discriminatory actions. Private property shall not be taken for public use without just compensation having been made.
  
- CWPP 1.5            Adequate open space is vital to the quality of life and sense of place in Mason County. Mason County should coordinate with growth areas to protect multiple use open space. The County should explore ways to provide accessible public open space without compromising private property rights.

*Permits*

Both GMA and Mason County express that "applications for permits should be processed in a timely and fair manner to ensure predictability (CWPP 10.2)."

CWPP 10.2            Applications for permits should be processed in a timely and fair manner to ensure predictability.

*Resource Industries*

GMA recommends Counties maintain and enhance natural resource based industries including productive timber, agriculture, and fisheries industries, and encourage the conservation of productive forest lands and productive agricultural lands, and discourage incompatible uses.

CWPP 8.2            Maintain and enhance natural resource based industries including productive timber, agriculture, and fisheries industries. Encourage the conservation of productive forest lands and productive agricultural lands, and discourage incompatible uses.

*Open Space*

GMA encourages the retention of open space and development of recreational opportunities. GMA further encourages conservation of fish and wildlife habitat, and increased access to natural resource lands, water and developed parks

CWPP 3.2            Encourage retention of open space and development of recreational opportunities.

CWPP 3.3            Encourage increased access to natural resource lands and water.

CWPP 3.5            Encourage the development of parks.

CWPP 1.5            Adequate open space is vital to the quality of life and sense of place in Mason County. Mason County should coordinate with growth areas to protect multiple use open space. The County should explore ways to provide accessible public open space without compromising private property rights.

*Environment*

GMA strives to protect the environment and enhance the quality of life, including air and water quality, and the availability of water.

- CWPP 3.6            Protect the environment and enhance the quality of life, including air and water quality, and the availability of water.
  
- CWPP 3.10        In order to protect public health and water quality, septic systems will be encouraged where appropriate according to adopted County health codes. Alternative sewage collection and treatment systems should be considered as an option to conventional sewage treatment.
  
- CWPP 3.11        Mason County and the cities therein shall protect drinking water supplies from contamination, maintain potable water in adequate supply, and identify and reserve future supplies.
  
- CWPP 8.6         Discourage development activities in environmentally sensitive areas which may have a detrimental effect on public health, safety, environment, and fiscal integrity of the area.

*Citizen Participation*

GMA encourages the involvement of citizens in the planning process and coordination between communities and jurisdictions to reconcile conflicts.

- CWPP 10.3        Encourages the involvement of citizens in the planning process and coordination between communities and jurisdictions to reconcile conflicts.
  
- CWPP 7.1         Mason County and the cities within will establish joint procedures for review of land development activities within the cities' Growth Areas.

*Facilities/Services*

GMA strives to ensure that public facilities and services necessary to support development shall be adequate to serve the development at the time of occupancy without decreasing the level of service provided.

- CWPP 3.1         Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time of occupancy without decreasing current levels below locally established minimum standards.

- CWPP 4.1            Mason County and the cities therein, along with public participation, shall develop a cooperative regional process to site essential public facilities of regional and statewide importance. The objective of the process shall be to ensure that such facilities are located so as to protect the environmental quality, optimize access and usefulness to all jurisdictions, and equitably distribute benefits/burdens through out the region or county.
- CWPP 4.2            Major public facilities that generate substantial travel demand should be sited along or near major transportation and public transit corridors.
- CWPP 4.3            Sharing of corridors for major utilities, trails and other transportation rights of way is encouraged.

***Historic Preservation***

GMA states that jurisdictions should "identify and encourage the preservation of lands, site, and structures that have historical or archeological significance.

- CWPP 3.7            Identify and encourage the preservation of lands, sites, and structures that have historical or archeological significance.



## **II-4 PLAN OBJECTIVES and ALTERNATIVES**

### **Overview**

GMA emphasizes and SEPA requires, the use of objectives as an important means of formulating and evaluating the proposed Comprehensive Plan. Mason County's Vision Statement and goals, as stated through the Countywide Planning Policies, provided the framework for developing the County's Major Plan Objectives.

Mason County's draft Plan/EIS presents and evaluates four alternatives and a preferred alternative to determine which alternative(s) can feasibly attain the community's objectives. Mason County's integrated approach complies with GMA's requirement to develop a plan based on planning goals, and SEPA's requirement to describe and evaluate plan alternatives through the community's goals and objectives.

### **Plan Objectives**

Mason County's Growth Management Advisory Committee used the Vision Statement and Goals to identify objectives that the County's Comprehensive Plan should achieve. Those objectives include preserve air and water quality; support a resource-based economy; maintain rural lifestyle; create flexibility in land management; foster land and housing affordability; and encourage employment and a strong tax base.

#### *1. Preserve Air and Water Quality*

Appropriate regulation of land use and development throughout the County to maintain air and water quality. This includes coordination with state and regional agencies responsible for protecting of air and water resources.

#### *2. Support Resource-Based Economy*

Appropriate regulation of land use and development of lands adjacent to Resource Lands to help encourage the long term viability of Mason County's resource-based economy.



3. *Maintain Rural Lifestyle*

Appropriate regulation of land and development throughout the County to maintain the sense of community, safety, peace, and lack of crowding. New development should consider on-site views of trees and water, and use the natural environment to buffer/screen one home from another.

4. *Flexibility in Land Management*

Use of flexible land use and development regulations and management practices, such as performance zoning, to preserve personal property rights, promote well-designed development, and to protect the natural environment.

5. *Affordability*

Appropriate land use and development regulations throughout the County to maintain affordable land, housing, and public services.

6. *Encourage Employment and Strong Tax Base*

Appropriate regulation of land use and development throughout the County to encourage economic expansion, the creation of high paying jobs, and broadening the County's tax base.

*Plan Alternatives*

Comprehensive Plan alternatives were part of a decision-making process that began with Visioning and progressed through development of Community Goals, and Major Plan Objectives. This process was used because both GMA and SEPA emphasize goals, objectives and alternatives as important means for formulating and evaluating the Comprehensive Plan. Following an extensive evaluation of numerous broad range alternatives, the Growth Management Advisory Committee (GMAC) identified four Comprehensive Plan Alternatives to be advanced for SEPA analysis in the draft Plan/EIS.

Initially, the GMAC considered 10 broad range alternatives for the County's draft Plan/EIS. Those alternatives included No Action as required by SEPA, 5 urban options, and 4 rural concepts. Through an assessment process that evaluated the alternatives based on Mason County's Vision Statement, community goals, and Major Plan Objectives, the GMAC refined the 10 broad range alternatives into four for further consideration. Those alternatives, including "No Action" and three others, contain a range of ideas and growth concepts intended to encourage evaluation of growth management issues facing Mason County. They presented alternative approaches to the designation and location of Urban Growth Areas, Fully Contained Communities, Working Rural Areas, and Rural Lands

including Rural Activity Centers, Rural Community Centers, and Rural Areas. They also presented alternative standards for residential and non-residential development.

After a series of public workshops and committee meetings, a preliminary preferred alternative was developed. The county then proceeded to produce the "Draft Mason County Comprehensive Plan and Environmental Impact Statement, November, 1995" and released it for public comment.

Taking the public comment received, the draft plan was revised to produce this document.

### *Policies*

The GMAC also developed broad policy categories to further describe the four alternatives. Those policies included general policies and alternative-specific policies. The general policies applied to all alternatives. The alternative-specific policies applied to a single alternative. The policies addressed:

| TABLE II-4: GMA Policy Categories |                            |
|-----------------------------------|----------------------------|
| Urban Growth Areas                | Rural Lands                |
| Resource Lands                    | Critical Areas             |
| Open Space                        | Water Quality and Quantity |
| Housing                           | Utilities                  |
| Capital Facilities                | Transportation             |



## **II-5 IMPACTS AND MITIGATION MEASURES**

### **Overview**

Growth causes numerous impacts on the environment. Potential impacts on the natural environment include increased storm water runoff and air emissions as well as decreased or altered habitat for fish and wildlife. Potential impacts on the built environment include increased demands for housing, transportation and other capital facilities, and utilities.

### **Impact Analyses**

Both GMA and SEPA require that the County analyze impacts associated with the proposed comprehensive plan alternatives and provide information regarding those impacts. GMA requires that the County collect and analyze data for resource lands, the mandatory plan elements, and urban growth areas. It also requires the County to review drainage, flooding, and stormwater runoff through the land use element. SEPA requires that the County analyze impacts to both the natural and built environments. Discussion of this is to be found in the Comprehensive Plan Environmental Impact Statement.

### **Mitigation Measures**

GMA was adopted in large part to reduce a number of growth related impacts on the natural and built environment. SEPA describes these various ways of reducing growth related impacts as mitigation. There are a number of ways in which fulfilling GMA's requirements will assist Mason County in identifying mitigation measures, and in some cases, serve as mitigation. Discussion of this is to be found in the Comprehensive Plan Environmental Impact Statement.

### **Public Process**

In preparation for this comprehensive plan, Mason County used a three-step public process to review impacts and mitigation associated with the County's comprehensive plan. The steps included the following:

1. An Ad Hoc Committee to review and guide revisions to preliminary drafts of the County's draft Plan/EIS and preparation of the Final EIS
2. Public comment received in response to issuance of the County's draft Plan/EIS; and
3. Public input received at public meetings and hearings on the draft Plan/EIS.



# CHAPTER III

## Planning Policies

### III-1 INTRODUCTION

The planning policies herein are intended to guide capital investment and land use decisions in implementing the Future Land Use Plan of Mason County. At the end of some of the policy sections, the policies contained in applicable Subarea plans have also been included. For those subarea plans which have been adopted by the county, this plan will replace those plans. For Harstine Island, this plan has some planning policies intended to apply only to that area. Where a general policy and a subarea policy conflict, the more restrictive policy will apply; and where they are equally restrictive, the more specific policy will apply. The original numbering scheme used in the individual Subarea plans has been maintained to allow easy reference to the location in the document where the policy originally appeared.

In addition to the planning policies contained in this chapter, there are planning policies for transportation and capital facilities in those respective chapters.



### **III-2 URBAN GROWTH AREAS**

#### **General Policies**

- U-100            Development within the Urban Growth Areas should promote compact and efficient land use patterns and reduce the inappropriate conversion of undeveloped land into sprawling, low density development.
- U-101            Exterior lighting on new development should be shielded or obscured to prevent excessive glare on public streets or walkways, or in adjacent residential areas.
- U-102            New development should provide adequate parking and space for loading and unloading of persons, materials and goods.
- U-103            New development should provide adequate access for emergency vehicles.
- U-104            A variety of uses and densities should be encouraged within the Urban Growth Areas (UGAs).
- U-105            Development in UGAs should support multi-modal forms of transportation and encourage pedestrian activities.
- U-106            Shoreline development in UGAs should include a variety of water dependent, water related, and recreational uses.
- U-107            New Development within the UGAs should occur in areas where public facilities and services are already available, or are planned.
- U-108            Urban Growth Boundaries should provide a sufficient amount of developable land to minimize negative impacts on land and housing costs within the UGAs.

#### **Shelton**

- U-150            The following definitions are intended to apply only to the City of Shelton urban growth area:
- A.    "City" means the City of Shelton
  - B.    "County" means County of Mason
  - C.    "Urban Growth Area (UGA)" means the area described in this Comprehensive Plan adjacent to the City of Shelton



- D. "Subdivisions" means short plats, long plats, and large lot subdivisions as regulated by Title 16 of Mason County Code
- E. "Urban density" means no less than 3 dwelling units per net acre
- F. "Urban services" or "urban type services" means City water service, City sewer service, public streets and roads.

U-151

The following development policies are intended to apply only within the City of Shelton urban growth area:

- A. Land Use Policies
  - A1. Provide for appropriate and desired land use patterns as growth occurs.

**Policies**

- A1a. Growth should be guided toward the creation of compact, efficient patterns of land use and the reduction of sprawl;
  - Urban development in the Shelton area should be directed into areas already characterized by urban type growth or adjacent to such areas as defined by the designation of the Shelton Urban Growth boundary.
  - No development should be allowed that results in a reduction of adopted levels of service. Rural and urban levels of service shall be adopted for the Urban Growth Area. The LOS applied shall be consistent with the type of service available.
- A1b. Consistent and compatible land use patterns should be established within the UGA through a cooperative planning process between the City and County. Consistency should be based on joint agreement, review of the Future Land Use Map, and review of the description of land uses within each depicted land use area provided in the Shelton Comprehensive Plan.
- A2. Land use patterns should be established that are consistent with eventual provision of urban type services.

**Policies**

- A2a. Subdivision of land shall facilitate current or eventual residential development at urban densities.

- A2b. In areas within the Urban Growth Area, where public sewer and water are not available, subdivisions must be designed to allow more intensive development when such services become available. This can be accomplished on one of the following two ways:

**Alternative #1**

Before annexation or before urban services are otherwise available at a property, subdivision shall be to urban densities. However, development may be allowed wherein non-urban services are provided on several lots in support of development on others.

**Alternative #2**

Before annexation or before urban services are otherwise available on a property, subdivision of the property may provide for a number of lots meeting the definition of urban density while the remainder of the property is maintained as a single large lot. The large lot portion may be used to site non-urban type services such as wells and septic systems to serve development on the smaller, urban size, lots. Eventual provision of urban services to such properties shall be as per policy B. below.

- A2c. Specific improvements bringing properties subdivided in one of the ways discussed above to city standards may be deferred until City services are provided. This deferment will only be granted if, as a condition of approval of such subdivisions, an obligation to bring the property to specified city standard at that time is provided as an attachment to title.
- A3. Whether roads provided in new subdivisions are public or private, the layout of the roadways should support the modified grid street pattern of the City of Shelton. Use of cul-de-sacs should be minimized.
- A4. When water or sewer lines are installed for use prior to connection to city utilities, the lines should be sized to meet the future system requirements and standards.
- B. The county supports the following Policies for extension of City utilities to areas within the UGA:
- B1. City Utilities may be extended to properties within the UGA either upon annexation or through the creation of a Utility

Extension Agreement with the owners of properties not annexed.

- B2. No utility extension will be permitted to any unannexed property within the UGA unless a Utility Extension Agreement is signed between the owner of the subject property and the City of Shelton. The Agreement shall provide for the following;
  - B2a. Utility Extension Agreements will be an instrument recorded against the title of the property and the responsibilities therein shall transfer to successors in ownership of all or part of the property.
  - B2b. Extension and hook up must not result in lowering of service delivery below adopted City LOS standards. Hook ups outside of the City shall not be permitted until such standards are adopted.
  - B2c. Sewer extensions will not be allowed without demonstration that equivalent I&I will be removed from the system or a contribution to a sewer system I&I mitigation fund is made.
  - B2d. Water hook-up will not be allowed until a contribution to a source development fund is made by property owner/developer.
  - B2e. Extensions will not be permitted unless agreement is made to pay a system development charge as identified by the City in a rate study.
  - B2f. All costs for utility system extension, steps necessary to maintain LOS, sewer system I&I removal fund contributions, water source development fund contributions and system development charges shall be born by the property owner served.
  - B2g. All served property must have a commitment to annex when contiguous and requested by City placed on title.
  - B2h. All utility users shall be subject to rates and surcharges as established by the City of Shelton.

- B2i. In the event that a Utility Extension Agreement is made in an area that is served by a State Department of Health approved water system, that system may continue to be operated by the present owners or their satellite management agency. Fire flow, service line size, and main size will remain until State DOH requires an upgrade for a green operating permit.
- B3. In addition to all conditions listed in section B2(a-I) above, the following must be provided in Utility Extension Agreements reached to extend City services to new development not vested by virtue of a complete development application before signature of this Joint Planning Agreement;
  - B3a. City owned utilities will only be extended to land uses consistent with the City's Comprehensive Plan Future Land Use Map as determined by the City.
  - B3b. City owned utilities will only be extended to development meeting city development standards.
  - B3c. When extended to residential development, city owned utilities will only be extended to development that meets the definition of urban densities as per Joint Planning Agreement and is consistent with the policies for subdivision of land therein.
  - B3d. Storm water systems shall be designed and constructed in compliance with the requirements of the Washington State Department of Ecology's Storm water Management Manual for the Puget Sound Basin and all adopted storm water master plans or storm water ordinances and basin plans. Those properties designated by these plans as draining to City of Shelton owned and maintained facilities shall be included in the City Storm Water Utility Program.
- C. Policies for Transportation
  - C1. Assure that roads and streets provided to development facilitate urban-type densities

Policies

- C1a. Subdivisions shall provide for current or eventual streets on a grid or modified grid pattern providing access to property, and to adjacent properties where appropriate, consistent with urban densities as provided in policy A2a.

- D. Policies on standards for new development.
- D1. Assure that new on-site development occurs to standards that do not result in future inconsistencies with City standards.

Policies

- D1a. On site development standards for sidewalks, landscaping, signage, not otherwise deferred as per section A2b, shall be consistent with City standards.

E. Policies on Annexation

- E1. To minimize inefficient provision of essential urban services, annexation within the UGA shall be facilitated whenever desired by property owners, or when necessary for efficient service provision.

Policies

- E1a. Annexation of unincorporated islands as they occur shall be encouraged.
- E2. The jurisdictions will discuss formulas and methods for amortization of sales tax benefit lost by the County after annexation.
- E3. The jurisdictions will discuss formulas and methods for amortization of County owned capital facilities transferred to the City as a result of annexation.

F. Policies on Joint Planning

*Jurisdiction for areas within the Urban Growth Area shall rest with Mason County until annexation. The County shall provide for joint planning and review of development proposals according to the following policies;*

- F1. The County and the City shall each notify the other of any discretionary land use permit or development proposal within the Urban Growth Area or within 1000 feet of the UGA boundary. Such notification shall be adequate to provide opportunity to review and comment on such applications prior to action designated body of jurisdiction.

- F2. All threshold determinations pursuant to the State Environmental Policy Act (SEPA) issued by the County for proposals within the UGA or within 1000 feet of the UGA, will be provided to the City. All such threshold determinations issued by the City for projects or areas within 1000 feet of the City boundary shall be provided to the County. Such notice shall be adequate to provide County staff with opportunity to review and comment on such actions prior to expiration of comment periods.
- F3. The County and City shall each take due heed of comments offered by the other regarding any application for discretionary land use permits being processed by the other. Each jurisdiction shall have formal standing for appeal of decisions made by the other on such matters.

Belfair

- U-200 The Urban Growth Boundary for the community of Belfair should be of sufficient size to accommodate growth which is 50% greater than projected.
- U-201 The Urban Growth Boundary should reflect the abilities of service purveyors to provide urban levels of facilities and services during the 20-year planning period.
- U-202 The County should define the levels of service necessary to support urban levels of development in the UGA.
- U-203 Urban services and facilities within the Belfair UGA that are required to meet the needs of new development should be planning to be available within six years of the completion of development to meet the levels of services established for such services and facilities.
- U-204 Facilities and services in the Belfair UGA should be sufficient to accommodate seasonal increases in population.
- U-205 Mason County should plan for a variety of uses in the Belfair UGA, including residential, open space, public facilities, cultural facilities, and commercial, retail and industrial uses.
- U-206 Mason County should minimize land use conflicts in the Belfair UGA through the use of appropriate buffering and performance standards, and ensure compatibility among residential, commercial, and

industrial land uses.

***Residential Policies***

- U-300 Residential development within the Belfair Urban Growth Area should encourage and promote a wide range of housing types, densities and mixtures.
- U-301 The Belfair Urban Growth Area should encourage and support a wide range of housing opportunities for special populations including: independent living; assisted living; and congregate care facilities as single uses or within mixed-use developments.
- U-302 Residential densities should be based on neighborhood character and the community's ability to provide the required public facilities and services.
- U-303 Redevelopment to higher densities in underdeveloped areas should be determined by compatibility with surrounding uses, adequacy of public facilities and services, parking and neighborhood character.
- U-304 Infill development should be consistent with the character of established neighborhoods, and incorporate some of the distinguishing design features of those neighborhoods.
- U-305 Residential development should include open spaces, green belts and wildlife corridors.
- U-306 A network of pedestrian and bicycle paths should link neighborhoods to one another and facilities such as parks, schools, transit systems, business and retail areas.
- U-307 New and revitalized neighborhoods should incorporate centrally located, limited-use retail development which is compatible with the neighborhood. These uses may include small grocery stores, laundromats, personal services, service stations, diners and coffee shops.
- U-308 New and redeveloped neighborhoods should include a multiple use open space to promote pedestrian activity and help establish a sense of neighborhood pride and identity.
- U-309 New residential development shall be reasonably accessible to public transportation. New subdivisions should incorporate transit facilities into their site designs.

- U-310 Residential development should occur within the confines of both the natural and built environments.
- U-311 A wide range of affordable housing should be made available through the use of innovative land use techniques such as mixed-use, planned unit development, infill housing incentives, density bonuses, etc.
- U-312 Existing housing stock should be preserved.
- U-313 Affordable housing should be convenient to public transportation, employment centers, and public services.
- U-314 New residential development should, where possible, give preference to "grid" street patterns.
- U-315 The use of upper story apartments shall be encouraged as a housing option in downtown buildings.
- U-316 New residential development should set aside land for parks and open space.

*Commercial Policies*

- U-400 Commercial development should be accessible to all modes of transportation, and all segments of the population.
- U-401 Commercial zones should be established to meet the needs of the surrounding community or neighborhood.
- U-402 Commercial uses should include retail sales, personal and professional services, professional offices, theaters, cultural uses, recreation, small appliance repair and similar uses, home occupations, and public meeting places.
- U-403 New or redeveloped retail uses should provide ground floor, street front space for retail activity.
- U-404 Commercial uses in mixed-use developments should be located and designed to preserve quiet and privacy for residents.
- U-405 Redevelopment of underdeveloped commercial areas should be encouraged.
- U-406 Development and redevelopment should address surrounding uses,



adequacy of public facilities and services, parking, signage, design and neighborhood characteristics.

- U-407 Site development standards should guide siting of new development within the Urban Growth Area.
- U-408 Mature vegetation should be retained in new development, infill, and redevelopment areas.
- U-409 Landscaping in commercial areas are encouraged to make use of native plants and vegetation.

***Industrial Development***

- U-501 Industrial uses should be buffered against incompatible uses to minimize hazards to and nuisance from surrounding land use.
- U-500 Appropriate areas should be identified for industrial or mixed use development within the Belfair urban growth area. Appropriate areas may include those already characterized by this type of development; where infrastructure exists, is planned, or will be provided by the developer; where off-site impacts, such as transportation, can be effectively managed; where services needed by the activities already exist or can be easily and economically provided; and away from environmentally sensitive areas, which may have detrimental effects on public health, safety, the environment, and the fiscal integrity of the area.
- U-502 Industrial development should use best management practices to comply with environmental regulations and to minimize negative environmental impacts.

***Open Space and Recreation***

- U-600 Potential sites for open spaces and parks within the Urban Growth Areas should be identified and prioritized. Where possible, these areas should be acquired either through purchase or land donations according to the availability of funds and the priority site.
- U-601 The Belfair UGA should provide a variety of open spaces ranging from protected critical areas to developed multi-use parks.
- U-602 A network of open spaces or greenbelts should link existing and new developments.

- U-603 Community residents should participate in development of parks and open spaces.
- U-604 Open spaces, neighborhood parks and recreation facilities should be located within the UGA.

### **Belfair Village Planning Effort**

The Belfair Planning Group was formed to assist county officials understand ideas and issues about designating Belfair as a Growth Area. The group was selected to represent a diversity of community views, and was assisted by Professor Richard Untermann of the University of Washington. The group accepted that for Mason County to remain rural, growth had to occur around Belfair and other centers.

The group met for three long sessions, discussing the complexities of converting a strip center that had grown somewhat haphazardly over the years, into a compact, denser village with opportunity for employment, housing and character. Much time was spent discussing wetland and water quality issues, with the remainder spent discussing the size of the Growth Area, the type of community Belfair should become, and how to get there. The following is based on the work of that group and subsequent public workshops and public hearings.

#### ***Belfair Growth Goals should include the following:***

1. Become a compact, rural village, with a variety of housing and job opportunities, including sufficient affordable housing to meet the county's growth goals;
2. Preserve and enhance the saltwater marshes and ensure wetland protection as Belfair grows;
3. Strengthen Belfair's economic vitality.

#### ***These goals might be accomplished by:***

- A. Protecting the marsh and wetlands. The center of the Belfair is dominated by the famous and productive Theler Marsh and the scenic Union River Valley. Anticipated growth must not damage or destroy these sensitive lands. Rather, growth should use the wetland amenity and correct past errors and problems.
  - A.1 Consider defining the growth area so it can be economically sewerred, to enhance water quality. The group reshaped Mason County's Belfair Option 4, accepting the north boundary but reducing its west extensions to minimize the impact on the wetlands, and to meet state growth area size mandates.
  - A.2 Consider developing a range of densities within Belfair to protect the wetlands and marshes, together with strict Performance Standards for lands along the Theler Marsh (west of SR-3), and within the Union River Valley's 100 year flood plain. As part of the GMA, the County should:

- A.2.a develop appropriate “runoff and sewer performance standards” to ensure new growth doesn’t pollute the wetlands;
- A.2.b institute ‘buffer zones options’ between new development and wetlands or marshes;
- A.2.c reduce the size and type of road and parking requirements;
- A.2.d explore alternative sewer options to replace septic adjacent to marshes and wetlands.
- A.3 Insure reserve growth areas are available should the designated growth area cause harm to the wetlands.
- B. Feature the marsh in the area’s economic development. Belfair’s future economy seems wedded to tourism and moderate commercial and industrial expansion. Developing Belfair into an attractive and fully functioning village could attract and support modest industrial expansion, and capture more dollars from the thousands of tourists who visit the marshes and wetlands.
  - B.1 Build on the ‘Ecologic Destination’ amenities in the area - the marshes, wetlands, state parks, Hood Canal, DNR lands, etc., to attract and capture more tourists, and should include:
    - B.1.a clean up of some of the visual eyesores along the highway - the low density storage, parking and low intensity auto dependent uses. Encourage the development of tourist support services (hotel, picnic areas, parking, shops, etc.) Between SR-3 and the marsh;
    - B.1.b construction of sidewalks along SR-3, the village and recreation center to encourage tourist and resident walking. Extend the marsh walk connecting the recreation center to the village, complete with shelters, benches, interpretive signage, etc.
    - B.1.c creation of an organization to foster tourist development on lands south of the village (with State Tourist Office, Chamber, etc.).
- C. Create an old-fashioned “village” in Belfair at SR-3 intersection, reminiscent of small towns like Sisters and Cannon Beach in Oregon, or LaConner and Leavenworth in Washington, or Eureka and Pleasanton (a planned community) in California - all ‘user friendly’ small towns.
  - C.1 Convert the Old Belfair Highway and portions of SR-3 to a main street, complete with on-street parking and sidewalks, beginning at the “Y” and extending north and south. Locate new stores near the sidewalk, with parking at the rear or alongside buildings.

- C.2 Concentrate commercial development. Traditional villages have commercial development concentrated within several blocks of the village center. Belfair's commercial development extends along almost 3 miles of SR-3, producing a strip mall look and feel. No businesses need relocate, however, future commercial development should be concentrated within ½ mile of the village center.
  
- D. Ensure new housing and employment opportunities.
  - D.1 Designate land as 'mixed use' for employment growth. This land would be master planned when development was to occur and could include some higher density residential. These lands include:
    - D.1.a land within ½ mile of the village and along SR-3 north of the village;
    - D.1.b. portions of Section 28 and 33 near the bypass;
    - D.1.c land within the growth area, 10 acres or larger, with performance standards to protect the wetlands and neighbors.
  - D.2 Encourage pockets of clustered or small lot housing to serve a variety of needs, reminiscent of housing around small towns.
    - D.2.a Increase residential density near the village with small lot single family, duplexes and small scale apartments to a maximum density of six (6) dwelling units per acre.
    - D.2.b Encourage housing east of the highway, edging up the hill, with small lot and clustered single family or duplexes to a density of four (4) density units per acre. Housing on lands steeper than 30% should be clustered on the leveler portions, to a maximum density of two (2) density units per acre. Though housing is often forbidden from slopes, it is more typically used when in close proximity to towns, villages and jobs.
  
- E. Implementation
  - E.1 Performance Standards. Mason County desires to direct growth and the quality of community development with 'Performance Standards'. Performance Standards should be developed for three broad categories of land use - residential, mixed use and conservation.
    - E.1.a Residential Performance Standards would allow increased residential density as small lot single family, duplexes or small scale apartments to a maximum density of six (6) dwelling units per acre when within ½ mile of a full scale shopping and service, meeting buffer Performance

Standards to protect against pollution of the conservation lands.

- E.1.b Housing within one (1) mile of full scale shopping services, small lot and clustered single family or duplexes to a density of four (4) density units per acre. Housing on lands steeper than 30% must be clustered on the leveler portions, to a maximum density of two (2) density units per acre, meeting buffer Performance Standards to protect against pollution of the conservation lands.
- E.1.c Mixed use lands would serve industrial, office park, commercial and housing. Performance Standards would guide development toward 'Urban' practices, with reduced parking requirements, narrower roads, buffers, etc.
- E.1.d Conservation lands would be those between SR-3 and the Theler Marshes and could be developed for tourist or residential uses with strict adherence to buffer Performance Standards that protected the wetland or marshes.
- E.1.e Develop variable buffer widths for the residential and commercial uses that could be reduced in width with upgrading of planting and runoff control for visual buffer, runoff buffer and habitat buffers, each reduced by special planting, grading, fences, swales, etc.

F. Sewers.

Lack of sewers has caused spotty, low intensity development, with limited employment possibilities in Belfair. A compact growth area is designated to enhance the possibility that it could all be sewerred, thereby allowing room for development and protection of water quality. Mason County should direct it's sewer consultant to explore innovative smaller scale sewer treatment options that allow different densities of development.

G. Streamline the permit process within Belfair's growth area by eliminating short plats and fostering easy plating for traditional small lot blocks, clustering and P.U.D.'s.

Monitor development demand and designate lands north and south of Belfair for future urban growth should the current land not be sufficient. This approach acknowledges that having too much land available for development causes sprawl.

H. Spearhead new village transportation standards and improvements. These include narrower and simpler road standards and reconstruction of the main streets, hopefully by the Highway Department, complete with sidewalks and on-street parking. Find ways to improve the transit system.

### III-3 RURAL LANDS

#### Rural Activity Centers

##### *General Policies*

- RU-100 Designated Rural Activity Centers (RACs) should include: Allyn, Union, Hoodsport, and Kimilche/Taylor Towne.
- RU-101 Development in RACs should protect critical areas.
- RU-102 Shoreline development in RACs should include a variety of water dependent, water-related, and recreation uses.
- RU-103 Retail, commercial, and office buildings in RACs should be developed with standards for building height, lot coverage and setbacks that implement the vision for that particular RAC.
- RU-104 Residential development in RACs should be of sufficient density to support required public services and provide quality, affordable housing choices.
- RU-105 RACs should provide a variety of open spaces ranging from protected critical areas to developed parks.
- RU-106 New development should be designed so that any additional traffic generated does not have a significant adverse impact on surrounding development.
- RU-107 New development should be served by adequate facilities for water supply, wastewater disposal, electricity, and storm drainage.
- RU-108 New development should provide adequate access for emergency vehicles.
- RU-109 Proposed uses producing intense glare or heat should be conducted within an enclosed building or effectively screened in such a manner as to make the glare or heat imperceptible from any point along the property line.
- RU-110 Exterior lighting on new development should be sufficiently shielded or obscured in such a manner that excessive glare will be prevented on public streets or walkways, or in adjacent residential areas.

- RU-111 Features of new mixed use development, including buildings, circulation, open space and landscaping, should be designed and arranged to maximize the opportunity for privacy by residents.
- RU-112 New development should provide adequate parking and space for the loading and unloading of persons, materials and goods.
- RU-113 New development should protect existing trees and shrubs, or provide new landscaping in order to screen utility boxes, parking areas, loading areas, trash containers, outside storage areas, and blank walls or fences from roadways, pedestrian areas and public view.
- RU-114 New development adjacent to existing or approved public parks or open space areas should provide for access to these areas from the development.
- RU-115 Buildings and other elements such as fences, signage, and parking facilities should be designed and placed on the site so that they are consistent with established neighborhood character.
- RU-116 New development should adapt to the physical characteristics of the site and minimize disturbance of topography, water bodies, streams, wetlands, wildlife habitat, vegetation and other natural features.
- RU-117 Building design should be appropriate for the uses and activities intended on the site and contribute positively to neighborhood character.
- RU-118 New development should provide for the preservation and/or adaptive use of historic or cultural resources.
- RU-119 Setbacks for buildings and other site elements such as fences and parking facilities should be consistent with setbacks established in the surrounding neighborhood.

**Residential Policies**

- RU-120 Mason County should encourage and promote a wide range of residential lot sizes, housing development types, and densities in RACs to meet the needs of a diverse population and provide affordable housing choices for all income levels.

- RU-121 Residential densities in RACs should be based on the land's natural capacity for development, ability to provide required public facilities, and neighborhood character within the RACs.
- RU-122 Mason County should encourage new residential development to occur in RACs where adequate facilities and services can be provided.
- RU-123 New residential development in RACs should achieve an average density of 4 dwelling units per acre. This average density may be achieved by a combination of single family, multifamily and mixed-use developments.
- RU-124 New multifamily uses in RACs should be developed at an maximum density of 8 dwelling units per acre.
- RU-125 Redevelopment to higher densities in underdeveloped areas within RACs should be determined by considering such factors as surrounding uses, adequacy of public facilities and services, parking, and neighborhood character.
- RU-126 A range of living environments should be provided for within RACs. This includes housing for special populations, independent living, assisted living, and congregate care facilities as single uses or within mixed-use developments.
- RU-128 Group homes are allowed in RACs.
- RU-129 Mobile home parks are allowed in RACs.
- RU-130 Mixed-use residential and business uses should be encouraged within RACs.

*Non-Residential Policies*

- RU-140 Retail uses within RACs should provide for the everyday shopping and personal services needs of local residents and residents of the surrounding Rural Area.
- RU-141 Retail uses within RACs should provide for tourist services and attractions to support Mason County's tourist industry.
- RU-142 Commercial development in RACs could include business and professional services, light fabrication and assembly, tourism, institutional uses, and wholesale trade.



- RU-143      New non-residential development should occur on existing lots within the RACs.
  
- RU-144      Mixed use residential and business uses should be encouraged within RACs.
  
- RU-145      Commercial uses within commercial/residential mixed-use developments should be located and designed to preserve quiet and privacy for residents.
  
- RU-146      Redevelopment of underdeveloped commercial areas within RACs to higher intensities should be determined by considering such factors as surrounding uses, adequacy of public facilities and services, parking and continued neighborhood economic and social vitality.
  
- RU-147      Commercial or industrial development in portions of the RAC that directly abut Rural Areas should be buffered to provide a transition to lower intensity rural uses.
  
- RU-148      Resource-based and light industrial development within an RAC, when allowed by the community plan, should be designed and operated to prevent leaking, spilling, or draining of toxic materials into groundwater, streams, or other water bodies.
  
- RU-149      All vehicle repair, painting and body work activities, including the storage of refuse and vehicle parts, should be designed to take place within an enclosed and sight-obscuring structure.
  
- RU-150      Mason County should allow the development of high profile, commercial recreation uses within RACs and evaluate them based on the proposed use, density/intensity of proposed development, design and materials, vehicle access, water supply, wastewater disposal, and storm water run-off/drainage.

***Rural Community Centers***

- RU-200      Designated Rural Community Centers should include Matlock, Mason/Benson, Tahuya, Grapeview, Lilliwaup, Potlatch, Dayton, and Skokomish Valley. The designated areas shall be of adequate size to include most of the existing commercial and civic development, but shall be as compact as possible to avoid allowing a pattern of sprawl.

- RU-201      RCCs should provide community identity and serve as community centers for surrounding rural residents.
- RU-202      RCCs may provide additional compact and small scale civic and retail uses to meet the convenience needs of surrounding rural residents and tourists. Uses that should be allowed in RCCs include gas stations, schools, post offices, grocery stores, lodging, restaurants, and community centers or meeting halls.
- RU-203      Within the first year of plan adoption, the county shall review the designated area as a possible subarea amendment. After that, at least every five years, Mason County should review Rural Community Centers to determine if it is appropriate to adjust the designated area or to redesignate such areas as Rural Activity Centers.
- RU-204      Mason County should allow the development of high profile, commercial recreation uses within RCCs and evaluate them based on the proposed use, density/intensity of proposed development, design and materials, vehicle access, water supply, wastewater disposal, and storm water run-off/drainage.
- RU-205      The residential policies for the Rural Community Centers shall be the same policies as for the Rural Area.

**Working Rural Area**

***General Policies***

- RU-300      Preferred land uses within Working Rural Areas should include forestry, agriculture, mineral extraction, and other resource-based uses.
- RU-301      An area-wide WRA designation should be applied to those contiguous, large tracts that are anticipated to remain in forestry and other resource-based uses for the next 15-20 years.
- RU-302      The following criteria should be used to identify those tracts that are eligible for WRA designation:
- A.      The proposed WRA includes a minimum of 2,000 acres.

- B. Ninety percent of the proposed WRA is in forestry or other resource-based uses.
  - C. Lands eligible to be designated WRA are currently in Open Space Timber, Designated Forest, or classified Forest under the property tax classification program pursuant to Chapter 84.33 or 84.34 RCW; Agriculture Current Use; in Open Space Taxation; or mineral extraction.
- RU-303 WRAs may include parcels and tracts held in single or multiple ownership.
- RU-304 Property owners, individually or as a group, may apply for designation of their property as a WRA under one of the following conditions:
- A. The parcel is currently in forestry or other resource-based uses and contains at least 640 contiguous acres, or
  - B. The parcel is less than 640 acres but is immediately adjacent to a designated or proposed area-wide WRA.
- RU-305 The minimum lot size within Working Rural Areas should be 40 acres for those parcels remaining in resource uses.
- RU-306 Working Rural Areas may be used for wastewater treatment applications based on standards for protection of critical areas, and buffering of development in adjacent RACs, RCCs, or RAs.
- RU-307 Mason County should provide protection against nuisance claims for forestry, mineral extraction, and other resource uses in WRAs if new development changes the character of the areas surrounding those uses.
- RU-308 Land may be converted from forestry or other resource uses within the WRA through one of the following types of development and at the following densities:
- A. Planned Unit Development (PUD) based on the County's development standards for PUDs specific to WRAs. The PUD process may provide increased density and other incentives for creative land development techniques that include public open space, recreation facilities, public access to shorelines, or other public benefits included in the County's PUD ordinance;

- B. Through the Master Plan process for sites larger than 20 acres and smaller than 1,000 acres. Development under this approach must include a mix of land uses and may be used to create a new Rural Community Center or Rural Activity Center;
- C. New Fully Contained Communities (FCCs) based on development standards for FCCs;
- D. Master Planned Resort based on development standards for Master Planned Resorts;
- E. Industrial uses;
- F. Commercial and retail uses;
- G. Single purpose recreational uses;
- H. Low profile, single purpose recreation use based on development standards for recreation uses;
- I. Resource Conservation Master Plan.

*Planned Unit Development*

RU-310 Planned Unit Developments (PUDs) should be allowed in Working Rural Area if the area of the proposed PUD is redesignated from WRA to Urban and can achieve the following objectives:

- A. Protect critical areas, historic sites or structures, significant tree stands, and cultivated lands, open meadows or pastures;
- B. Development is located on the most suitable soils for on-site sewage disposal (in unsewered areas);
- C. Development is located on the least fertile soils and in a manner which maximizes the potential for the remaining usable area to be used for farming, horticulture or other resource based uses;
- D. 50% of the site is devoted to permanent open space;
- E. Residences are clustered into groups of no more than 8 - 10 units with buffering; and

- F. Development is located where it is least likely to block or interrupt scenic vistas.

*Mixed Use Development*

- RU-320 Mixed use development should be allowed in Working Rural Area at either rural or urban levels of development. If developed at urban levels, the area of the proposed mixed use development should be redesignated from WRA to Urban.
- RU-321 A proposal for a mixed use development at both rural and urban levels requires a master plan for the entire site.
- RU-322 The master plan for the new Mixed Use development should include the following:
  - A. A land use plan that provides for residential, retail, commercial, resource-based or light industrial, institutional, recreation, and open space uses;
  - B. A transportation plan that addresses linkages to the existing road network, and access, circulation, classification, and phasing of transportation facilities within the Mixed Use development;
  - C. A capital facilities plan that addresses how the Mixed Use development will link to existing facilities and the types and phasing of new public facilities and services to be provided within the development;
  - D. A development or phasing plan that identifies the schedule of development of the Mixed Use development;
  - E. Development standards and design guidelines for projects within the Mixed Use development; and
  - F. Environmental analysis that assesses the potential adverse environmental impacts and identifies mitigation measures.
  - G. Proof of adequate potable water to service the proposed development.

*Fully Contained Community*

- RU-330      The future location of a new Fully Contained Community may be identified within the Working Rural Area.
- RU-331      A new Fully Contained Community must include a minimum of 1000 acres.
- RU-332      A proposal for a new Fully Contained Community (FCC) requires the following:
- A.      Redesignation of the area proposed for the FCC from WRA to Urban; and
  - B.      A master plan for the entire site.
- RU-333      The master plan for the new FCC should include the following:
- A.      A land use plan that provides for residential, retail, commercial, industrial, institutional, recreation, and open space uses. The plan will provide for buffers between the fully contained community and any adjacent urban growth area. The plan will also provide for a range of housing types so that affordable housing will be available to households with a broad range of income levels.
  - B.      A transportation plan that addresses linkages to the existing road network, and access, circulation, classification, and phasing of transportation facilities within the FCC. The plan must address transit-oriented site planning and traffic demand management programs.
  - C.      A capital facilities plan that addresses how the FCC will link to existing facilities and the types and phasing of new public facilities and services to be provided within the FCC.
  - D.      A development or phasing plan that identifies the schedule of development of the FCC.
  - E.      Development standards and design guidelines for projects within the FCC.

- F. Environmental analysis that assesses the potential adverse environmental impacts and identifies mitigation measures. The analysis shall include an evaluation of the compliance of the plan with the adopted county critical area regulations.
- G. Proof of adequate potable water to service the proposed development.
- H. The plan for the fully contained community shall provide for the mitigation of impacts on resource lands designated by the county.

RU-334 The county may cooperate with the development of a Fully Contained Community by assisting in obtaining grants or other funding sources for off-site public facility improvements, or by adding to its own capital facilities plan public improvements on-site or off-site, which are supportive of the development plan. For example, the development of a county recreation area or open space area within or in the vicinity of the Fully Contained Community.

RU-335 Among other findings, the county shall determine before approval of the plan for the fully contained community that it is consistent with the county's adopted critical area regulations.

RU-336 The allocation of population to fully contained communities shall be done on a project-by-project basis only from the available population identified and reserved in the Mason County Comprehensive Plan. This population reserve for fully contained communities shall be revised and a new reserve established no more often than once every five years as a part of the designation or review of urban growth areas.

RU-337 The approval of an application for a new fully contained community shall be considered an amendment to the Mason County Comprehensive Plan.

***Master Planned Resort***

RU-340 Recreational uses, including Master Planned Resorts (MPR), may be allowed within Working Rural Areas if they do not conflict with resource uses.

RU-341 A proposal for a MPR should include a development plan for the entire site.

- RU-342      The master plan for the new MPR should include the following:
- A.      A land use plan that identifies and locates the proposed uses within the MPR;
  - B.      A transportation plan that addresses linkages to the existing road network, and access, circulation, classification, and phasing of transportation facilities within the MPR;
  - C.      A capital facilities plan that addresses how the MPR will link to existing facilities and the types and phasing of new public facilities and services to be provided within the MPR;
  - D.      A development or phasing plan that identifies the schedule of development of the MPR;
  - E.      Development standards and design guidelines for projects within the MPR; and
  - F.      Environmental analysis that assesses the potential adverse environmental impacts and identifies mitigation measures.
  - G.      Proof of adequate potable water to service the proposed development.
- RU-343      New urban or suburban development in the vicinity of the Master Planned Resort is prohibited unless such areas are designated as urban growth areas.
- RU-344      Approval of a Master Planned Resort shall only be made after a finding by the county that the land is better suited and has more long-term importance, for the Master Planned Resort than for the commercial harvesting of timber or agricultural production, if the land has been designated as long-term commercial forest land or agricultural land under RCW 36.70A.170.
- RU-345      Approval of a Master Planned Resort shall only be made after a finding by the county that the off-site and on-site infrastructure impacts will be fully considered and mitigated.
- RU-346      Approval of a Master Planned Resort shall only be made after a finding by the county that the resort plan is consistent with the development regulations established for critical areas.



**Industrial**

- RU-350 Mason County should allow the development of industrial uses within Working Rural Areas and evaluate them based on the following:
- A. A minimum parcel size of 50 acres;
  - B. A land use plan that identifies and locates the proposed uses within the industrial development;
  - C. A transportation plan that addresses linkages to the existing road network, and access, circulation, classification, and phasing of transportation facilities within the industrial development;
  - D. A capital facilities plan that addresses how the industrial area will link to existing facilities and the types and phasing of new public facilities and services to be provided within the industrial development;
  - E. A development or phasing plan that identifies the schedule of development of the industrial development;
  - F. Development standards and design guidelines for projects within the industrial development; and
  - G. Environmental analysis that assesses the potential adverse environmental impacts and identifies mitigation measures.

**Commercial/Retail**

- RU-360 Mason County should allow the development of commercial/retail uses within Working Rural Areas and evaluate them based on the following:
- A. A minimum parcel size of 20 acres;
  - B. A land use plan that identifies and locates the proposed uses within the commercial/retail development;
  - C. A transportation plan that addresses linkages to the existing road network, and access, circulation, classification, and phasing of transportation facilities within the commercial/retail development;

- D. A capital facilities plan that addresses how the commercial/retail development will link to existing facilities and the types and phasing of new public facilities and services to be provided within the commercial/retail development;
- E. A development or phasing plan that identifies the schedule of development of the commercial/retail development;
- F. Development standards and design guidelines for projects within the commercial/retail development; and
- G. Environmental analysis that assesses the potential adverse environmental impacts and identifies mitigation measures.

***Single Purpose Recreation***

- RU-370 Mason County should allow the development of single purpose recreational uses within Working Rural Areas and evaluate them based on the development, design and materials, vehicle access, water supply, wastewater disposal, and stormwater run-off/drainage.

***"In-Holding" Landowners***

- RU-380 Land owners, similar to the "in-holding lands" within the Forest Resource Area, in designated WRAs have two years from the adoption of the Comprehensive Plan to choose the WRA classification otherwise their lands will be designated Rural.
- RU-381 Land owners surrounded by designated WRAs who choose the WRA classification, may convert their land from the WRA through one of the following types of development:
  - A. Options available under WRA as identified in Policies RU-308 through RU-346;
  - B. Non-clustered, single family at a maximum density of one dwelling unit per five acres with a five-acre minimum lot size;
  - C. Clustered single family at a maximum density of one dwelling unit per 2.5 acres with a one-acre minimum lot size.

- D. Single-family with home-based business;
- E. Single-family with cottage industry;
- F. Small-scale commercial and retail uses; and
- G. Resource-based industrial uses.

***Resource Conservation Master Plan***

- RU-400 Resource Conservation Master Plans should be allowed within the Rural Area.
- RU-401 The proposed RCMP should include a minimum of twenty (20) acres.
- RU-402 The RCMP should include 30% permanent open space, maintain 30 percent of the site in resource-based uses, and not exceed 75% impervious surface within developed areas.
- RU-403 Densities within RCMPs should be based on development standards such as requirements for water and wastewater, setbacks, buffers, and bulk and dimension.
- RU-404 An RCMP may develop as a PUD that includes a variety of residential uses and may be combined with a recreation use.
- RU-405 An RCMP may develop as a mixed use development. Mixed use developments should include a minimum of 20 acres and no more than 1,000 acres. Development under this approach must include a mix of land uses and may be used to create a new Rural Community Center or Rural Activity Center.
- RU-406 Intensities of development within RCMPs should be determined by the capacity of the site to support required levels of services.
- RU-407 The plan for the RCMP should include a development plan for the entire site.
- RU-408 The plan for the RCMP should include the following:
  - A. A land use plan that identifies and locates the proposed uses within the RCMP;

- B. A transportation plan that addresses linkages to the existing road network, and access, circulation, classification, and phasing of transportation facilities within the RCMP;
- C. A capital facilities plan that addresses how the RCMP will link to existing facilities and the types and phasing of new facilities and services to be provided within the RCMP;
- D. A development or phasing plan that identifies the schedule of development of the RCMP;
- E. Development standards and design guidelines for projects within the RCMP; and
- F. Environmental analysis that assesses the potential adverse environmental impacts and identifies mitigation measures.

Rural Areas

*General Policies*

- RU-500 In RAs, features of the rural landscape should be dominant. Uses other than farms, pastures, farm buildings, forestry, wood lots, and other resource-related industries, should be buffered or screened from public rights-of-ways and adjacent properties.
- RU-501 New development in RAs should be guided by performance standards and design guidelines to enhance rural character, protect critical areas, and tailor development to the characteristics of individual sites.
- RU-502 Residential uses in RAs should be at densities that can be sustained by rural levels of service for water, wastewater, drainage, police, fire, and schools.
- RU-503 Utilities and services in RAs should be provided at levels suitable to rural densities including on-site septic systems, private wells or community water systems, and roads with gravel shoulders and open roadside drainage.
- RU-504 Small scale convenience retail that serves RA residents or provides tourist related goods and services should be allowed within RAs.

- RU-505 Other uses that should be allowed in RAs include tourism, horticulture, low profile recreation, and home-based businesses and cottage industries accessory to a primary residential use.
- RU-506 Land use and proposed development along the shoreline, streams, or adjacent uplands should provide protection from any increases in stormwater runoff and nonpoint pollution which degrade water quality.
- RU-507 Existing forestry, agriculture, aquaculture, and mineral extraction in Rural Areas should have a preferential right to continue and not be subject to nuisance claims if new development changes the character of the areas surrounding those uses.
- RU-508 Existing commercial and industrial uses in Rural Areas should have a right to continue and not be subject to nuisance claims if operating in compliance with County regulations.
- RU-509 Proposed roads in Rural Areas, subject to review by the Fire Marshall, should be evaluated for impacts to areas traffic patterns; location in relation to topography, soils, and critical areas; and adequacy if roads rights-of -way and easement.
- RU-510 The improvement of shoulders along roads and old highway spurs for pedestrian, bicycle, and recreational use should be encouraged.
- RU-511 On-site sewage systems in Rural Areas should be maintained in a condition that will ensure longevity, protect public health, and prevent contamination of surface and ground waters.
- RU-512 Adjacent residential uses and non-residential uses in the Rural Area should be buffered or screened from each other. Existing uses will not be required to provide buffers or screens, except in the case of the expansion or intensification of use.

**Residential Policies**

- RU-520 Mason County should provide for a range of residential densities and housing types in RAs through the use of performance standards.
- RU-521 Residential subdivisions in RAs should be designed to achieve the following objectives:
  - A. Locate development on the most suitable soils for on-site sewage disposal (in unsewered areas);

- B. Locate development on the least fertile soils and in manner which maximizes the potential for the remaining usable or other resource based uses;
- C. Locate development to reduce impacts to resource uses, and to allow new development to be visually absorbed by natural landscape features;
- D. Locate development in such a manner that the common boundary between new lots and preserved open space is minimized in length; and
- E. Locate development beneath ridge lines, and where it is least likely to block or interrupt scenic vistas.
- F. Locate the resource use or open space parcel or conservation easements contiguous with any abutting designated resource use parcel, open space, greenbelt, agricultural land, forest lands, public preserves, parks or schools, terrestrial management area, wildlife corridor, or aquatic management vegetative area.

*Non-Residential Policies*

- RU-530 Existing industrial and commercial uses should be allowed to expand in Rural Areas, Rural Activity Centers and Rural Community Centers, provided that: they do not require urban levels of government service, they do not conflict with natural resource based uses, they are compatible with surrounding rural uses.
- RU-531 Resource-based industrial and commercial uses should be allowed to locate or expand in Rural Areas, Rural Activity Centers and Rural Community Centers, provided that: they do not require urban levels of government service, they do not conflict with natural resource based uses, and they are compatible with surrounding rural uses.

*Harstine Island Sub-Area Plan*

- B-1 Residential Land Use, including Water Systems and Shoreline Development.

B-1-a: Establish subdivision design standards which minimize site disturbance, preserve the natural beauty of the Island, minimize the visual impact of the development, ensure privacy of residents and maintenance of rural character.

B-1-a • 1: Innovative techniques in site planning, such as open space, common areas, clustering and development rights purchase or transfer should be encouraged to protect the rural atmosphere on the Island.

**Suggested Implementation:** Subdivision development should be designed to encourage open space with conservation easements to ensure its continuance. A program providing density bonuses should be developed by the County to encourage the following: retention of large percentages of a site in native ground cover and overstory; no disturbance buffer zones; additional screening of houses through increased buffers; trails and wildlife corridors; separation of vehicular and pedestrian traffic through the use of buffers, trails, bikeways and other means; coordination with adjacent landowners to provide continuity of open space, natural systems, greenways and corridors.

B-1-a • 2: Encourage use of community and multi-party water systems.

B-1-a • 3: Conserve the forest features of the Island.

**Suggested Implementation:** Traditional plant species should be retained on development sites. Open space and building sites should contain sufficient overstory and other indigenous vegetation to maintain the forested character of the Island. Retaining trees along shorelines should be encouraged.

B-1-a • 4: Roads should be kept as narrow as safety allows to encourage drivers to slow down. Extensive cutting of vegetation along the shoulders of property should be discouraged as it alters the character of the roadways. Numbers of roads and driveways should be kept to a minimum.

- B-1-a • 5: Utilities should be located with regard to minimizing their visual impact.
  - B-1-a • 6: Buffers of natural vegetation should be encouraged to help buildings, roads, and utilities blend into the natural environment.
  - B-1-a • 7: Extensive clearing for development should not be done on steep slopes. Setbacks should be sufficient to allow some screening by vegetation of houses viewed from adjacent roads or waterways, so that from most perspectives the predominant view is of the property's vegetation, not its improvements. Building designs which offer a sense of integrity with the landscape should be promoted.
  - B-1-a • 8: Care should be taken to limit the amount of impervious surface area on any lot (i.e., house, driveway, concrete walk, etc.).
- B-1-b: Promote residential densities which maintain the rural character of the Island.
- B-1-b • 1: Develop a density map that would result in the largest number of new lots being at least one living unit per 5 acres, some lots at 2 1/2 units per acre and the smallest portion being sized to shorelands requirements. In areas where development has already occurred, allow higher density. In areas where no development has occurred, promote lower density. Lots already platted shall be vested as conforming with this plan as of the plans adoption.
  - B-1-b • 2: When the Mason County Shoreline Master Program is revised next year, particular attention should be paid to the need for increasing minimum lot size, providing additional setbacks and for protecting vegetation, especially overstory, at the shoreline. The minimums under the current "Rural" designation are 100 feet of shoreline with a 25 foot setback and a 20,000 square-foot minimum lot size.
- B-3 Industrial and Commercial Land Use



B-3-a: Discourage or prohibit industrial development in the subarea.

B-3-a • 1: Design standards for industries should be developed.

B-3-b: Design standards for commercial activity on the Island need to be established to ensure resident's privacy.

B-3-b • 1: A plan with an accompanying map should be developed identifying what types of commercial activity are allowed and what areas of the Island are zoned for commercial activity.

Suggested Implementation: Prohibit apartments, commercial office space, mini-warehouses. Limit retail business uses to areas zoned for possible commercial. Businesses should be limited to those that service the island population.

B-3-c • 2: Commercial development be subject to design review to ensure compatibility with rural character of the Island

Suggested Implementation: Use a design team to review plans for sight development, architecture, landscaping, parking, signage, and building height.

B-3-d: Ensure that the natural beauty of the Island is not impaired nor the rural character compromised as a result of commercial development.

B-3-d • 1: Setbacks and aesthetic considerations, including landscaping, should be required when creating new lots for commercial development and when siting buildings.

#### B-11 Public Nuisances

B-11-a: To implement regulations that would offer relief from objectionable and offensive activities.

B-11-a 1: Ordinances shall be written that prohibit activities found to be injurious to health, indecent or offensive to the senses, or interferes with the rights of others to enjoy their property. Following are some

samples: loud music, barking dogs, animals not under control, roaming livestock, tire dumps, indiscriminate disposal of waste, etc. This list is not inclusive.

### Southeast Mason County Sub-Area Plan

#### D. RESIDENTIAL LAND USE

A1: The physical capabilities of development sites and the potential impact on surrounding properties should determine the site suitability of proposed developments in the subarea. To attain this policy, the following density standards are recommended:

- a. Each parcel currently below 5 acres in size may be developed for an individual single-family residence.
- b. For parcels 5 acres to 10 acres in size which were legally created prior to the adoption of this Plan, parcel owners shall have the right to divide this property into lots, the smallest of which is not less than 2.5 acres in size.
- c. For parcels greater than 10 acres in size, one of the following options shall apply:
  - 1) Land may be divided to a density of one single-family residence per 2.5 acres by using the following density bonus strategy:

For every single-family residential lot planned into an "Open Space Development", one additional single-family residential lot may be added to the development, provided that at least 50% of the total land base is designated as open space. (see open space development chart in appendix for example densities per acreage.)

The designated open space parcel may be used for agriculture, forestry, passive recreation, stormwater detention areas, community water systems, on-site sewage disposal systems, and critical areas (i.e. wetlands, steep slopes, wildlife habitat, etc.).

The acreage not allocated to each individual lot shall be managed as open space by the original owner or through an open space maintenance agreement with individual lot owners (an example of a model open space agreement is in the Appendix). The following two statements should be placed on the face of the plat at the time of recording of the open space development:

- a) an open space maintenance agreement does exist, and
  - b) the rights to development of this acreage, other than the allowed open space uses previously mentioned, are no longer available on this parcel or parcels of land.
- 2) One single-family residence per 5 acres may be created using conventional land segregation methods.
- A2: Innovative techniques in site planning, such as the creation of open space and common areas and the use of clustering of individual lots and buildings, should be used in the design of all land division proposals in the subarea.
- A3: Incentives to help design development proposals, such as density bonus, conservation easements, and community-held open space, should be encouraged, but permitted only in locations where land capability will allow denser development.
- A4: Planned Unit Developments (PUD's) should be encouraged so that developments are planned in a manner which best preserves rural character, protects critical areas and adjacent property owners, and provides necessary facilities.
- A5: Residential development should be discouraged adjacent to existing industrial areas or those areas designated for future industrial use within the subarea. New residential development adjacent to existing industrial uses should provide some buffering according to performance standards; however, the county will encourage the joint provision of a buffer in these cases. If clustering or density transfers are used in a land division, then the open space or resource areas or parcels should be used to provide separation.
- A6: When a local entity (county or state) takes land by eminent domain or negotiation for a project of public purposes and reduces the size

of affected properties, those affected parcels should have the rights afforded to them that were available prior to the eminent domain or negotiation action.

- A7: The evaluation of land division proposals in the subarea should consider the impacts to existing and planned infrastructure, such as sewage disposal, water supply, traffic and circulation, and fire safety.
- A8: In determining site suitability of shoreline development activities, potential short and long term impacts to water quality should be considered, as well as any reasonable alternative actions and/or mitigation measures.
- A9: The site design of developments should not adversely impact the current levels of water quality and should avoid any risk of decertification of existing shellfish beds (When a shellfish bed is decertified, commercial harvest of shellfish for human consumption becomes illegal.)
- A10: Accessory Dwelling Units should be permitted for each primary residence provided the land and the septic system are capable to support the additional use. Accessory living quarters should be limited to 800 square feet in size, should only be used for immediate family members, and should not be rented or leased.
- A11: As recommended in the Totten-Little Skookum Watershed Action Plan, shorelines in the subarea should be redesignated to Conservancy Shoreline Environment, to restrict land divisions that create new lots each less than 200 feet wide.

E. COMMERCIAL AND INDUSTRIAL LAND USES

- A1: Commercial and industrial development should be designed and located to minimize adverse impacts by noise, lights, and visual obstruction of the proposed use.
- A2: Site development of commercial and industrial land uses should integrate stormwater retention standards in the preparation, construction, and operation of the land use.
- A3: The operation of commercial and industrial land uses should not discharge wastes directly into the waters of the State.

- A4: Industries which threaten ground or surface water should be prohibited from locating within the planning area if the business or use cannot ensure protection of these resources.
- B1: Additional commercial and industrial development in the subarea should be located adjacent to existing commercial and industrial locations in the narrow corridor along Highway 101, north of the Highway 101 - 108 intersection.
- B2: New and future industries seeking to locate in the planning area should be low impact, meet all performance standards for other permitted uses, and be clustered at designated locations which are physically suitable for the proposed land uses.
- B3: Existing commercial and industrial developments should be allowed to continue and expand, provided that such expansion results in no significant adverse environmental impacts, the expansion can comply with the performance standards for similar uses in the Rural Area, and the expansion does not require the extension of an urban level of governmental services.
- B4: Existing commercial or industrial uses should have a preferential right to continue and not be subject to nuisance claims; provided that these uses are in compliance with local, state, federal laws and regulations.
- B5: Existing commercial and industrial uses are encouraged to use setback landscaping along their property lines. New commercial and industrial uses should be required to provide setback landscaping between that use and adjacent land uses.

### **III-4 RESOURCE LANDS**

#### ***Long Term Commercial Forest Lands***

- RE-100      The following criteria should be used to identify those tracts that are eligible for Long Term Commercial Forest Designation and are designated under RCW 36.70A.060 and RCW 36.70A.170 as conservation areas for forest resource lands of long term commercial significance:
- A.      The Long Term Commercial Forest shall be a minimum of 5,000 acres (2,015 hectares) which shall consist of a minimum parcel size of 80 acres within said block.
  - B.      The proposed Long Term Commercial Forest shall be enrolled , as of January 31, 1992 in the Open Space - Timber or Designated Forest or Commercial Forest property tax classification pursuant to Chapter 84.33 or 84.34 RCW, or is owned by a state or local governmental body with long term forest management as its primary use.
  - C.      In any one block, no more than 5 % is used for non-resource use.
  - D.      The property shall be greater than two miles from a public sanitary sewer line (as of January 31, 1992).
  - E.      Designated Long Term Commercial Forests shall be at least two miles from the city limits of Shelton or outside any designated Urban Growth Area in Mason County.
  - F.      50% or more of an ownership parcel shall have Douglas Fir Site Index of 118 (Land Grade 2) or better pursuant to WAC 458-40-530. Additionally, property owners having more than 4000 acres of property within Mason County that meet said criterion shall also include all properties with a Douglas Fir Site index of 99 (Land Grade 3) or better pursuant to WAC 458-40-530.
  - G.      Greater than 50% of the linear frontage of the perimeter of any parcel meeting classification criteria A - F above shall abut parcels that are greater than five (5) acres.
  - H.      Or the parcel is at least 40 acres in size, or is a government Lot and is contiguous with property under the same ownership that meet classification criteria A - G above.

- I. Or the property shall be composed of one or more parcels 40 acres or greater in size in one ownership that border United States Forest Service property on more than one side, irrespective of its consistency with classification criteria A - H above.
- RE-101 Minimum lot sizes for subdivisions within the Long Term Commercial Forest designation shall be 80 acres. Exceptions to this minimum lot size may occur for non-residential permitted or conditional uses and facilities; provided that the county finds that there will be no impact on surrounding resources uses and further provided that a restrictive covenant be placed on said property by the property owner, to be held by the county, prohibiting future residential use. Limitations on density and uses are designed to provide timber resource protection and to ensure compatible uses.
- RE-102 Long Term Commercial Forests may include parcels or tracts in single or multiple ownership.
- RE-103 Long Term Commercial Forests may be used for wastewater treatment applications based on standards for protection of critical areas, and buffering of development in adjacent RACs, RCCs, or RAs.
- RE-104 Long Term Commercial Forests shall have a Preferential Right to Forestry which includes the following provisions:
- A. No resource use or any of its components shall be or become a nuisance, private or public, by any changed conditions in or about the locality thereof after the same has been in operation for more than five years, when such operation was not a nuisance at the time the operation began; provided that the provisions of this subsection shall not apply whenever a nuisance results from the negligent or improper operation of any such operation or its component activities, and the property owner follows the standards and policies established for Long-Term Commercial Forest land.
  - B. A resource operation shall not be found to be a public or private nuisance if the operation conforms to local, state, and federal law and best management practices.
  - C. A farm or forest operation shall not be restricted to time of day or days of the week, but shall be conducted according to best management practices pursuant to State law.
  - D. A farm or forest operation shall be free from excessive or arbitrary regulation.

- RE-106      Non-Resource Lands may be designated Long Term Commercial Forests provided that the following conditions are met:
- A.      The property is enrolled in the open space or forest land taxation program pursuant to Chapters 84.33 or 84.34 RCW.
  - B.      The property is at least 640 acre in size or the property abuts and already Designated Long Term Commercial Forest Land on one side and is at least 40 acres in size, or is at least 5 acres in size and abuts Long Term Commercial Forest on at least two sides.

**In-holding Lands**

- RE-200      Inholding lands are smaller areas within the Long-Term Commercial Forest Lands which do not meet the criteria for long-term commercial forest but which are regulated to mitigate potential incompatible land uses between the two lands use types. Inholding lands shall meet one or more of the following conditions:
- A.      Lands that are fully contained within Mason County shall be surrounded on all sides by designated Long Term Commercial Forests. If a property is partly contained within Mason County, that portion that lies within Mason County shall be surrounded by designated Long Term Commercial Forest; and the maximum block size is less than 640 acres in size.
  - B.      The property does not meet the requirements of Long Term Commercial Forest.
  - C.      The property meets the criteria for Long Term Commercial Forest designation yet is within 400 feet of the Cloquallum/Lake Communities border as of August 3, 1993.
- RE-201      The minimum lot size for any new subdivision, short sub-division or large lot segregation shall be a minimum of 5 acres. Exceptions to the minimum lot size may occur for non-residential Permit Required and Conditional Uses and facilities; provided no impact will occur on surrounding resource lands, and further that restrictive covenants are placed on the property which prohibit future residential use. Exceptions for residential lots are given below in policies RE-202 and RE-204.
- RE-202      Average residential densities for any new subdivision or short subdivision of property within Inholding lands may be increased up to one (1) dwelling unit per two and one half (2.5) acres provided that the following conditions are met.



- A. The property to be divided is at least twenty acres in size.
  - B. Each residential lot created is no more than one acre in size.
  - C. All identified residential building sites are located outside any one hundred-year floodplains, geologically hazardous areas, or other critical areas.
  - D. The subdivision or short subdivision minimizes impacts on surrounding resource uses.
  - E. A natural resource management and/or conservation easement; to be held by the county, recognized non-profit Land Trust or similar institution be placed on the non-residential portion of the subdivision or short subdivision restricting the use of said property to uses consistent with natural resource management and/or conservation, and prohibiting future residential uses; or a natural resource management and/or conservation restriction is placed on the face of the plat accomplishing the same purpose as an easement.
  - G. No less than 50 percent of the property is to be set aside for natural resource management, land trust, and/or conservation easement.
- RE-203 Each parcel currently below 5 acres in size may be developed for an individual single-family residence.
- RE-204 Lots within In-Holding Lands that are between 5 acres and 9.99 acres in size, the original owner at the time this plan is adopted may divide their property into two parcels, the smallest of which is not less than 2.5 acres in size.
- RE-205 Long Term Commercial Forests may be reclassified to Inholding Lands provided that all the following conditions are met:
- A. The property meets the classification criteria for In Holding Lands.
  - B. The property owner removes the property from open space or forest land tax classification pursuant to RCW Chapters 84.33 or 84.34 within three years of the effective date of redesignation, and any taxes, interest and penalties are in full upon removal.
  - C. The applicant has demonstrated that reasonable use of the property as Designated Long-Term Commercial Forest Land is not possible and the inability to make a reasonable use of the property is not due to action or inaction of the applicant.

D. The amount of property removed from Long-Term Commercial Forest Land is the minimal amount necessary that meet the conditions of "C" above.

RE-206 Prior to redesignation out of the Long Term Commercial Forest classification, the property owner shall demonstrate that the property can no longer be feasibly used for Long Term Commercial Forest purposes for reasons not caused by the property owner.

RE-207 The County shall review the following before any properties are permitted to convert out of the Long Term Commercial Forest Designation:

- A. Availability of public services and facilities conducive to the conversion of forest land.
- B. Proximity of designated land to urban and suburban areas and rural settlements.
- C. Compatibility and intensity of adjacent and nearby land use and settlement patterns.
- D. Local economic conditions which may affect the ability to manage forests lands for long-term commercial production.
- E. Quality of growing conditions on the site.
- F. The history of land development permits issued nearby.

RE-208 Designation of In-Holding lands shall not interfere with the ability to manage the remainder of the block for long term commercial forestry.

RE-209 In-Holding Lands will convert back to the Long Term Commercial Forest Designation provided that subdivision or other project approval for a use which shall be compatible with surrounding conforming uses not granted within three years of effective redesignation from Long Term Commercial Forest to In-Holding lands.

**Non-Designated Forest Management Lands**

RE-300 Property that is enrolled in the Open Space Timber or Designated Forest or Classified Forest property tax classification programs pursuant to Chapters 84.33 RCW or 84.34 will be classified Forest Management Lands.

- RE-301 Forest Management Lands and their component uses shall be protected against nuisance claims from changing development in or around said area provided that the Forest Management Lands has been in operation for more than five years and said operation was not a nuisance at the time that operations began.
- RE-302 Forest operations on Forest Management Lands shall be protected against public and private nuisance claims provided that the operation conforms to local, state, and federal law and best management practices.
- RE-303 Forest operations shall not incur time of day or days of the week restrictions, but must be conducted according to best management practices pursuant to Washington State Forest Practices Rules and Regulations.
- RE-304 Forest operations shall be free from excessive or arbitrary regulation.

**Non-Designated Agriculture Lands**

- RE-400 Property that is enrolled in the Open Space Agriculture property tax classification program pursuant to Chapters 84.33 RCW are classified Agriculture Lands.
- RE-401 Non-Designated Agriculture Lands shall have a Preferential Right to Farm which includes the following provisions:
  - A. No resource use or any of its components shall be or become a nuisance, private or public, by any changed conditions in or about the locality thereof after the same has been in operation for more than five years, when such operation was not a nuisance at the time the operation began; provided that the provisions of this subsection shall not apply whenever a nuisance results from the negligent or improper operation of any such operation or its component activities, and the property owner follows the standards of Chapter 17.01.050 of the Mason County Interim Resource Ordinance.
  - B. A resource operation shall not be found to be a public or private nuisance if the operation conforms to local, state, and federal law and best management practices.
  - C. A farm or forest operation shall not be restricted to time of day or days of the week, but shall be conducted according to best management practices pursuant to State law.
  - D. A farm or forest operation shall be free from excessive or arbitrary regulation.

- RE-402      Agricultural operations on Agriculture Lands shall be protected against public and private nuisance claims provided that the operation conforms to local, state, and federal law and best management practices.
- RE-403      Agricultural operations shall not incur time of day or days of the week restrictions, but shall be conducted according to best management practices pursuant to Washington State Law.
- RE-404      Agricultural operations shall be free from excessive or arbitrary regulation.

**Mineral Resource Lands**

- RE-500      Mineral deposits which are greater than 25 acres in size, have the potential to meet the immediate and future needs of the regional community, and are readily accessible to water traffic on the Puget Sound shall be classified as Class 1a Mineral Resource Lands.
- RE-501      Mineral deposits which are greater than 25 acres in size, have the potential to meet the long term future and immediate needs of the regional community, and are accessible to rail or truck haul routes shall be classified Class 1b Mineral Resource Lands.
- RE-502      Mineral deposits within existing permitted surface mining operations that operate under the authority of Chapter 78.44 RCW shall be classified Class 2.
- RE-503      Mineral Lands that meets the requirements for Class 1a and 1b Mineral Resource Lands shall be designated under RCW 36.70A.060 and RCW 36.70A.170 as conservation areas for mineral lands of long term commercial significance.
- RE-504      Mineral Lands of Long Term Commercial Significance shall adhere to normal environmental review process of County and State agencies as applicable.
- RE-505      Areas currently not identified as Class 1a or 1b Mineral Resource Lands may be so designated provided that a qualified geologist or mining engineer demonstrate the probability for occurrence of mineral deposits meeting the requirements for either classification.
- RE-506      Subdivisions, short subdivisions or large lots segregations shall be prohibited in Class 1a and Class 1b Mineral Resource Lands prior to their full utilization. Exceptions to this may be made through a resource redesignation or through a variance procedure.

- RE-507        Conditional uses for Class 1a or Class 1b any include the following:
- A.    Mineral processing facilities including rock crushing, asphalt and concrete batch plants.
  - B.    Public and semi-public structures including but not limited to fire stations, utility substations, pump stations, and waste water treatment facilities.
  - C.    Class IV - General Forest Practices" under authority of the "1992 Washington State Forest Practices Act Rules and Regulations", WAC 222-12-030, or as thereafter amended; which involve conservation to a Conditional Use in designated Mineral Resource Lands.
  - D.    Any industrial or commercial development.
- RE-508        Development standards shall apply to all mining operations. Variances for development standards and non conforming may be appropriate when an operation is located in isolated areas or contains unusual topographical conditions.
- RE-509        The following setbacks and screening requirements shall apply to all Mineral Resource Lands:
- A.    Mineral Resource lands shall have a 50 foot setback from all property lines, other than for access purposes onto public rights of way. Setbacks shall be maintained for areas of direct cut or fill connected with resource extraction operations. Setbacks for mining operations may be increased when necessary to protect lateral support of abutting properties or public rights of ways.
  - B.    All Mineral Resource Lands shall be screened by a twenty five foot on all property lines. Screens shall consist of materials approved of by Mason County, such as obscuring vegetation.
  - C.    All direct extraction operation areas shall maintain a fifty foot setback form all public utility lines.
- RE-510        Prior to the commencement of surface mining, a fence which encloses the area authorized by the surface mining permit shall be constructed and maintained. Fences shall be a minimum of six feet in height, and shall be constructed of woven wire. Gates shall be installed at all or vehicular or pedestrian entry or exit points, and shall be the same height as the fence. All gates shall be locked when facilities are not in regular use.

- RE-511 Access on any public right of way to surface mining operations shall be surfaces according to the County Engineering Divisions or State Department of Highways development standards as appropriate.
- RE-512 In order to assure maintenance and development of adequate County roadways, owners of the surface mining operations may be required to enter into a haul route agreement with the County Engineer upon adoption and implementation of a Haul Route Agreement Program.
- RE-513 The County Engineer may require installation of traffic control and warning signs at intersections of private access roads to Mineral Resource Lands and publicly maintained roads.
- RE-514 No development or activity within mineral Resource Lands shall exceed the maximum Environmental Noise Levels established by WAC 173-60, and Mason County Title 9, Chapter 9.36.
- RE-515 Bright lights which are necessary to facilitate emergency repairs shall be allowed outside of normal operating hours for short-term mining operations.
- RE-516 Surface mining operation within a Critical Aquifer Recharge Area shall meet the following requirements:
- A. Fuel tanks and oil drums shall be double containment construction and shall be protected by bermed areas having adequate capacity to accommodate, contain, and allow the removal of chemical spills. Fuel nozzles shall contain locking devices. Fuel storage shall be above ground. Fueling of mobile equipment shall be located at least twenty feet above the seasonal high ground water level or within lined and bermed areas with adequate capacity to accommodate, contain, and allow the removal of chemical spills.
  - B. All operations shall maintain a fuels/hazardous waste management plan maintained by the operator and available on the site at all times.
  - C. Fencing, or some comparable deterrent, shall be installed to prevent unauthorized dumping of any materials within surface mining areas.
  - D. Surface mines within critical aquifer recharge areas shall not use any noxious, toxic, flammable, compatible, or combustible materials not specifically authorized by Mason County Department of Health for backfill or reclamation. Non-contaminated process water used for gravel washing shall be routed to settling ponds to minimize off-site discharges. A general discharge may substitute for these requirements.

- E. On-site truck and equipment wash run-off shall be routed to retention facilities equipped with an oil-water separator prior to its release into the settling pond.
  - F. Use of chemicals, petroleum or hazardous products, and disposal of such products, in concrete or asphalt plant operations within Critical Aquifer Recharge Areas shall meet all standards set forth in WAC 90.48 and WAC 173.303.
- RE-517 Surface mine owners shall ensure that on-site operations shall not be hazardous to neighboring uses. Blasting activities shall be conducted in a manner such that ground vibrations and fly-rock to off mine site uses are monitored and minimized.
- RE-518 Mineral Lands and their component uses shall be protected against nuisance claims from changing development in or around said area provided that the site has been in operation for more than five years and said operation was not a nuisance at the time that operations began.
- RE-519 Mineral Resource Lands shall have a Preferential Right to Mine which includes the following provisions:
- A. No resource use or any of its components shall be or become a nuisance, private or public, by any changed conditions in or about the locality thereof after the same has been in operation for more than five years, when such operation was not a nuisance at the time the operation began; provided that the provisions of this subsection shall not apply whenever a nuisance results from the negligent or improper operation of any such operation or its component activities, and the property owner follows the standards of Chapter 17.01.050 of the Mason County Interim Resource Ordinance.
  - B. A resource operation shall not be found to be a public or private nuisance if the operation conforms to local, state, and federal law and best management practices.
- RE-520 Mining operations shall not incur time of day or days of the week restrictions, but shall be conducted according to best management practices pursuant to Washington State Law.
- RE-521 Mining operations shall be free from excessive or arbitrary regulation.

- RE-522 Any properties that are redesignated to Mineral Resource Lands classification shall be recorded with the County Auditor within two weeks of redesignation. Notification shall be in the form of written notice of the designation. Said notice shall be in a form authorized by the Director and shall include:
- A. Legal description of the property subject to redesignation.
  - B. The sixteenth (1/16) section or sections in which the designated properties lie, as well as those for any properties that lie within 300 feet of the boundary if the designated property.
  - C. Notification to property owners within 300 feet of proposed Mineral Resource Lands.

*Non Resource Uses within Long Term Commercial Forests,  
Inholding Lands and Mineral Resource Lands*

*Roadway Standards*

- RE-600 Permanent vehicular access for non-resource uses shall meet the following standards:
- A. Permanent legal access which has been granted by resource property owner(s) or public rights-of-way can be accessed directly.
  - B. Strict adherence to the standards of the Uniform Fire Code as determined by the Mason County Fire Marshall.
  - C. Maximum roadway grade serving two or more non-resource properties shall not exceed fourteen percent (14%). The gradient for a fire apparatus access road shall not exceed 14% for one (1) through nine (9) dwelling units and 12% for ten (10) or more dwelling units.
  - D. For rights-of-way serving two or more non-resource properties, a maintenance agreement is recorded with the County Auditor identifying owners responsible for maintaining said rights-of-way to the above standards.
- RE-601 The County Engineer may impose additional roadway standards if he/she determines they are necessary to the above standards.



### ***Water Supply Standards***

- RE-700      When residential or other structural uses are intended to be supplied with potable water from off-site sources, written permission shall be obtained from the property owners supplying the water prior to plat approval or building permit issuance, as applicable.
- RE-701      New residential or recreational domestic water supplies shall be certified by the County or State of Washington as appropriate, and shall not be located within one hundred (100) feet of adjacent property without written consent or easement of the adjacent property owner.
- RE-702      Domestic water supplies shall be in compliance with State and County health codes.

### ***Harstine Island Sub-Area Plan***

#### **B-2    Forest Land Use**

B-2-a: Encourage forestry as a preferred land use in the subarea.

B-2-b: Promote forest practices with private land owners and commercial timber companies that preserve as much as possible of the natural beauty of the Island; especially along roads and in other scenic areas.

B-2-b • 1:    Roads and shorelines in forested areas should be identified and agreements should be promoted with timber companies to use alternatives to clear-cutting in those areas.

B-2-b • 2:    Agreements with timber companies should be promoted which minimize the likelihood that large blocks of land will be clear-cut simultaneously.

B-2-b • 3:    Buffers required between roads and occupied properties and clear cut areas.

#### **B-4    Agriculture Land Use**

B-4-a: Identify and encourage the existing agricultural lands in the subarea.

B-4-b: Assist property owners, who wish to implement new agriculture to the Island, to use Best Management Practices (BMP).

- B-4-b • 1: Encourage land use that meets the criteria as agricultural lands; to remain in long-term farming or agricultural use; (as detailed in the Mason County Resource Conservation and Critical Areas Protection Ordinance.)

Implementation: BMPs should be used and include the following standards, when appropriate:

- A Vegetation buffer for perennial and seasonal streams and wetlands, based on the class of the critical area.
- B Gutters and down spouts on building in all animal holding areas to direct runoff with pipes or ditches to non-contaminated areas.
- C Proper manure storage to prevent surface and groundwater contamination.
- D Limited densities of animals and pasture rotation to avoid overgrazing and associated runoff problems.
- E Livestock excluded from streambanks and disturbance of anadromous fish.
- F Fertilizers, pesticides, and herbicides kept from entering streams.

- B-4-b • 2: Commercial farms which are currently implementing existing farm plans (and BMPs) and updating them on a regular basis, and which continue to preserve water quality, should be eligible for open space or farm credit on the tax rolls.

#### B-5 Aquacultural Land Use

B-5-a: Preserve existing aquacultural lands for recreational and commercial uses and protect these lands from conditions that may cause decertification.

- B-5-a • 1: Land uses and proposed development along the shoreline or on adjacent uplands should minimize any increases in storm water runoff and nonpoint pollution which degrade water quality for aquacultural uses.

B-5-b: Enhancement of aquacultural lands, providing improved habitat while maintaining the rural character.

- B-5-b • 1: Activities which enhance habitat or increase fish, shellfish and other aquatic resources should be encouraged as an important part of the economy and lifestyle of the area.

- B-5-c • 2: Aquaculture activities should be carried out in a manner to minimize adverse impacts to the water quality and best management practices for all types of aquaculture should be established by Washington State.

### **North Mason Sub-Area Plan**

#### ***Surface and Storm Water Management***

- 4. Resource industries (forestry, agriculture, aquaculture, mining) should use management practices that minimize the hydrological impacts of erosion and sedimentation. Those management practices should also minimize the occurrence of natural or man made pollutants from entering ground or surface waters.

#### ***Agricultural Practices***

- 1. Agricultural activities should be encouraged to utilize appropriate agricultural management techniques.
- 2. Best Management Practices should be encouraged.
- 3. Good communications between water quality officials and the agricultural community should be maintained.

#### ***Forest Practices***

- 1. Prime forest lands should be conserved and enhanced for long term economic use.
- 2. Minimize the impact of forest practices upon water quality by effectively enforcing regulations.
- 3. Encourage and support the goals and objectives of the Forest Practices Act and the Timber/Fish/Wildlife management process.
- 4. Support regulations to minimize the drift of pesticides, fertilizers, sludge, and chemicals and to prevent these substances from entering water bodies.
- 5. Minimize nutrient and sediment loading to Mason County water bodies from forest practices.

***Aquaculture***

1. Give preference to those efforts undertaken to enhance habitat or increase fish, shellfish and other aquatic resources for the good of the general public (i.e. Department of Fisheries efforts for salmon enhancement).
2. Pollution discharges into waters where shellfish are commercially harvested, and where there is significant recreational shellfish harvesting, should be prohibited and violations corrected.
3. Aquacultural activities should be carried out in such a manner as to minimize adverse impacts to water quality.

***Southeast Mason County Sub-Area Plan***

**A. AGRICULTURAL LAND USE**

- A1: Owners of those lands which qualify are encouraged to enroll in the Open Space - Agriculture property tax classification program, pursuant to RCW Chapter 84.33.
- A2: Lands that meet the designation criteria for agricultural lands, as detailed in the Mason County Interim Resource Ordinance, as adopted, will be provided protection against nuisance claims as detailed in the Ordinance.
- B1. Property owners of these agricultural land uses are encouraged to work with the Mason County Conservation District to get the technical assistance suitable for their property, including locally accepted Best Management Practices.
- B2. Site specific farm management plans should be developed in cooperation with the Mason County Conservation District and should include the use of Best Management Practices applicable to the farm operation.

**B. AQUACULTURAL LAND USE**

- A1: Land uses and proposed development along the shoreline or on adjacent uplands of the watershed should minimize any increases in stormwater runoff and nonpoint pollution which degrade water quality for aquacultural uses.

- A2: Provide protection against nuisance claims for aquacultural uses in case new development changes the character of the areas surrounding those aquacultural uses.
- B1: Activities which enhance habitat or increase fish, shellfish, and aquatic resources should be encouraged as an important part of the economy and lifestyle of the area.
- C1: Pollution discharges into waters where shellfish are cultured or harvested, or into streams which flow into these shellfish areas should be prohibited or brought into compliance.
- C2: Aquaculture activities should be accomplished with minimum adverse impacts to area water quality and with the best available aquacultural management practices.
- C3: Forestry, open space, and low-density residential development should be the preferred land uses adjacent to productive aquacultural areas.
- C4: Establishment of a watershed/shellfish protection district should be considered in order to focus all efforts on improving water quality and lessening impacts which degrade aquacultural areas; protection district funding should come out of assessments that have been raised within the watershed.

C. FOREST LAND USE

- A1: Incentives should be made available by Mason County to encourage continued forest land ownership.
- A2: If land conversions from forest to other land uses occur, continued access for forest management activities should remain as an important consideration in the planning of transportation routes in the subarea.
- A3: Provide protection against nuisance claims for forestry uses if new development changes the character of the areas surrounding those forestry uses.
- A4: Landowners adjacent to forest land uses should be made aware that forest lands will be managed to the property lines of the forest lands.

- A5: Promote citizen awareness and the understanding of forest practices in the watershed through public education efforts.
- B1: Forest management activities should remain in compliance with state forest practices to minimize the physical and water quality impacts to adjacent properties in the watershed.
- B2: Recommendations from the Timber/Fish/Wildlife cooperative research should be integrated in future forest management activities through the Washington State Forest Practice Act.

G. NATURAL SYSTEMS

- B1: The general public should be educated about the location of forest, aquacultural, agricultural, and mineral resource lands and the intrinsic nature of these land uses.
- B2: Residential and non-resource commercial and industrial uses in the areas of resource lands should be closely regulated and should follow development standards which do not create conflicting land uses.
- B3: Forest, aquacultural, agricultural, and mineral resource lands and uses should be protected from nuisance claims brought about by changing land use patterns.
- B4: In reviewing proposed land divisions and land use conversions, all efforts should be made to discourage the fragmentation of resource lands into units which do not allow for economically viable resource uses.



### III-5 CRITICAL AREAS

#### General Policies

- CA-100 New development should be required to protect and preserve critical areas.
- CA-101 The County should promote a land use pattern which will protect critical areas and minimize hazardous conditions.
- CA-102 The County should promote innovative design and planning which assures protection of critical areas while allowing for reasonable use and development of property.
- CA-103 The County should amend development regulations to provide for reasonable protection of critical areas.
- CA-104 The County should ensure that a uniform process is used for the review of land use and development proposals within critical areas.

#### Wetlands

- CA-200 The County should adopt permanent wetland regulations that address:
- A. Wetland designation.
  - B. Delineation procedures.
  - C. Land uses that are subject to permit requirements, including as a minimum those activities that involve or result in:
    - I. The removal, excavation, grading and dredging of soil, sand, gravel, minerals, organic matter, or any other materials;
    - ii. The dumping of, discharging of, or filling with any material;
    - iii. The draining or flooding of wetland sites;
    - iv. The driving of pilings;
    - v. The placing of obstructions;



- vi. The construction, reconstruction, demolition, or expansion of any structure;
  - vii. The destruction or alteration of wetlands and wetland vegetation area through clearing, harvesting, shading, intentional burning, or planting of vegetation; or
  - viii. A significant change of water temperature, a significant change of physical or chemical characteristics of wetlands water sources, including quantity, or the introduction of pollutants.
- D. Those activities and wetland areas that are exempt from permitting requirements, including but not limited to:
- I. Isolated wetlands under one acre; and
  - ii. Agricultural activities on wetlands within agricultural lands, except where such activities result in the conversion of a regulated wetland to a non-agricultural use.
- E. Development standards, including but not limited to standards that apply to:
- I. Vegetation areas;
  - ii. Building setbacks; and
  - iii. Management areas.
- F. Mitigation for wetland impacts
- CA-201 Land use and development impacts to wetlands should be avoided. If it is not feasible to avoid such impacts, then the impacts should be mitigated such that no net loss of wetlands in terms of wetland acreage, function and value occurs.

**Critical Aquifer Recharge Areas**

- CA-300 The County should adopt permanent regulations that address classification, designation, appropriate land uses, and development standards for critical aquifer recharge areas.

- CA-301 Within potential aquifer recharge areas, the County should identify and regulate land uses which could have a potential significant impact on ground water quality and/or quantity.
- CA-302 Within potential aquifer recharge areas, uses such as landfills, junk yards, salvage yards, auto wrecking yards, businesses that use hazardous substances or generate hazardous waste in their operation, solid waste disposal facilities, or other uses and activities determined by the Directors of the Mason County Department of Community Development and the Mason County Health Department that are likely to pose a threat to groundwater should be regulated via permit.
- CA-304 The County should encourage those engaged in agricultural activities, including commercial and hobby farms, to utilize best management practices regarding animal keeping, animal waste disposal, fertilizer use, pesticide use, and stream corridor management.
- CA-305 The County should review all proposals for subdivision, short subdivision, and other divisions of land to evaluate the impact on groundwater quality.
- CA-306 The County should require an Environmental Geologic Report for any development proposal in areas with a high degree of susceptibility to contamination of the water table or confined aquifers that have a high probability of yielding potable water.
- CA-307 An Environmental Geologic Report should identify the proposed development plans and the risk associated with on-site sewage disposal systems and other on-site activities which may potentially degrade the ground water aquifer or confined reservoirs. The report should contain:
- A. A description of the general geological and hydrological characteristics of the area under permit application consideration;
  - B. A description of the local characteristics associated with site drainage and water movement;
  - C. A geologic map with a cross section of the site and adjoining properties up to 1,000 feet away at a scale of one inch equals 200 feet;

- D. A water well report which describes in detail the lithology of the penetrated geologic units and geologic units penetrated in wells in adjoining properties up to 1,000 feet away;
- E. A topographic map of the property and adjoining properties up to 1,000 feet away at a scale of one inch equals 200 feet and a five foot contour interval; and
- F. Provide a discussion on the proposed activities and the effects of sewage disposal, lawn and yard uses, agriculture and animal husbandry, storm water impacts and any other impact reasonably associated with the project type.

CA-308 An Environmental Geological Report should be prepared by an engineering geologist, hydrologist or professional engineer licensed by the State of Washington, who is qualified to analyze geological and hydrological information and ground water systems.

**Frequently Flooded Areas**

CA-400 The Mason County Comprehensive Plan should be consistent and compatible with the Mason County Flood Damage Prevention Ordinance.

CA-401 The County should adopt permanent regulations that address frequently flooded areas. These regulations should include provisions for classification and designation of frequently flooded areas, appropriate land use activities, and development standards.

**Landslide Hazard Areas**

CA-500 The County should adopt permanent landslide hazard area regulations that minimize the risks to property owners and adjacent property owners from development activities. Landslide hazard regulations should include provisions for classification and designation of landslide hazard areas, appropriate land use activities, and development standards.

CA-501 Permits should be required for all development activities and uses in Landslide Hazard areas, except the following:

- A. The growing and harvesting of timber, forest products and associated management activities in accordance with the Washington

Forest Practices Act of 1974, as amended, and regulations adopted pursuant thereto; including, but not limited to, road construction and maintenance, aerial operations, applications of fertilizers and pesticides, helispots, and other uses specific to growing and harvesting timber forest products and management activities, except those forest practices designated as Class IV - "General Forest Practices" under the authority of the *1992 Washington State Forest Practices Act Rules and Regulations*, WAC 222-12-030;

- B. Activities and uses conducted pursuant to the Washington State Surface Mining Act, RCW 78.44 and its rules and regulations, where State law specifically exempts local authority; and
- C. Existing and ongoing agriculture, aquaculture, floriculture, horticulture, general farming, and dairy operating under best management practices.

CA-502 The County should require a geotechnical report prepared by a licensed civil engineer or a practicing engineering geologist with special knowledge to the geology of Mason County for proposals located on landslide hazard areas.

CA-503 A geotechnical report should, at a minimum, include the following:

- A. A description of the soil and geological conditions of the proposed development, including a geologic map with a cross section showing site geologic conditions at a scale of one inch equals 200 feet, and opinions and recommendations of the adequacy of the site to be developed;
- B. A detailed temporary erosion control plan which identifies the specific mitigating measures to be implemented during construction to protect the slope from erosion, landslides and harmful construction methods;
- C. A detailed clearing and grading plan which specifically identifies vegetation to be removed, a schedule for vegetation removal and replanting, and the method of vegetation removal;
- D. An analysis of both on-site and off-site impacts of the proposed development; and
- E. Specifications of development conditions such as, vegetative management, drainage, and buffer widths.

- CA-504 Any area in which a geotechnical report indicates the presence of landslide hazards should not be subjected to development unless the report demonstrates conclusively that the hazards can be overcome, and that the proposed development meets all development standards.

Seismic Hazard Areas

- CA-600 The County should adopt permanent seismic hazard area regulations in order to 1) identify areas that present potential dangers to public health and safety, 2) prevent the acceleration of natural and manmade geologic hazards, and 3) minimize the risks to property owners and adjacent property owners from development activities. Seismic hazard regulations should include provisions for classification and designation of landslide hazard areas, appropriate land use activities, and development standards.
- CA-601 The County should take potential seismic effects into consideration when reviewing development proposals.

Fish and Wildlife Habitat

- CA-700 The County should adopt permanent regulations to protect fish and wildlife habitat. Such regulations should establish and define aquatic and terrestrial management areas and provide management guidelines that include development standards and permit requirements.
- CA-701 Fish and wildlife regulations should be compatible and consistent with the Mason County Shoreline Master Program.
- CA-702 The County should provide fish and wildlife habitat information/education to the public as part of the development permitting process.
- CA-703 All areas under the jurisdiction of the Mason County Shoreline Master Program where on-site sewage disposal systems exist should undergo an on-site sewage disposal system inspection certified by the County Health Department or the State of Washington, prior to any transfer of ownership.
- CA-704 The County should establish septic system inspection programs in areas where the County Health Director finds it necessary to protect water quality.

- CA-705 Tree removal adjacent to aquatic areas for building site preparation or for health and safety reasons, shrub removal, creation of access trails, and tree limbing should be done carefully and kept to a minimum to provide maximum aquatic habitat protection.
- CA-706 The commercial and non-commercial yarding of animals and use of fertilizer should be done in a manner to provide aquatic habitat protection.
- CA-707 Site preparation to support development activities should not result in off-site erosion, siltation, or other reductions in water quality.

**Harstine Island Sub-Area Plan**

**B-6 Natural Systems**

- B-6-a: Protect the subarea natural physical systems (air, water, and land resources) by identifying and designating critical areas, which have recognized resource values or are potentially hazardous to life and property. Public recreational access is currently available at Jarrell Cove State Park and the beach access near McMicken Island. Public boat launching is available at Latimers Landing on the west end of the bridge.
- B-6-a • 1: The unique, fragile, sensitive, and critical areas of Mason County should be protected from incompatible uses, and the public should be alerted of the locations and natural limitations of these areas.
- B-6-a • 2: Flooding and geologic hazard areas (seismic and landslide) should be delineated throughout the subarea. Residential, commercial, and industrial development in such areas should be closely regulated and should follow strict safety and development standards which are tailored to each hazard.
- B-6-a • 3: The valuable natural functions of riparian areas in wetlands, shorelines, and stream corridors should be protected by maintaining an undisturbed or restored vegetation buffer and establishing protective development standards, such as prohibiting filling, clearing, draining, or excavating within these areas.
- B-6-a • 4: Wetlands and floodplains should be preserved in their natural state to store and transport peak floodwater and to improve water quality in the vicinity.

- B-6-a • 5: Estuary and contiguous wetlands, as well as freshwater wetlands, should be protected through the Mason County Shoreline Master Plan and other ordinances.
- B-6-a • 6: In areas subject to flooding, priority land use should be forestry, agriculture and public recreation. New development in the floodplain or actions protecting existing developments should involve no filling within the floodplain, be designed to avoid damage from floods, and not increase flood hazards on-site or downstream.
- B-6-a • 8: When updated soil survey for the whole county is completed, include for Harstine Island the current descriptions of soil physical properties and limitations and the suitability of each soil for numerous land uses.

**North Mason Sub-Area Plan**

***Sensitive/Critical Areas***

1. Riparian areas should be protected. Specific ways to do this include requiring buffers along streams, shorelines and wetlands, and establishing practices to protect those areas.
2. Wetlands and floodplains should be retained because of their ability to reduce flood peaks and provide treatment to improve water quality. They should be preserved in their natural state to protect water quality.
3. The quality of water entering wetlands, streams and ponds should be maintained and improved where necessary, so that the capability of these systems to cleanse the water is not overloaded.
4. Areas where there are sensitive aquifer areas (i.e. low supply of ground water) should be restricted to low intensity and compatible uses, unless alternative domestic water supplies are available from other sources.
5. The valuable natural functions of wetlands and stream corridors, should be protected by maintaining an undisturbed or restored native vegetation buffer and by prohibiting filling, draining, and clearing within these areas.
6. In areas subject to flooding, priority should be given to land uses such as forestry, agriculture, and public recreation. Developments

in floodplains should be designed to avoid damages from floods, and not increase flood hazards down stream.

7. Flood storage and transmission capacity of floodplains should be maintained by prohibiting filling of wetlands and discouraging filling elsewhere in the floodplain.

*Southeast Mason County Sub-Area Plan*

G. NATURAL SYSTEMS

- A1: The unique and fragile sensitive areas of the subarea should be protected from incompatible uses.
- A2: Critical areas should be delineated throughout the subarea. Residential, commercial, and industrial development in such areas should be closely regulated and should follow strict safety and development standards which are tailored to each type of critical area.
- A3: The valuable natural functions of riparian areas in wetlands, shorelines and stream corridors should be protected.
- A4: Wetlands and floodplains of the subarea should be maintained to store and transport peak floodwater and to maintain or improve water quality in the vicinity.
- A5: Estuary and contiguous wetlands, as well as freshwater wetlands, should be protected through the Mason County Shoreline Master Plan and other applicable ordinances.
- A6: In areas subject to flooding, priority land uses should be forestry, agriculture and public recreation. New development in the floodplain or actions protecting existing developments should not involve filling within the floodplain or increase flood hazards onsite or downstream, and should be designed to avoid damage from future flooding.
- A7: Protection of endangered and threatened plant and wildlife species and game species and their habitat should be considered in evaluating proposed land conversions.
- A8: An updated soil survey for the subarea should be completed to aid in land use decision-making. The survey should include the current descriptions of soil physical properties and the limitations and suitability of each soil for numerous land uses.





### **III-6 OPEN SPACE**

#### **Planning**

- OS-100      The County Open Space Plan should be updated every five years (*Mason County Parks, Recreation and Open Space Comprehensive Plan*).
- OS-101      Mason County should develop and maintain an open space inventory to evaluate the effectiveness of the County Open Space Plan.
- OS-102      Mason County should coordinate open space planning with Grays Harbor, Jefferson, Kitsap, Pierce and Thurston Counties to more effectively preserve watersheds, wildlife, scenic views and recreational opportunities.
- OS-103      Master plans for mixed use developments, Fully Contained Communities (FCC's), Master Planned Resorts (MPR's) and Resource Conservation Master Plans (RCMP's) should contain an open space element that includes the following:
- A.      The mapped location of open space areas within the plan site;
  - B.      Identification of the proposed use(s) of designated open space areas, and where feasible, provisions for multiple uses;
  - C.      Provisions for linkage of open space areas within the site, as well as with open space areas on adjacent properties where feasible; and
  - D.      Provisions for public access to open space areas where such access does not threaten fragile or sensitive natural features.

#### **Acquisition**

- OS-200      Open space has a high aesthetic value, therefore it should be acquired to provide natural recreation areas and provide for wildlife habitat (*Mason County Parks, Recreation and Open Space Comprehensive Plan*).

- OS-201 Lands of regional open space significance should be identified for preservation through a process involving County residents, property owners, the urban centers of Shelton and Belfair, other government agencies, and conservation and outdoor recreation groups.
- OS-202 Open space lands preserved at public expense should be selected based upon objective criteria, and the criteria and properties to be acquired should be reviewed periodically.
- OS-203 Mason County should establish a program to encourage the donation of open space and conservation easements.
- OS-204 Special areas should be acquired to provide trails for Off-Road-Vehicles (*Mason County Parks, Recreation and Open Space Comprehensive Plan*).
- OS-205 The County should make an effort to acquire shoreline property in areas where public access is limited (*Mason County Parks, Recreation and Open Space Comprehensive Plan*).

**Open Space Networking**

- OS-300 Where feasible, parks, open space parcels, wildlife corridors, trails, and educational facilities should be connected throughout Mason County.
- OS-301 To the extent possible, open space in Planned Unit Developments (PUD's) and Resource Conservation Master Plans (RCMP's) should be contiguous within the site plan and should be encouraged to be contiguous with preserved open spaces on adjacent sites.
- OS-302 The County should encourage the Department of Natural Resources and the Department of Fish and Wildlife to provide public shoreline access (*Mason County Parks, Recreation and Open Space Comprehensive Plan*).
- OS-303 Access should not be required of all open space sites and should be limited in ecologically sensitive open space areas.

**Development and Multiple Use**

- OS-400 Planned unit developments (PUD's) in areas redesignated from Working Rural Area (WRA) to Urban should include 50% of the site devoted to permanent open space.

- OS-401 Mixed use developments in Working Rural Areas (WRA's) should be developed under a Master Plan that provides for at least 30% of the site to be designated as permanent open space.
- OS-402 Fully Contained Communities (FCC's) should be developed under a master plan that provides for at least 30% of the site to be designated as permanent open space.
- OS-403 Master Planned Resorts (MPR's) should be developed under a master plan that provides for at least 50% of the site to be designated as permanent open space.
- OS-404 Resource Conservation Master Plans (RCMP's) should include a minimum of 30% of the site as permanent open space.
- OS-405 Plats, mobile home parks, and recreational vehicle parks should provide greenbelts and common open space (*Mason County Parks, Recreation and Open Space Comprehensive Plan*).
- OS-406 In satisfying performance district open space requirements, those areas with critical and sensitive features such as wetlands, shorelines, critical fish and wildlife habitat, etc. should receive prime consideration for inclusion within designated open space areas.
- OS-407 Lands preserved for open space should provide multiple open space benefits whenever possible. Multiple benefits include, but are not limited to, active or passive recreation, scenic vistas, fish and wildlife habitat, natural surface water drainage systems and wetlands.
- OS-408 Multiple use open space should be designed and managed to minimize conflicts among users with competing interests.

**Education and Recreation**

- OS-500 Outdoor education and recreation in the form of viewing wildlife, waterfowl and other native organisms should be provided for County residents (*Mason County Parks, Recreation and Open Space Comprehensive Plan*).
- OS-501 Special consideration should be given to Mason County's extensive wetlands resources in regard to educating the public on the importance of preserving these areas (*Mason County Parks, Recreation and Open Space Comprehensive Plan*).

Parks and Trails

- OS-600 : Parks and recreational facilities should prohibit the use of off-road-vehicles (ORV) unless the facility is specifically designed for those activities (*Mason County Parks, Recreation and Open Space Comprehensive Plan*).
- OS-601 Conserving natural open space for recreational opportunities should be considered in parks projects (*Mason County Parks, Recreation and Open Space Comprehensive Plan*).
- OS-602 Trails should be constructed to provide for the growing population of the County (*Mason County Parks, Recreation and Open Space Comprehensive Plan*).
- OS-603 Trails should traverse areas of natural beauty and special interest but in no way destroy or degrade the naturalness of the surrounding area (*Mason County Parks, Recreation and Open Space Comprehensive Plan*).

Harstine Island Sub-Area Plan

B-6 Natural Systems

- B-6-c: Encourage the preservation of current open space areas, including wetlands, woodlands, and natural drainage corridors. Encourage protection of scenic views.
- B-6-c • 1: All development in the subarea should protect stream buffers during construction and during the operation of land use activities.
- B-6-c • 2: Open space in the subarea should be designated to protect scenic views and significant natural resources.
- B-6-c • 3: Greenbelts and common areas should be included in residential and commercial development. Open space and greenbelts should be used as visual buffers from logging and mining activities.
- B-6-c • 4: Financial incentives should be provided to landowners who protect identified open space areas.

**Southeast Mason County Sub-Area Plan**

**G. NATURAL SYSTEMS**

- C1: All land modifications in the subarea should protect stream corridors during and after construction and during the operation of land use activities.
- C2: The use of greenbelts and common areas should be encouraged in proposals for residential and commercial development.
- C3: Financial incentives should be provided to landowners who protect identified open space areas.



### **III-7 WATER QUALITY AND QUANTITY**

#### **General Policies**

- WQ-100      The Mason County Comprehensive Plan should be consistent and compatible with the Mason County Shoreline Management Act.
- WQ-101      Water conservation should be reflected in development regulations, and development features such as landscaping, architecture, and storm water runoff collection and detention systems.
- WQ-102      Conservation and efficiency strategies should be developed and implemented County-wide to provide the most efficient use of all water resources.
- WQ-103      Conservation plans and programs should be coordinated with Grays Harbor, Jefferson, Kitsap, Pierce and Thurston Counties to ensure water resource protection measures address the needs and conditions of entire watersheds.
- WQ-104      Mason County should continue and enhance County-wide education efforts on water use, conservation and protection.
- WQ-105      Mason County should actively promote the concept of watershed management with respect to land use planning and the review of proposed development.
- WQ-106      Mason County should discourage future development in the 100-year floodplain as identified in the Mason County FEMA Flood Insurance Study maps.
- WQ-109      The volume of surface and ground water used should be limited through comprehensive conservation programs, including provisions for emergency restrictions on use, and design standards promoting efficiency.
- WQ-110      Uses such as landfills, junk yards, salvage yards, auto wrecking yards, businesses that use hazardous substances or generate hazardous waste in their operation, solid waste disposal facilities, or other uses and activities determined by the Directors of the Mason County Department of



Community Development and the Mason County Health Department that are likely to pose a threat to groundwater should be regulated via permit.

- WQ-111      The County should encourage those engaged in agricultural activities, including commercial and hobby farms, to utilize best management practices regarding animal keeping, animal waste disposal, fertilizer use, pesticide use, and stream corridor management.
- WQ-112      The County should review all proposals for subdivision, short subdivision, and other divisions of land to evaluate the impact on groundwater quality.
- WQ-113      The County should monitor the quality and quantity of surface and ground water on an ongoing basis.
- WQ-114      The County shall ensure that adequate potable water is available for all new construction and proposed subdivisions and short subdivisions prior to approval.

**Harstine Island Sub-area Plan**

B6      Natural Systems

- B-6-d:      Protect or enhance existing groundwater resources in the subarea by educating the public about the importance of high quality and reliable water sources.
- B-6-d • 1:      The extent of areas critical to the protection of aquifers and drinking water supplies should be identified and the measures needed to assure their protection and supply should be established.
- B-6-d • 2:      The areas where there are sensitive aquifer areas (i.e., low supply of groundwater) should be restricted to low intensity and compatible land uses; more intensive land uses may be permitted if alternative domestic water supplies are available from other sources.
- B-6-d • 3:      Community water systems should be encouraged where multiple services are planned. When done, locating a community well should be at a maximum practical distance from salt water.

B-6-d • 4: Surface water in subarea marshes, ponds, wetlands, and lakes should be recognized as visible indicator of groundwater regime and should be protected from possible encroachment or contamination.

B-6-d • 5: Land uses which cause contamination to groundwater should be brought into compliance with the goals of the current standards in use by the Mason County Department of Health Services.

B-8 On-Site Sewage Disposal

B-8-a: Ensure that septic installations are in compliance with current Mason County Department of General Services, Environmental Health Division requirements.

B-8-a • 1: Data on each newly installed on-site sewage system in the subarea should be accessible to system installers and pumpers and to county health and assessor staff, as well as to the real estate industry, for disclosure in the sale of a residence.

B-8-a • 2: On-site sewage systems will be maintained in a condition that will ensure longevity, protect public health, and prevent contamination of surface and ground waters. Periodic inspections will be done by Mason County.

B-8-a • 3: On-sight sewage systems which do not meet minimum operation standards will be repaired or upgraded within 6 months of notification that the system is failing. On-site sewage systems which do not meet Mason County minimum operation standards will be repaired, upgraded, or replaced to meet Mason County and State of Washington Environmental Health standards as follows:

Any effluent discharge to the land surface, surface or ground waters, or to any body of water, shall be stopped immediately, and Mason County approved corrective action shall take place prior to any further use of the septic system, except that by order of the Mason County Environmental Health Department an alternative plan of action may be allowed.

B-8-a • 4: A financial assistance program such as revolving loan with a payback provision should be considered to aid area

property owners unable to pay for repairing or replacing their failing on-site sewage.

**B-9 Clearing and Grading**

**B-9-a • 1** Enforce the performance standards in Mason County Clearing and Grading Standards, when evaluating new land use activities and development proposals in the subarea.

**B-10 Stormwater and Surface Water**

**B-10-a:** Ensure that adequate controlled surface water management is part of each development proposal.

**B-10-a • 1:** Incentives should be provided for proposed residential and commercial land uses to utilize innovative stormwater management techniques, such as on-site retention and detention areas. These techniques should protect existing natural drainage ways and associated steep slopes, wetlands, floodplains, and erosion areas.

**B-10-a • 2:** All land use requests, from single-family residences to subdivisions, or from commercial to industrial uses, should be evaluated for drainage or stormwater impacts and permitted only after meeting necessary development requirements.

**B-10-a • 3:** Stormwater management and surface drainage systems should be integrated into land use proposals as major design elements which enhances open space, wildlife, fisheries, recreation, and aesthetic quality throughout the county.

**North Mason Sub-area Plan**

***Shoreline/Upland Use***

1. Shoreline development activities should be evaluated with consideration of their varying degrees of suitability for development based on the sensitivity of their natural waters, the uses made of their waters, and the potential impacts on short and long term water quality.
2. Clearing, grading, development and other upland activities should be done in a manner that minimizes the adverse impacts to water quality.

3. Erosion control practices such as natural vegetative buffers, settling ponds, silt curtains, hydro seeding, manufactured slope protection covering, and other appropriate methods need to be utilized when a potential exists for water quality degradation.
4. Developments should be undertaken in such a manner so as to minimize increases in runoff to adjacent properties and minimize water quality degradation.

### ***Storm and Surface Water Management***

1. Existing and new developments should minimize degradation of water quality from runoff, along with increases in peak storm water runoff. They should also avoid altering natural drainage systems in order to minimize flooding and water quality degradation.
2. Streams and other natural waterways, which convey runoff to lakes, rivers and Hood Canal or Puget Sound, should be protected for their wildlife, fisheries and aesthetic values.
3. Wetlands and floodplains should be retained because of their ability to reduce flood peaks and provide treatment to improve water quality. They should generally be preserved in their natural state and have their water quality protected. Alterations or enhancement should be allowed, if necessary, only after evaluation of the biological, ecological, and hydrological functions.
4. Resource industries (forestry, agriculture, aquaculture, mining) should use management practices that minimize the hydrological impacts of erosion and sedimentation. Those management practices should also minimize the occurrence of natural or man made pollutants from entering ground or surface waters.
5. The quality of water entering wetlands, streams and ponds should be maintained and/or improved where necessary so that the capability of these systems to cleanse the water is not overloaded.
6. Recognize that preventing water quality problems from storm water is better than correcting such problems after-the-fact.
7. Recognize storm water management systems and surface drainage systems as major design elements that enhance open space, wildlife, fisheries, recreation and aesthetic quality throughout the County.

### ***On-Site Sewage Disposal***

1. On-site septic systems should be required to function properly and not degrade surface or ground water quality.

2. Financial support should be made available to those individuals who do not have the resources to upgrade their systems.
3. New developments should provide adequate on-site sewage disposal systems.
4. Encourage education of home owners on proper installation and maintenance of on-site systems.
5. On-site sewage disposal systems should not be allowed in areas deemed inappropriate by the Environmental Health Department.

### ***Groundwater Management***

1. Long-term reliability and quality of water supplies should be encouraged.
2. Community water systems should be encouraged in un-sewered areas.
3. Water quality of all aquifers used for drinking water should be regularly monitored and protected. Resources should be primarily assigned to areas of greater threat (i.e. landfills, sludge disposal sites, master drainfields, etc.).
4. Ground water quality should be protected and aquifer contamination or degradation prevented through comprehensive management of the ground water resource.
5. Areas where the supply of ground water is limited should be restricted to low intensity and compatible uses unless alternative domestic water supplies are available from other resources.
6. Visible surface water such as marshes, ponds, wetlands, and lakes must be recognized as "windows" in the ground water regime and must be protected from encroachment and contamination.

### ***Monitoring***

1. Support efforts to monitor all aspects of water quality.
2. Emphasize that monitoring is an essential tool needed to manage water quality.
3. Support intensive monitoring for areas that have a great potential for water quality degradation/contamination (i.e. landfills, sludge disposal sites, master drainfields, etc.).

**Education**

1. Recognize and support citizen group efforts toward public involvement and education on water quality issues.
2. Encourage public to use the "least toxic alternative" through education.

**Southeast Mason County Sub-area Plan**

**E. COMMERCIAL AND INDUSTRIAL LAND USES**

- A2: Site development of commercial and industrial land uses should integrate stormwater retention standards in the preparation, construction, and operation of the land use.
- A3: The operation of commercial and industrial land uses should not discharge wastes directly into the waters of the State.
- A4: Industries which threaten ground or surface water should be prohibited from locating within the planning area if the business or use cannot ensure protection of these resources.

**G. NATURAL SYSTEMS**

- D1: The extent of areas critical to the protection of aquifer recharge areas should be identified and the measures needed to assure their protection and supply should be established.
- D2: Surface water in subarea marshes, ponds, wetlands, and lakes should be recognized as visible indicators of the groundwater regime and should be protected from possible conversion or contamination.
- D3: Sensitive aquifer recharge areas, as an identified critical area, should be restricted to low intensity and compatible land uses.
- D4: Community water systems should be encouraged in unsewered areas, both to avoid existing or future contamination problems.
- D5: Land uses which cause contamination to groundwater should be brought into compliance with the goals of the Totten-

Little Skookum Watershed Action Plan and the current standards in use by the Mason County Department of Health Services.

H. STORMWATER AND SURFACE WATER

A1: Residential, recreational, and commercial land uses proposed in the planning area should use stormwater management techniques to control runoff and sedimentation. These techniques, such as on-site retention, detention, and infiltration, should protect natural drainage ways and associated steep slopes, wetlands, floodplains, and erosion areas, and should keep additional surface flows from running off the project site.

A2: All land use requests, from single-family residences to subdivisions, or from commercial to industrial uses, should be evaluated for drainage or stormwater impacts and permitted only after meeting necessary development requirements.

A3: All development proposals should incorporate measures to minimize impervious areas and altered land surfaces in order to maintain the normal rates of surface water infiltration and overland flows.

A4: Stormwater management and surface drainage systems should be integrated into land use proposals as major design elements which enhance water quality, open space, wildlife, fisheries, recreation, and aesthetic values throughout the county.

I. ON-SITE SEWAGE DISPOSAL AND TREATMENT

A1: The database on each on-site sewage system in the subarea should be accessible to system installers and pumpers and to county health and assessor staff, as well as to the real estate Multiple Listing Service for disclosure in the sale of a residence.

A2: Re-examination of the county on-site sewage system criteria should focus on the site suitability of the proposed sewage system location; factors to consider include soil physical properties, slope, depth to water table, proximity to surface water, lot size, and number of bedrooms in the residence.

- A3: On-site sewage systems should be maintained in a condition that will ensure longevity, protect public health, and prevent contamination of surface and ground waters. Monitoring inspections and necessary maintenance, such as pumping the system, should be required every five years or less, based upon the size or design of the system or upon a county Environmental Health recommendation.
- A4: On-site sewage systems which do not meet minimum design standards should be upgraded at times of opportunity, such as the sale of the residence, home remodeling, and system repair.
- A5: A financial assistance program, such as revolving loan with a payback provision, should be provided to aid area property owners in repairing or replacing their failing on-site sewage systems.
- A6: The Mason County Shoreline Master Program should be revised to prohibit any direct outfalls from sewage treatment plants or any other point source discharges into surface waters of the subarea, and to maintain the 100-foot shoreline setback for on-site sewage systems currently in effect.

J. CLEARING AND GRADING

- A1: Activities which involve vegetation removal and surface alterations, except those actions covered by state forest practice rules, should be regulated by an established permit and review process and should be consistent with the Natural Systems and Stormwater goals and policies contained in this Subarea Plan.
- A2: Site preparation by clearing and/or grading, development, and other upland activities should be undertaken using methods which minimize increased runoff to adjacent properties and degradation to area water quality.
- A3: Appropriate erosion control practices should be required in approving proposed site preparation and development activities; such techniques include natural vegetation buffers, proper sloping, detention or retention ponds, silt curtains, hydroseeding, and slope surface protection materials.





### **III-8 HOUSING**

#### **Housing Availability and Affordability**

- H-100 Mason County should ensure that fair and equal housing opportunities are available to all County residents.
- H-101 Mason County should consider changes to Land Use Map designations and Policies of the Land Use Element in the Mason County Comprehensive Plan as necessary to provide for a wide range of housing types throughout the County, as well as to accommodate projected population and household income levels.
- H-102 Mason County should establish a citizen-based Housing Advisory Committee to address housing issues in the County.
- H-103 Mason County should consider providing incentives to housing developers and home builders in return for providing housing that is affordable to lower and moderate income households.
- H-104 Mason County should coordinate with neighboring counties to ensure that enough housing is provided to meet the needs of the projected population levels and household incomes within the County for the next twenty years and beyond.
- H-105 Mason County should consider ways to shorten the review process for affordable-housing permits.
- H-106 Mason County should consider participation in the preparation of applications for federal and state housing funds.
- H-107 There should be enough safe, healthful and blight free housing for all residents and a variety of housing types so that a choice will be provided. Housing should be convenient to activities and facilities (1970 Mason County Comprehensive Plan).
- H-108 Mason County should examine alternative means to encourage public and private investment in development of low income housing.
- H-109 Mason County should provide for accessory dwelling units in any district which is otherwise restricted for use only to single family dwellings.

Preservation of Existing Housing Stock

- H-200 Mason County should preserve and enhance the value and character of its neighborhoods by extending the life of its housing stock.
- H-201 In cooperation with PUD No. 1, PUD No 3 and Cascade Natural Gas Corporation, Mason County should promote the use of weatherization programs in existing housing.
- H-202 Mason County should encourage and accommodate local non-profit agency efforts to purchase and rehabilitate housing to meet affordable housing needs and special needs of the community.
- H-203 As a means of preserving (rather than repairing) existing housing stock, Mason County should evaluate the benefit of establishing a program to assist homeowners who do not have the resources or ability to perform routine home maintenance.

Housing Improvement

- H-300 Mason County should preserve and enhance the value and character of its neighborhoods by improving its housing stock.
- H-301 Mason County should update its Housing Needs Assessment every five years to measure the progress made in rehabilitation efforts, and to identify areas with the greatest need for rehabilitation.
- H-302 Mason County should update housing condition surveys at least every three years to monitor the progress made in repair and rehabilitation of housing stock.
- H-303 Mason County should work closely with Federal and State agencies to maximize the amount of public funding available for housing rehabilitation within the County.
- H-304 Mason County should work closely with private local financial institutions, non-profit housing organizations, the construction industry, the business community, churches and other charitable organizations to maximize the amount of private funding available for housing rehabilitation within the County.
- H-305 In directing available housing rehabilitation resources, Mason County should give priority consideration to those who do not have the resources or ability to perform home repairs (i.e. low income and elderly households).

**Housing Development**

H-400 All new housing development should comply with the residential policies in Chapters 2 and 3.



### **III-9 UTILITIES**

#### **General Policies**

- UT-100 Conflict between transportation, communications and utilities and other land uses should be minimized (*1970 Mason County Comprehensive Plan*).
- UT-101 Services and utilities should be supplied as well and as economically as possible (*1970 Mason County Comprehensive Plan*).
- UT-102 The physical elements of services should disturb the landscape as little as possible (*1970 Mason County Comprehensive Plan*).
- UT-103 Undergrounding of all utilities should be encouraged where feasible, particularly in newly developed areas (*1970 Mason County Comprehensive Plan*).
- UT-104 Every effort to reduce to reduce noise and other pollution from transportation, communications and utilities uses should be encouraged (*1970 Mason County Comprehensive Plan*).
- UT-105 Mason County should process permits and approvals for utility facilities in a fair and timely manner, and in accordance with development regulations that ensure predictability.
- UT-106 Planning by Mason County for utility facilities development should be coordinated with the urban centers of Belfair and the City of Shelton.
- UT-107 Planning by Mason County for utility facilities development should be coordinated with neighboring Grays Harbor, Jefferson, Kitsap, Pierce and Thurston Counties.
- UT-108 Mason County should coordinate land use planning with the utility providers' planning.
- UT-109 Mason County should coordinate the periodic update of the *Utility* element of the Mason County Comprehensive Plan with adjacent jurisdictions.
- UT-110 Mason County should encourage the joint use of utility corridors where feasible.

- UT-111      Mason County should provide timely and effective notice to utilities of the construction, maintenance or repair of streets, roads, highways or other facilities, and coordinate such work with the serving utilities to ensure that utility needs are appropriately considered.
  
- UT-112      Mason County should promote, when feasible, the co-location of new public and private utility distribution facilities in shared trenches and coordination of construction timing to minimize construction-related disruptions to the public and reduce the cost to the public of utility delivery.
  
- UT-113      Mason County should provide for efficient, cost effective and reliable utility service by ensuring land will be made available for the location of utility lines, including location within transportation corridors.
  
- UT-114      Mason County should encourage system design practices intended to minimize the number and duration of interruptions to customer service.
  
- UT-115      Mason County should facilitate and encourage the conservation of resources to delay the need for additional facilities for energy and water resources and achieve improved air quality.
  
- UT-116      Mason County should promote the conversion to cost-effective and environmentally sensitive alternative technologies and energy sources.
  
- UT-117      Mason County should conserve the use of energy and water in the County's own facilities.
  
- UT-118      Mason County should ensure that all elements of the Mason County Comprehensive Plan (and the implementing development regulations) are consistent with, and do not otherwise impair the fulfillment of, the public service obligations imposed upon the utility providers by federal and state law.

**Harstine Island Sub-Area Plan**

- B-1-a • 5:      Utilities should be located with regard to minimizing their visual impact.
  
- B-1-a • 6:      Buffers of natural vegetation should be encouraged to help buildings, roads, and utilities blend into the natural environment.

### **III-10 HISTORIC PRESERVATION**

#### **General Policies**

- HP-100 Areas containing potentially valuable historical/cultural features should be identified and procedures for protecting and preserving such resources should be employed.
- HP-101 Landmarks and buildings of historical significance should be preserved.
- HP-102 During development, when sites of historical significance are discovered, they should remain undisturbed until they are examined and a determination of disposition is made by the appropriate agency.
- HP-103 Public access to historical and cultural sites should ensure against negative impacts and environmental degradation. Access should not detract from the sites' significance
- HP-104 Development in areas that contain potentially valuable historical/cultural features should be in compliance with RCW 27.44 (Indian Graves and Records) and RCW 27.53 (Archeological Sites and Records).





# Chapter IV

## LAND USE

### IV.1 INTRODUCTION

The Washington state Growth Management Act requires counties planning under the act to adopt a comprehensive plan that includes a land use element and a rural element. The land use element should identify the proposed distribution of land uses and address other concerns such as the protection of groundwater quality and quantity, drainage, flooding, and storm water run-off and potential mitigation measures. The rural element should address those rural lands in the county which are not specially designated for urban growth or natural resource use. Because of the interconnection of the urban and resource lands with the rural lands, both elements have been included in the Land Use Chapter.

#### Purpose of The Land Use Element

The land use element identifies the existing land use conditions throughout Mason County, projects the land requirements to the year 2014, and determines how that growth should be accommodated, given the goals and policies developed in the plan.

#### Overview of the Land Use Plan

The lands of Mason County, which are within the jurisdiction of the county have been divided into three categories of performance districts. These are urban growth areas, resource lands, and rural lands. Each of these districts is described below.

#### Urban Growth Areas

The urban growth areas which are designated in Mason County include the City of Shelton, with a portion of its surrounding area, and the unincorporated community of Belfair. These communities currently support a mix of residential, commercial, industrial, civic, and public uses.

Within Shelton and Belfair, residential uses provide a variety of housing choices including medium to high density single family and multifamily. Commercial development includes retail and other business uses. Industrial uses include light and heavy industry, production, manufacturing, and resource-based uses. In addition, a broad range of civic and public facilities such as schools, churches, libraries, parks, courts, and City and County government exist within these communities.

### *Rural Lands*

Rural lands are divided into several classifications. These classifications identify performance districts through which rural growth will be managed. These districts include the following:

- Rural Activity Centers (RAC)
- Rural Community Centers (RCC)
- Working Rural Areas (WRA)
- Resource Conservation Master Plan (RCMP)
- Fully Contained Community (FCC)
- Rural Area (RA)

The Rural Activity Centers (RACs) include Allyn, Union, Hoodspout, and Kamilche/Taylor Town. Proposed Rural Community Centers include Mason/Benson, Matlock, Lilliwaup, Tahuya, Grapeview, Potlatch, Dayton, and the Skokomish Valley.

The rural lands are described in more detail in the rural lands section of the land use chapter.

### *Resource Lands*

Mason County has designated and protected two types of resource lands. These are Long-Term Commercial Forest Resource Lands and Mineral Resource Lands of long-term commercial significance. The county also designated forest Inholding Lands which were subject to special restrictions to protect adjacent Long-Term Commercial Forest Lands. In addition, the county adopted protections for agricultural and forest land uses anywhere in the county. The Western Washington Growth Management Hearing Board has ordered the county to reconsider its designations of forest lands and its failure to specifically designate agricultural lands of long-term commercial significance. The county will conduct the review, but until that is completed, the comprehensive plan will continue to support the approach developed by the county in studies, workshops, and public hearings conducted from 1991 to 1993.














# MASON COUNTY

## COMPREHENSIVE PLAN

### FUTURE LAND USE

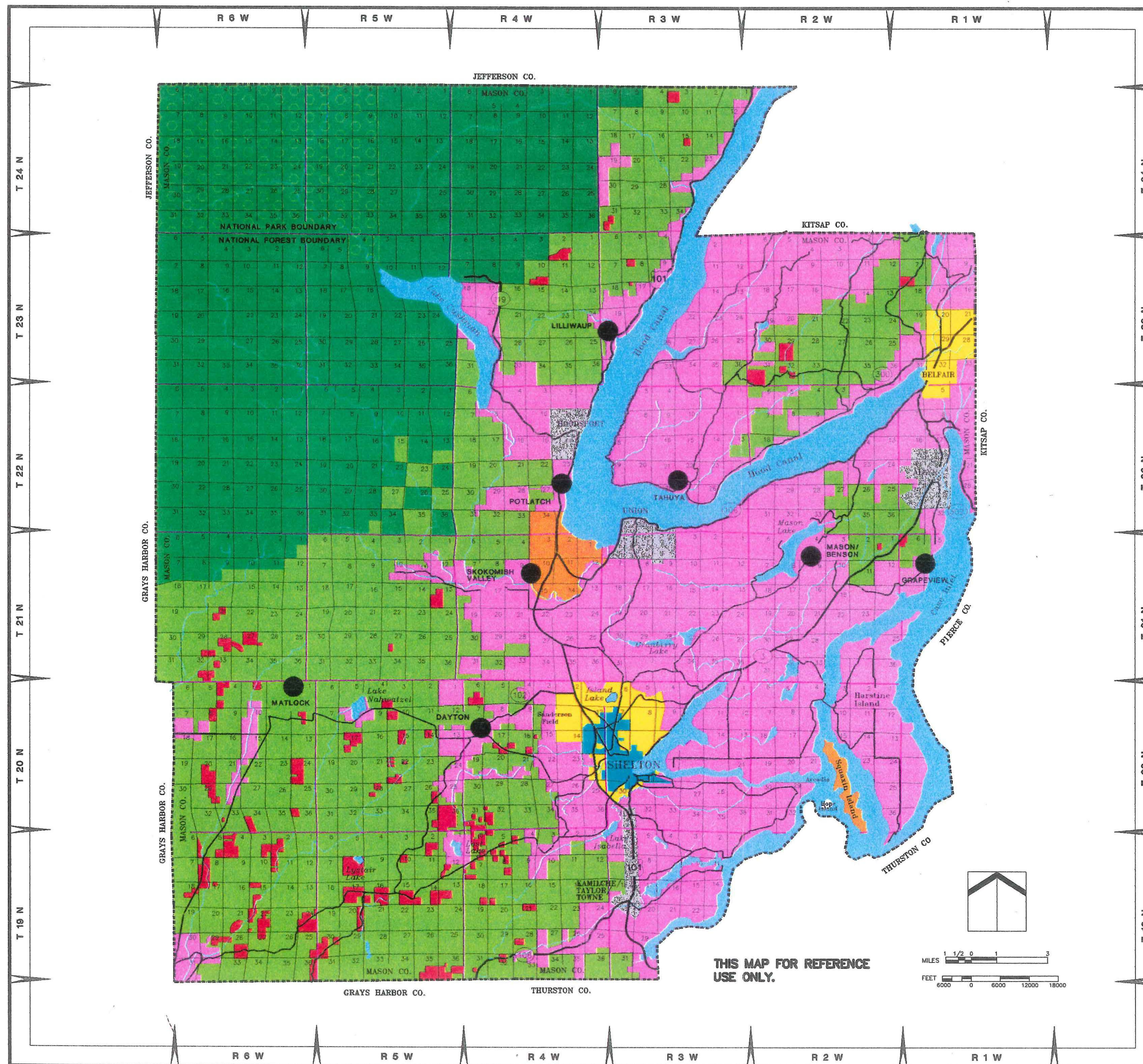
#### LEGEND

-  OLYMPIC NATIONAL FOREST
-  LONG TERM COMMERCIAL FOREST
-  OLYMPIC NATIONAL PARK
-  INDIAN OWNED LANDS
-  RURAL COMMUNITY CENTER
-  RURAL AREA
-  CITY OF SHELTON
-  URBAN GROWTH AREA
-  RURAL ACTIVITY CENTER
-  POTENTIAL NEW FULLY CONTAINED COMMUNITY (NO LOCATION PROPOSED)
-  INHOLDING LANDS

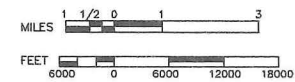
 MASON COUNTY  
Department of Community Development

Shelton, WA  
April, 1996.

FIGURE IV-1.1



THIS MAP FOR REFERENCE  
USE ONLY.





(Please insert Map of Future Land Use in front of this page.)

### Watersheds

Land use and land planning is also organized by watersheds. Mason County includes seven watersheds: Case Inlet, Chehalis, Hood Canal, Lower Hood Canal, Oakland Bay, Skokomish, and Totten-Little Skookum. (See FIGURE IV.3-1). Drainage patterns determine the boundaries of watersheds.

Mason County has chosen to use a watershed based planning because it provides the county with a meaningful approach for analyzing growth impacts, preparing effective development regulations, and establishing mitigation measures. It is based on the premise that action within one portion of a watershed impacts environmental and biological functions in other areas of the watershed. For example, the filling of wetland within a watershed not only impacts the area surrounding the wetland, but also affects the watershed's overall ability to control flooding and filter out pollutants before water reenters the groundwater system. Further, alleviating negative impacts of specific actions within a watershed protects environmental resources throughout the entire watershed. Mason County's watershed planning seeks to ensure adequate flood control and protect water quality, wildlife habitat and other environmental resources.

### Urban Growth Areas - Shelton

The following goals provide a statement of the intent for the City of Shelton urban growth area. The goals provide a basis for interpretation of the specific policies contained herein. These goals were developed jointly by the City of Shelton and Mason County.

1. To establish general guidelines for orderly growth within the Urban Growth area for Shelton.
2. To provide for cooperation between Mason County and the City of Shelton in planning and guiding development in the Urban Growth Area.
3. To provide land owners and the public generally with certainty about the types of land uses that will occur and or the processes that will be provided for changing those uses as the areas urbanize.
4. To provide a framework for detailed land use and service provision plans and studies that will facilitate efficient use of public funds.
5. To coordinate regulations and utility standards to minimize public and private costs.
6. To provide for land use densities and types, development standards, and provision of urban type services within the UGA that are compatible with the City of Shelton Comprehensive Plan.

## IV.2 POPULATION

The United States Bureau of the Census (Census) provides the foundation for understanding population growth in all areas of the Country. The Washington State Office of Financial Management (OFM) also prepares intercensal population data for all Counties and Cities in the state. Using both Census and OFM figures, it is possible to both identify historical population trends, and to project future populations trends.

In addition to Census and OFM figures, population projections for Mason County prepared by E. D. Hovee and Company have been incorporated into this section. It is the opinion of the County that the Hovee figures are a more accurate representation of future population growth than projections acquired through OFM, which, in recent history, have underestimated population growth for counties outside the Central Puget Sound region.

Planning under the Growth Management Act requires cities and counties to plan for future development, and to manage land supply to accommodate projected growth. In order to accomplish this, the Mason County Comprehensive Plan was developed based on both historical trends and future projections of Mason County's population.

### Population Growth

#### *Historical Trends*

In 1950 Mason County's population was 15,022, only slightly more than one third of the County's population in 1994. During the decade of 1950 to 1960, the statewide population grew by 19.9 percent, or 1.8 percent annually. At the same time, Mason County's population grew by eight percent (an average rate of .07 percent annually) to reach a 1960 population of 16,251 (see TABLES IV.2-1 and IV.2-2).

|                  | Population |           |           |           |           |
|------------------|------------|-----------|-----------|-----------|-----------|
|                  | 1950       | 1960      | 1970      | 1980      | 1990      |
| Washington State | 2,378,963  | 2,853,214 | 3,413,250 | 4,132,353 | 4,866,663 |
| Mason County     | 15,022     | 16,251    | 20,918    | 31,184    | 38,341    |

Source: Bureau of the Census, Washington State Office of Financial Management

|                  | Percent Change |       |       |       | Average Annual Increase |       |       |       |
|------------------|----------------|-------|-------|-------|-------------------------|-------|-------|-------|
|                  | 50-60          | 60-70 | 70-80 | 80-90 | 50-60                   | 60-70 | 70-80 | 80-90 |
| Washington State | 19.9%          | 19.6% | 21.1% | 17.8% | 1.8%                    | 1.8%  | 1.9%  | 1.6%  |
| Mason County     | 8.2            | 28.7  | 49    | 23    | 0.7                     | 2.5   | 4.1   | 2.1   |

Source: Washington State Office of Financial Management

The 1960's marked the start of a period of rapid Countywide population growth that has continued into this decade. Between 1960 and 1970, the County experienced a population increase of 28.7 percent (4,667 people), an average annual rate of 2.5 percent. By 1970, Mason County's population had grown to 20,918. During the same period, the Statewide annual rate of population increase was of 19.6 percent (an average annual growth rate of 1.8 percent).

During the 1970's, both the County and the State experienced the fastest rates of population increase in recent history. The County's population rose by an average rate of 4.1 percent annually, totaling an increase of 49 percent. At the end of the decade the population had increased by 10,266 people bringing the total population to 31,184.

Meanwhile, the State's relatively stable annual rate of population growth increased very slightly from 1.8 to 1.9 percent, amounting to a population increase of 21 percent.

The rate of population growth slowed somewhat during the eighties. Between 1980 and 1990, the County's population grew by an average annual rate of 2.1 percent amounting to a ten year increase of 23 percent and a total population of 38,341. Statewide population growth during the decade totaled 18 percent (an average annual rate of 1.6 percent).

While it is commonly believed that much of the State and County's growth occurred during the 1980's, the actual rate of growth for the decade was the slowest experienced in the County since the 1950's. The 10,266 people added to the County population between 1970 and 1980 exceeds the 7,157 increase during the 1980's by approximately 43 percent.

### *Current Trends*

In the past, Statewide population growth has been concentrated in the more metropolitan counties along the Puget Sound corridor. During the 1980's, 70 percent of the state's population growth occurred in King, Pierce, Snohomish and Kitsap Counties. Interestingly enough, this has not been the case since 1993, when the previously mentioned counties accounted for only 35 percent of the State's growth.

One explanation for this recent shift in population growth is what is called "rural rebound," which has been experienced throughout the western United States. Essentially, the population has migrated towards areas of the state that have a more rural character, greater availability of land, and consequently lower land costs. Additionally, the rapid technological advancements being made today allow a growing number of people to telecommute to work from home. It is increasingly more common for people to live in the more rural areas of the State while retaining jobs with companies based in the metropolitan areas.



In 1990, Mason County's population was 38,341. According to OFM figures, the actual County population as of April 1, 1994 was 44,300, which represents an increase of 15.5 percent or an increase average of 3.7 percent annually since 1990. During the 1990's, Mason County has ranked fifth in the State in population growth rate. One thing that must be considered when looking at the County's current growth is that the current average annual growth rate (3.7%) is not much lower than the record 4.1% rate of growth experienced in the 1970's, when the County's population grew by 49 percent.

If the current growth rate remains constant throughout the end of the decade, the County's population can be estimated to approximate 55,020 people. If this trend continues, the population will have increased by 43.5 percent during the decade, which exceeds Hovee's *high growth* rate scenario projection of 52,716 for the same year. The latter of the two scenarios would result in a total population increase of 37.5 percent over the initial population at the beginning of the decade.

TABLE IV.2-3 lists State and Countywide populations by year and also includes population of Counties that adjoin Mason County. It is important that the population trends in other surrounding Counties are monitored, as they are influential in determining the trends that occur in this County. It should be noted that Mason County is surrounded by some of the fastest growing Counties in the State.

TABLE IV.2-4 shows that rates of population growth vary yearly. The highest actual increase in County population occurred between 1992 and 1993, when an additional 1700 people, or 4 percent, were added to the population of the county.

|                     | Total Population |               |               |               |               | Average Annual Increase |
|---------------------|------------------|---------------|---------------|---------------|---------------|-------------------------|
|                     | 1990             | 1991          | 1992          | 1993          | 1994          | 1990-1994               |
| Washington State    | 4,866,663        | 5,000,371     | 5,116,671     | 5,240,900     | 5,334,400     | 2.3                     |
| <b>Mason County</b> | <b>38,341</b>    | <b>39,900</b> | <b>41,200</b> | <b>42,900</b> | <b>44,300</b> | <b>3.7</b>              |
| Grays Harbor County | 64,175           | 65,100        | 65,400        | 66,500        | 67,400        | 1.3                     |
| Jefferson County    | 20,406           | 21,600        | 22,500        | 23,500        | 24,300        | 4.5                     |
| Kitsap County       | 189,731          | 196,500       | 205,600       | 210,000       | 213,200       | 3.0                     |
| Thurston County     | 161,238          | 168,000       | 174,300       | 180,500       | 185,900       | 3.6                     |

Source: Washington State Office of Financial Management

| County              | Actual Growth |       |       |       | 90-91 | 91-92 | 92-93 | 93-94 | Percent Change |
|---------------------|---------------|-------|-------|-------|-------|-------|-------|-------|----------------|
|                     | 90-91         | 91-92 | 92-93 | 93-94 |       |       |       |       |                |
| Mason County        | 1,559         | 1,300 | 1,700 | 1,400 | 4.1%  | 3.3%  | 4.0%  | 3.3%  | 15.5%          |
| Grays Harbor County | 925           | 300   | 1,100 | 900   | 1.4   | .5    | 1.7   | 1.4   | 5.0            |
| Jefferson County    | 1,194         | 900   | 1,000 | 800   | 5.9   | 4.2   | 4.4   | 3.4   | 19.1           |
| Kitsap County       | 6,769         | 9,100 | 4,400 | 3,200 | 3.5   | 4.6   | 2.1   | 1.5   | 12.4           |
| Thurston County     | 6,762         | 6,300 | 6,200 | 5,400 | 4.1   | 3.8   | 3.6   | 3.0   | 15.3           |

Source: Washington State Office of Financial Management

### Growth Rate Scenarios

As previously mentioned, OFM population projections are consistently lower than what has actually occurred in recent years in Mason County. Part of this can be explained by the simple nature of projections, that is that it is impossible to determine with absolute accuracy what the future will hold. However, allowing for acceptable margin for error, OFM figures are still inaccurate for counties outside the Central Puget Sound area.

Growth planning relies upon population projections. Simply stated, these projections are educated predictions about what may happen relative to population growth over time. Mason County considered three alternative growth rate scenarios in determining the levels of population upon which Growth Management planning would be based over the 20 year planning period. The three growth rate scenarios for the County include, the *Low Growth* scenario, the *Medium Growth* scenario and the *High Growth* scenario. The *Low Growth* scenario represents population forecasts prepared by OFM. The other two scenarios were developed E.D. Hovee and Company for the City of Shelton.

### Low Growth Rate Scenario

OFM derived population projections represent the County's *Low Growth* rate scenario. At the time that these projections were obtained, Mason County's population for the year 1994 was expected to be 42,262. In actuality, the County's population in 1994 was 44,300, which is roughly 5 percent greater than OFM's projected figure. OFM did not project the County's population to reach its actual present figure until between 1997 and 1998.

### *Medium Growth Rate Scenario*

The *Medium Growth* rate scenario uses a method that is similar to that used by OFM. Using this method, the County's average changing share of statewide population is tracked and is then trended forward into the future.

### *High Growth Rate Scenario*

The *High Growth* rate scenario was produced for the City of Shelton by E.D. Hovee and Company. The figures listed for this scenario in TABLE IV.2-5 were derived using the County's annual rate of growth between the years of 1970 and 1992 (3.13%) and projecting that trend into the future.

The County has determined that Hovee's *High Growth* rate scenario is the best guideline for planning to accommodate the needs of the population in the future. If the County were to rely on OFM figures to plan, and actual populations do exceed those figures (as expected), the County would be faced with shortfalls in capital facilities and housing, as well as areas suitable for residential, commercial and industrial development due to underestimating demand.

### *Assumptions in Adopting the High Growth Rate Scenario*

- a. The majority of Mason County's population increase comes from migration within the State, therefore the expected decrease in statewide population growth (due to a decrease in in-migration) will not have significant impact on the County's growth trends, and Mason County's population will continue to grow at a rate faster than the statewide average.
- b. Technological advances make it possible to work for companies located in the more metropolitan areas along the Puget Sound corridor, while still living in rural areas. Since Mason County is in relative proximity to Olympia, Bremerton, Tacoma, and Seattle, it is a desirable location for those looking to live in a rural area while telecommuting to work in metropolitan areas.
- c. Given that Mason County is a popular destination for retirees, and that the baby-boomer generation will reach retirement age in the year 2000, the County is expected to experience a higher rate of population growth as the baby-boomers retire, and a higher conversion rate of seasonal residence to year round occupancy.
- d. An increase in development along the County's waterfront properties is expected as property owners retire away from metropolitan areas to Mason County. Areas like Lake Cushman have relatively few plots that are still unpurchased, yet the area is less than one half developed.

- e. OFM population projections for Mason County fall well below actual population figures. Use of OFM figures in planning for capital facilities could result in a facilities deficit, the consequence of which would be Mason County's failure to comply with the concurrency requirement of the Growth Management Act.

| Year  | Mason County Population Projections |                               |                           |
|-------|-------------------------------------|-------------------------------|---------------------------|
|       | Low Growth Rate Scenario            | Moderate Growth Rate Scenario | High Growth Rate Scenario |
| 1992  | 39,775                              | 41,200                        | 41,200                    |
| 1993  | 40,512                              | 41,640                        | 42,900                    |
| 1994* | 42,262                              | 42,793                        | 44,300                    |
| 1995  | 42,027                              | 43,974                        | 45,300                    |
| 1996  | 43,546                              | 44,965                        | 46,710                    |
| 1997  | 43,072                              | 45,974                        | 48,163                    |
| 1998  | 44,604                              | 47,000                        | 49,662                    |
| 1999  | 44,143                              | 48,044                        | 51,208                    |
| 2000  | 45,688                              | 49,107                        | 52,802                    |
| 2001  | 45,318                              | 50,142                        | 54,445                    |
| 2002  | 45,956                              | 51,193                        | 56,140                    |
| 2003  | 46,604                              | 52,262                        | 57,887                    |
| 2004  | 47,261                              | 53,348                        | 59,689                    |
| 2005  | 47,927                              | 54,451                        | 61,547                    |
| 2006  | 48,590                              | 55,548                        | 63,463                    |
| 2007  | 49,262                              | 56,662                        | 65,438                    |
| 2008  | 49,944                              | 57,793                        | 67,475                    |
| 2009  | 50,635                              | 58,941                        | 69,576                    |
| 2010  | 51,335                              | 60,107                        | 71,742                    |
| 2011  | 52,021                              | 61,275                        | 73,975                    |
| 2012  | 52,717                              | 62,460                        | 76,278                    |
| 2013  | 54,351                              | 64,396                        | 78,653                    |
| 2014  | 56,345                              | 66,392                        | 81,102                    |

Source: Washington State Office of Financial Management, E.D. Hovee and Company, and Butler and Associates, 1995.

Explanation: Mason County's actual population in 1994 (44,300) exceeds the *low growth rate* scenario projections by 4.8 percent.

***Distribution of County Population***

***Regional Growth***

As can be seen in TABLE IV.2-6, most of the growth that occurred in the County from 1990 to 1994 has been located in the unincorporated areas of the County, which is not surprising since the City of Shelton is the only established incorporated area thus far.

The percentage of County population growth occurring within the Shelton city limits has varied considerably over the past four years, ranging from a high of 4.4 percent between 1990 and 1991 to a low of 1.5 percent between 1991 and 1992. Between 1992 and 1993 the percentage of total population growth increased substantially over the previous year, to 3.9 percent and then decreased again slightly between 1993 and 1994 to 3.1 percent.

TABLE IV.2-6 illustrates the percentage of the County's growth that is in the City of Shelton versus other areas of the County, but it does not show the rate at which each of these areas is growing. TABLE IV.2-7 shows the annual average rates of growth for both the incorporated and unincorporated areas, and for comparison, the County's annual rate of growth.

|                        | Population |        |        |        |        | Percent of Total Growth |       |       |       |
|------------------------|------------|--------|--------|--------|--------|-------------------------|-------|-------|-------|
|                        | 1990       | 1991   | 1992   | 1993   | 1994   | 90-91                   | 91-92 | 92-93 | 93-94 |
| Incorporated (Shelton) | 7,241      | 7,310  | 7,330  | 7,396  | 7,440  | 4.4%                    | 1.5%  | 3.9%  | 3.1%  |
| Unincorporated         | 31,100     | 32,590 | 33,870 | 35,504 | 36,860 | 95.6                    | 98.5  | 96.1  | 96.9  |
| County                 | 38,341     | 39,900 | 41,200 | 42,900 | 44,300 | 100                     | 100   | 100   | 100   |

Source: Washington State Office of Financial Management

TABLE IV.2-7 illustrates that the City of Shelton is growing at a much slower rate than the unincorporated areas of the County, which are experiencing very rapid growth rates. Between the years of 1990 to 1991, and 1992 to 1993 the unincorporated area experienced rates of growth higher than the record rate of 4.1 that occurred in the County during the seventies

|                                | Annual Rate of Population Increase |           |           |           |
|--------------------------------|------------------------------------|-----------|-----------|-----------|
|                                | 1990-1991                          | 1991-1992 | 1992-1993 | 1993-1994 |
| Incorporated (City of Shelton) | 0.95%                              | 0.27%     | 0.90%     | 0.59%     |
| Unincorporated                 | 4.7                                | 3.9       | 4.8       | 3.8       |
| County                         | 4.1                                | 3.3       | 4.1       | 3.3       |

Source: Washington State Office of Financial Management

Figures shown in TABLE IV.2-8 were derived using County population figures from the year 1990 in conjunction with residential building permits issued from that time on. Residential building permits help determine actual residential growth and the annual residential rate of growth by watershed. Using the individual rates of growth, it was possible to project into the future to come up with a total County population of 81,102 in the year 2014. Projecting in this manner provides County staff and residents alike with insight into population densities and the respective growth of the County's seven watersheds.

| Watershed                         | Percent of Total 1990 | 1990   | 1994   | 2000   | 2006   | 2014   |
|-----------------------------------|-----------------------|--------|--------|--------|--------|--------|
| Case Inlet                        | 12.3%                 | 4,699  | 5,327  | 6,429  | 7,759  | 9,971  |
| Chehalis                          | 3.9                   | 1,499  | 1,650  | 1,905  | 2,199  | 2,664  |
| Lower Hood Canal                  | 20.3                  | 7,796  | 8,828  | 10,638 | 12,819 | 16,437 |
| Oakland Bay<br>(Shelton excluded) | 29.1                  | 11,165 | 12,918 | 16,087 | 20,046 | 26,903 |
| Shelton                           | 18.9                  | 7,241  | 7,440  | 8,719  | 10,354 | 13,022 |
| Skokomish                         | 4.7                   | 1,810  | 2,067  | 2,522  | 3,078  | 4,013  |
| Totten-Little Skookum             | 7.3                   | 2,813  | 3,210  | 3,914  | 4,772  | 6,215  |
| West Hood Canal                   | 3.5                   | 1,319  | 1,399  | 1,528  | 1,669  | 1,877  |

Source: United State Bureau of the Census, Mason County Planning Department and Butler & Associates.

### *Factors Affecting Growth*

Population trends are influenced by a number of factors. These factors include the number of births minus the number of deaths, referred to as natural increase, and net migration, which is the number of people moving to an area minus the number moving from that area. Net migration in itself is influenced by a variety of factors that may vary from year to year.

### *Net Migration and Increase*

TABLE IV.2-9 illustrates the fluctuating influence that net migration and natural increase have on both the State's and County's populations. During the 50's, all of the growth that occurred in Mason County was due to natural increase. The -77.3 percent growth due to net migration reflects that more people moved out of the County than moved in during that time period. At the same time, 81 percent of statewide growth was due to natural increase, and the remaining 19 percent was due to net migration.

During the 60's, net migration began to have a greater impact on both the State and County's populations. While the percent of growth due to net migration has experienced upswings and down turns in the State, the County has been increasingly influenced by net migration since 1960. Between 1990 and 1993, net migration accounted for 92.5 percent of all growth in the county.

|                         | 1950 - 1960      |               | 1960 - 1970      |               | 1970-1980        |               | 1980-1990        |               | 1990-1993        |               |
|-------------------------|------------------|---------------|------------------|---------------|------------------|---------------|------------------|---------------|------------------|---------------|
|                         | Natural Increase | Net Migration | Natural Increase | Net Migration | Natural Increase | Net Migration | Natural Increase | Net Migration | Natural Increase | Net Migration |
| Washington State        | 384,069          | 90,182        | 305,528          | 254,502       | 245,504          | 473,408       | 365,152          | 369,158       | 126,448          | 247,789       |
| Percent of Total Change | 81%              | 19%           | 54.6             | 45.4          | 34.1             | 65.9          | 49.7             | 50.3          | 33.8             | 66.2          |
| Mason County            | 2,179            | 950           | 1,239            | 3,428         | 1,292            | 8,974         | 1,795            | 5,362         | 341              | 4,218         |
| Percent of Total Change | 177.3%           | -77.3%        | 26.5%            | 73.5%         | 12.6%            | 87.4%         | 25.1%            | 74.9%         | 7.5%             | 92.5%         |

Source: Washington State Office of Financial Management

TABLE IV.2-10 provides greater insight into Mason County's population growth. Data regarding the number of people moving to the County from either out of State or out of County was provided by the Washington State Department of Licensing, and is a record of the number of people from elsewhere applying for driver's licenses. The earliest data that is available is for calendar year 1983. By comparing the figures shown for net migration, total change and people moving to the County from out of State/Country, it is possible to make a number of deductions about the growth experienced during a particular year.

For example, in 1983, net migration in the County was equal to 626 people. Of that figure, 439 people moved to the County from either out of State or out of the Country. (Figures not shown here indicate that very few people move to Mason County from another Country.) The number of people moving out of the County and the number moving to the County from other areas of the state is equal to 187. Unfortunately, without knowing one of the two variables, we can not solve for the other.

During 1985, the number of people moving out of the County was greater than the number moving to the County, therefore net migration was negative for the year. Net migration is equal to the number of people moving to the County from out of State/Country plus the number of people moving to the County from other areas of the state, minus the number of people moving out of the County.

|                           | 80 - 81 | 81 - 82 | 83 - 84 | 84 - 85 | 85 - 86 | 86 - 87 | 87 -88 | 88 - 89 | 89 - 90 |
|---------------------------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| <b>Net Migration</b>      | 700     | 525     | 626     | 1049    | -91     | 409     | 467    | 561     | 622     |
| From Out of State/Country | N/A     | N/A     | 439     | 393     | 436     | 462     | 623    | 726     | 1009    |
| <b>Natural Increase</b>   | 230     | 255     | 203     | 209     | 235     | 176     | 114    | 137     | 119     |
| <b>Total Growth</b>       | 930     | 780     | 829     | 1258    | 144     | 585     | 581    | 698     | 741     |
| Percent Net Migration     | 75.3%   | 67.3%   | 75.5%   | 83.4%   | 63.2%   | 69.9%   | 80.4%  | 80.4%   | 83.9%   |
| Percent Natural Increase  | 24.7%   | 32.7%   | 24.5%   | 16.6%   | 163.2%  | 30.1%   | 19.6%  | 19.6%   | 16.1%   |

Source: Washington State Office of Financial Management, Washington State Department of Licensing.

Explanation: The number of people moving to Mason County from either out of State or out of the Country is included in net migration.

### ***Seasonal Population***

Mason County experiences seasonal fluctuations in population. Although seasonal residents are not included in the County's population statistics, they must be considered since there is definite increase in demand for certain types of capital facilities during the summer months when seasonal population is high and tourism is at its peak.

In order to approximate the seasonal population variation, the County has used billing addresses from both PUD #1 and PUD #3 customers. In this case, a seasonal resident is one who receives utility billings at an out of county address.

According to PUD #1 and #3 billing records, roughly 30 percent of County utilities customers are seasonal. Using this as an indication of seasonal population, the County's population increases by 30 percent during the summer months. This seasonal population tends to be concentrated along the County's waterfront. Thus, in 1994, the population increased from 44,300 people in the off season, to 57,590 during the height of the season.

PUD #1 and #3 report an average rate of conversion from seasonal to permanent residence of one percent annually. Therefore, assuming that the one percent conversion remains constant over the next 20 years, the County's seasonal population can be expected to account for a 24 percent increase in County population during the height of the tourist season in the year 2014. Based on the *High Growth* population projection, this will mean a seasonal population increase of 19,464 people in the year 2014.

The seasonal population of Mason County is projected to increase to 100,556 on an average day during the tourist season (April to September). Of this number, 81,102 will be permanent residents and 19,464 will be seasonal residents and visitors.



These seasonal increases in population will have a number of long term impacts on the County, particularly along the County's waterfront areas. Visitors and seasonal residents will contribute to peak congestion resulting from vehicle and pedestrian traffic. Seasonal population increases will also continue to place increased demands on County services. Those services, which are designed to accommodate the average and peak demands of resident populations, are often under severe stress during seasonal population peaks.

### *Population Distribution in the Future Land Use Plan*

The future land use plan proposes four Urban Growth Areas (UGAs), three Rural Activity Centers, and several Rural Community Centers. The proposed UGAs include the City of Shelton, the community of Belfair, the urban portion of the Working Rural Area (WRA), and the new Fully Contained Community (FCC). The proposed RACs include the communities of Allyn, Union, Kamilche/Taylor Town, and Hoodspout. The proposed RCCs include Matlock, Lilliwaup, Tahuya, Grapeview, Potlatch, Dayton, Skokomish Valley, and Mason-Benson Lakes. The Rural Area also allows for development of Resource Conservation Master Plan (RCMP) areas consistent with the criteria stated in the *Mason County Planning Policies*.

The population is distributed throughout the County in the following manner: City of Shelton UGA - 20.8 percent; Belfair UGA - 9.2 percent; WRA Urban - 18 percent; FCC - 25 percent; and Rural Areas - 15 percent.

TABLE IV.2-15 presents the additional population levels and the share of County growth that would be experienced in each of these areas in the year 2014.

| TABLE IV.2-15: Area Growth Projections for Mason County - 2014 |                 |                       |
|--|-----------------|-----------------------|
| Area   | Share of Growth | Additional Population |
| Shelton UGA  | 20.8 %          | 7,643                 |
| Belfair UGA  | 9.2 %           | 3,398                 |
| Working Rural Area Urban                                       | 18 %            | 6,624                 |
| FCC  | 25 %            | 9,201                 |
| Working Rural Area   | 12 %            | 4,416                 |
| Rural Areas  | 15 %            | 5,520                 |
| <b>Total County</b>  | <b>100 %</b>    | <b>36,802</b>         |

### ***County-Wide Planning Policies***

In 1992, the City of Shelton and Mason County adopted the *County-Wide Planning Policies* to cooperatively guide each agency's GMA Planning processes. The *County-Wide Planning Policies* contains several provisions which address population growth and capacity. They include agreement or cooperation in determining:

1. Urban Growth Area designations around incorporated cities, based on distribution patterns of projected population growth and existing concentrations of population density;
2. Urban Growth Areas designated in other areas of the County, based on population growth and distribution patterns and existing concentrations of population.

### ***Mason County Planning Policies***

The *Mason County Planning Policies* are intended to provide the basis for future land use decisions. The policies are incorporated in Chapter II of Comprehensive Plan. The *Mason County Planning Policies* contain numerous policies intended to guide population growth and to mitigate its impacts. Those policies call for:

1. Designating an Urban Growth Area of sufficient size to accommodate projected population for the next 20 years.
2. Minimizing restrictions on the supply of urban land and offsetting rising housing costs by designating an Urban Growth Area of sufficient size to accommodate growth 50% greater than projected.
3. Planning, design and financing of facilities and services that recognize the impacts of population and provide urban levels of service in urban areas.

### **IV.3 EXISTING LAND USE AND FUTURE LAND USE ANALYSIS**

#### ***Introduction***

This section of the Land Use Chapter identifies Mason County's current land use patterns. It describes land use on both a countywide and watershed level. Data presented in this section was compiled from the Mason County Tax Assessor's database. A variation of the official watershed map was also used to refine land use patterns at the watershed level. The map of the watershed boundaries used for data collection purposes appears in this section as FIGURE IV.3-1.

#### ***Definitions of Land Use Categories***

##### ***Residential***

This category includes properties which have any type of dwelling unit placed upon it, except those with an improvement value of less than \$20,000. The Assessor considers properties with improvements valued at less than \$20,000 as vacant. Residential uses include single family, multi family, mobile homes, convalescent centers, rooming and boarding houses, etc. In addition, this category includes personal properties which have building (other than a dwelling unit) which have an improvement value of greater than \$20,000.

##### ***Rural Vacant***

This category includes parcels determined vacant by the Mason County Assessor's office. Additionally, this category includes Lake Cushman leasehold properties and residential and personal property with an improvement value of less than \$20,000.

##### ***Commercial***

This category includes properties used for wholesale and retail trade, service industries, health care providers, and warehouses. This category also includes privately owned open spaces, such as privately owned parks and other privately owned entertainment and recreation facilities.

##### ***Agriculture/Aquaculture***

This category includes all agricultural properties except those in the Agriculture - Open Space taxation program.

*Forestry*

This category includes all properties in classified reforest lands, classified forests, designated forest lands, forest-related activities, and Christmas tree farms. The Forestry category does not include Long Term Commercial Forests designated under Mason County's Resource Land Ordinance, Ordinance Number 77-93, as required by GMA.

*Long Term Commercial Forests*

This category includes only those lands designated as Long Term Commercial Forests under Mason County's Resource Lands Ordinance, Ordinance Number 77-93, as required by GMA.

*Mineral Extraction*

This category includes mining activities and mining services.

*Transportation*

This category includes all parcels related to transportation uses including railroads, rights-of-way, motor vehicle transportation, mass transit, aircraft runways, and parking lots.

*Utilities*

This category includes all parcels used for utility related purposes including communications, electrical, natural gas, water, and sewage related uses; land fills; and pipelines.

*Tax Exempt*

This category includes parcels used for public purposes including government, civic, schools, business associations, professional membership organizations, and publicly owned recreation uses. This category also includes parcels owned by the City of Tacoma for hydro-electric purposes.

***Distribution of Land Uses***

***Introduction***

This section characterizes the current land use patterns in Mason County. The Mason County Assessor's Database provided the primary source of data for this section. In addition, the National Park Service provided data related to the National Park and Forest lands, and the Squaxin Island and Skokomish Tribes provided data related to tribal lands.

### ***Countywide Land Use***

Mason County includes approximately 619,520 acres of land, about 968 square miles, and an additional 57,600 acres, 90 square miles, of water. Approximately 154,086 acres of Mason County lie within the boundaries of the Olympic National Park and the Olympic National Forest. The incorporated City of Shelton occupies an additional 3,000 acres of Mason County and Tribal lands account for approximately 8,187 acres of the County.

GMA requires that the Mason County Comprehensive Plan designate lands within the County by four broad classifications. Those classifications include urban, rural, resource lands, and critical areas. Mason County also has substantial Federal lands and some Tribal lands.

Within Mason County, designated long term commercial forest lands, national park lands and national forest lands are not available for development. Those two classifications combined, account for approximately 57.1 percent of the land within Mason County.

The Mason County Assessor maintains land use data under eleven broad categories. Those categories include Residential, Rural/Vacant, Agriculture/Aquaculture, Commercial, Industrial, Forestry, Long Term Commercial Forest Lands, Mineral Extraction, Transportation, Utilities, and Tax Exempt. The Assessor does not maintain data on Federal or Tribal lands. The comparison and analysis of land use data in this section, therefore, is based on the amount of land tracked in the Assessor's database and not the entire amount of land within the County. It also does not include land uses within the City of Shelton.

The Long Term Commercial Forests classification includes approximately 199,670 acres of land. This classification represents the largest single land use within Mason County.

TABLE IV.3-1 illustrates the total acreage in each land use category on a countywide basis, as well as the percent of the countywide total that each land use category represents.

In addition, TABLE IV.3-1 shows the percentage of improved, unimproved, partially improved or timbered land for each land use category.

| Land Use           | Total Acreage  | Percent of County Total | Percent of Total Acreage |               |                    |               |
|--------------------|----------------|-------------------------|--------------------------|---------------|--------------------|---------------|
|                    |                |                         | Improved                 | Unimproved    | Partially Improved | Timber        |
| Residential        | 17,298         | 3.78%                   | 56.90%                   | 1.03%         | 42.07%             | 0%            |
| Rural/Vacant       | 67,902         | 14.85%                  | 14.00%                   | 69.50%        | 16.50%             | 0%            |
| Commercial         | 2,671          | 0.58%                   | 36.65%                   | 31.67%        | 31.67%             | 0%            |
| Industrial         | 439            | 0.10%                   | 92.48%                   | 1.82%         | 5.69%              | 0%            |
| Agri/Aquaculture   | 8,277          | 1.81%                   | 94.87%                   | 2.21%         | 2.92%              | 0%            |
| Forestry           | 144,847        | 31.68%                  | 0.74%                    | 6.58%         | 0.80%              | 91.88%        |
| LTCF               | 199,670        | 43.67%                  | 0.36%                    | 23.29%        | 0%                 | 76.35%        |
| Mineral Extraction | 36             | 0.01%                   | 0%                       | 0%            | 100%               | 0%            |
| Transportation     | 2,177          | 0.48%                   | 90.12%                   | 9.14%         | 0.73%              | 0%            |
| Utilities          | 1,906          | 0.42%                   | 8.92%                    | 86.73%        | 4.35%              | 0%            |
| Tax Exempt         | 12,024         | 2.63%                   | 19.86%                   | 77.74%        | 2.40%              | 0%            |
| <b>Total</b>       | <b>457,247</b> | <b>100%</b>             | <b>7.63%</b>             | <b>25.29%</b> | <b>4.63%</b>       | <b>62.45%</b> |

Source: Mason County Assessor's Office, 1995, and Mason County Department of Community Development

TABLE IV.3-2 shows the number of parcels and acreage that are improved, unimproved, partially improved, or timbered within each land use category.

| Land Use            | Improved      |               | Unimproved    |                | Partially Improved |               |              | Timber       |                |
|---------------------|---------------|---------------|---------------|----------------|--------------------|---------------|--------------|--------------|----------------|
|                     | Parcels       | Acres         | Parcels       | Acres          | Acres              |               | Parcels      | Parcels      | Acres          |
|                     |               |               |               |                | Imp.               | Unimp         |              |              |                |
| Residential         | 10,064        | 9,842         | 39            | 178            | 2,218              | 5,060         | 1,082        | 0            | 0              |
| Rural/Vacant        | 4,915         | 9,504         | 23,788        | 47,194         | 3,262              | 7,942         | 1,454        | 0            | 0              |
| Commercial          | 343           | 979           | 18            | 846            | 182                | 664           | 43           | 0            | 0              |
| Industrial          | 28            | 406           | 2             | 8              | 10                 | 15            | 4            | 0            | 0              |
| Agri/Aqua-culture   | 693           | 7,852         | 15            | 183            | 117                | 125           | 13           | 0            | 0              |
| Forestry            | 167           | 1,073         | 104           | 9,528          | 595                | 566           | 28           | 2,316        | 133,085        |
| LTCF                | 12            | 710           | 174           | 46,507         | 0                  | 0             | 0            | 727          | 152,453        |
| Mineral Extraction  | 0             | 0             | 0             | 0              | 6                  | 30            | 1            | 0            | 0              |
| Transport'n         | 357           | 1962          | 56            | 199            | 8                  | 8             | 3            | 0            | 0              |
| Utilities           | 171           | 170           | 53            | 1,653          | 8                  | 75            | 4            | 0            | 0              |
| Tax Exempt          | 628           | 2,388         | 333           | 9,347          | 122                | 167           | 17           | 0            | 0              |
| <b>County Total</b> | <b>17,378</b> | <b>34,886</b> | <b>24,582</b> | <b>115,643</b> | <b>6,528</b>       | <b>14,652</b> | <b>2,649</b> | <b>3,043</b> | <b>285,538</b> |

Source: Mason County Assessor's Office, 1995, and Mason County Department of Community Development

### **Watershed Land Use Patterns**

Mason County includes seven watersheds: Case Inlet, Chehalis, Hood Canal, Lower Hood Canal, Oakland Bay, Skokomish, and Totten-Little Skookum. Watershed names indicate the destination of water flowing through an area (see FIGURE IV.3-1). For example, water that drains through, or originates from, the City of Shelton will find its way into Oakland Bay, whereas water that flows through the Olympic National Park is destined for either the Skokomish River, or Hood Canal. Drainage patterns determine the boundaries of watersheds.

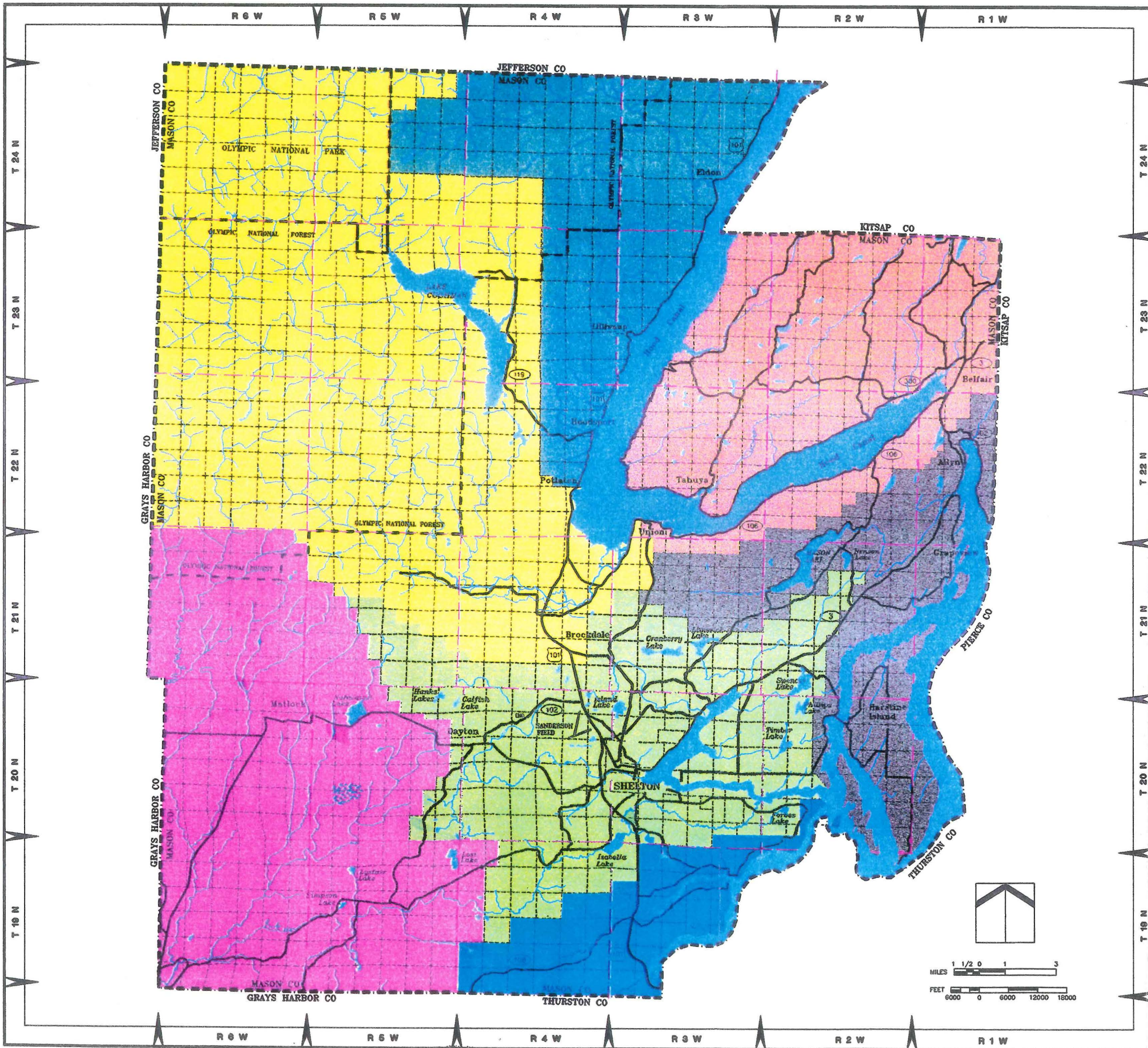
Mason County has chosen to undertake its GMA planning efforts on a watershed basis. Planning at this level provides the County with a meaningful approach for analyzing growth impacts, preparing effective development regulations, and establishing mitigation measures. It is based on the premise that action within one portion of a watershed impacts environmental and biological functions in other areas of the watershed. For example, the filling of wetland within a watershed not only impacts the area surrounding the wetland, but also affects the watershed's overall ability to control flooding and filter out pollutants before water reenters the groundwater system. Further, alleviating negative impacts of specific actions within a watershed protects environmental resources throughout the entire watershed. Mason County's Watershed planning seeks to ensure adequate flood control and protect water quality, wildlife habitat and other environmental resources.

The county has adopted the Southeast Mason County Subarea Plan for the Totten-Little Skookum watershed. The subarea plan remains in place and has not been amended by this plan, except for some policies. However, the comprehensive plan has included some of the policies from the subarea plan so that they can be integrated into the analysis. In addition, there are some planning policies proposed for Harstine Island. Although Harstine Island is not a watershed, it has been identified as an important subarea for planning purposes. The planning policies for each of these subareas are intended to apply only to that subarea. It is expected that subarea plans will be adopted for some areas in addition to Southeast Mason County in the near future.

The following paragraphs provide a detailed breakdown of land uses by watershed. To locate Mason County's watersheds, see FIGURE IV.3-1.

Please insert FIGURE IV.3-1: Mason County Watershed Map in front of this page.





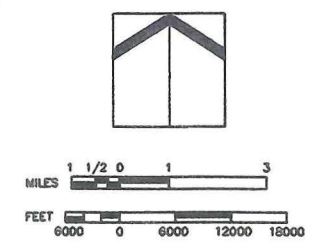
# MASON COUNTY

## COMPREHENSIVE PLAN

### WATERSHED BOUNDARIES

#### LEGEND

- SKOKOMISH
- CHEHALIS
- OAKLAND BAY
- HOOD CANAL
- LOWER HOOD CANAL
- TOTTON LITTLE SKOOKUM
- CASE INLET



MASON COUNTY  
Department Of Community Development

Shelton, WA  
November, 1995

FIGURE IV-3.1



### Case Inlet Watershed

The Case Inlet watershed totals 48,881 acres. It contains a large share of the County's shoreline and several islands. Those islands include Harstine, Squaxin, Stretch and Treasure (Reach) Islands. The Case Inlet watershed extends from the Allyn/North Bay area to the north, along Pickering Passage, south to Windy Point. To the west, the watershed encompasses the inland area from Oakland Bay to Hood Canal between Allyn and Union, and includes the Mason/Benson Lake area.

The Squaxin Island Tribal Reservation is located on Squaxin Island and in the Kamilche area. The Island is uninhabited and on-reservation members live in the Kamilche area. The Reservation contains approximately 1800 acres, of which 1500 are on Squaxin Island. The Squaxin Tribe owns and manages a number of facilities for its enrolled members which provide services to or sponsor enterprises for the tribe. These facilities include a Tribal Center, medical clinic, fish hatchery, and gambling casino. As of 1992, approximately 144 tribal members lived on-reservation and 286 members lived off-reservation.

Forestry represents the primary land use within the Case Inlet watershed. It encompasses 25,366 acres and accounts for approximately 51.9 percent of the watershed's total land.

TABLE IV.3-4 details the distribution of land uses within the Case Inlet Watershed based on the Assessor's data base.

|                       | Total Acres  |               |               |               |
|-----------------------|--------------|---------------|---------------|---------------|
|                       | Developed    | Vacant        | Timber        | Total         |
| Agricultural          | 757          | 48            | 0             | 805           |
| Commercial            | 139          | 223           | 0             | 362           |
| Forestry              | 65           | 1,206         | 24,095        | 25,366        |
| Industrial            | 6            | 3             | 0             | 9             |
| Long Term Com. Forest | 0            | 4,132         | 2,010         | 6,142         |
| Mineral Extraction    | 0            | 0             | 0             | 0             |
| Residential Land Use  | 2,829        | 970           | 0             | 3,799         |
| Tax Exempt            | 65           | 1,106         | 0             | 1,171         |
| Transportation        | 73           | 81            | 0             | 154           |
| Utilities             | 53           | 197           | 0             | 250           |
| Vacant/Rural          | 3,927        | 6,896         | 0             | 10,823        |
| <b>Total</b>          | <b>7,914</b> | <b>14,862</b> | <b>26,105</b> | <b>48,881</b> |

Source: Mason County Assessor's Office, 1995, and Mason County Department of Community Development

TABLE IV.3.4A summarizes the land supply, demand, and population data for the Case Inlet Watershed.

|              | Avail Land    |             | Land Demand  |            | Residential  |             | Non Residential |             | Population    |             |
|--------------|---------------|-------------|--------------|------------|--------------|-------------|-----------------|-------------|---------------|-------------|
|              | Acres         | %           | Acres        | %          | Acres        | %           | Acres           | %           | Amount        | %           |
| Urban        | 1,045         | 4%          | 2,638        | 252%       | 1,826        | 34%         | 811             | 95%         | 8,547         | 84%         |
| RAC          | 1,034         | 4%          | 88           | 1%         | 76           | 1%          | 12              | 1%          | 163           | 2%          |
| Rural        | 25,017        | 92%         | 3,443        | 56%        | 3,416        | 64%         | 27              | 3%          | 1,467         | 14%         |
| <b>Total</b> | <b>27,096</b> | <b>100%</b> | <b>6,269</b> | <b>23%</b> | <b>5,318</b> | <b>100%</b> | <b>851</b>      | <b>100%</b> | <b>10,177</b> | <b>100%</b> |

### *Chehalis Watershed*

The Chehalis watershed is the largest watershed in the County outside of the Olympic National Park and Olympic National Forest areas. It totals 111,696 acres and encompasses the southwest corner of the County. It includes the land area and associated river systems of Mason County that drain chiefly to the Chehalis River more specifically described as T19-R5,6; T20-R5,6; T21-R6.

Long Term Commercial Forestry represents the Chehalis watershed's primary land use. It accounts for 91,520 acres or approximately 81.9 percent of the watershed's land.

TABLE IV.3-5 details the distribution of land uses within the Chehalis Watershed based on the Assessor's data base.

|                       | Total Acres  |              |                |                |
|-----------------------|--------------|--------------|----------------|----------------|
|                       | Developed    | Vacant       | Timber         | Total          |
| Agricultural          | 784          | 32           |                | 816            |
| Commercial            | 17           | 0            |                | 17             |
| Forestry              | 522          | 121          | 11,148         | 11,791         |
| Industrial            | 0            | 0            |                | 0              |
| Long Term Com. Forest | 10           | 26           | 91,484         | 91,520         |
| Mineral Extraction    | 0            | 0            |                | 0              |
| Residential Land Use  | 689          | 378          | 0              | 1,067          |
| Tax Exempt            | 81           | 180          | 0              | 261            |
| Transportation        | 647          | 6            | 0              | 653            |
| Utilities             | 2            | 0            | 0              | 2              |
| Vacant/Rural          | 2,765        | 2,804        | 0              | 5,569          |
| <b>Total</b>          | <b>5,517</b> | <b>3,547</b> | <b>102,632</b> | <b>111,696</b> |

Source: Mason County Assessor's Office, 1995; Mason County Department of Community Development.

TABLE IV.3-5A summarizes the land supply, demand, and population data for the Chehalis Watershed

|       | Avail Land |      | Land Demand |    | Residential |      | Non Residential |      | Population |      |
|-------|------------|------|-------------|----|-------------|------|-----------------|------|------------|------|
|       | Acres      | %    | Acres       | %  | Acres       | %    | Acres           | %    | Amount     | %    |
| Urban |            |      |             |    |             |      |                 |      |            |      |
| RAC   |            |      |             |    |             |      |                 |      |            |      |
| Rural | 11,566     | 100% | 1,096       | 9% | 945         | 100% | 151             | 100% | 517        | 100% |
| Total | 11,566     | 100% | 1,096       | 9% | 945         | 100% | 151             | 100% | 517        | 100% |

### *Lower Hood Canal Watershed*

The Lower Hood Canal Watershed 74,790 acres of land, and is located between the North and East Shores of Hood Canal north to the Mason/Kitsap County Line and east to the Mason/Pierce County Line. It includes the Tahuya Peninsula, Belfair and a strip along the South Shore of Hood Canal between Belfair and Union varying between one and three miles in width.

Forestry represents the primary land use within the watershed. It includes 37,044 acres and accounts for 49.5 percent of the watershed's land.

TABLE IV.3-6 details the distribution of land uses within the Chehalis Watershed based on the Assessor's data base.

|                       | Total Acres   |               |               |               |
|-----------------------|---------------|---------------|---------------|---------------|
|                       | Developed     | Vacant        | Timber        | Total         |
| Agricultural          | 636           | 53            | 0             | 689           |
| Commercial            | 464           | 271           | 0             | 735           |
| Forestry              | 198           | 5,460         | 31,386        | 37,044        |
| Industrial            | 1             | 0             | 0             | 1             |
| Long Term Com. Forest | 641           | 15,392        | 0             | 16,033        |
| Mineral Extraction    | 6             | 30            | 0             | 36            |
| Residential Land Use  | 2,529         | 1,164         | 0             | 3,693         |
| Tax Exempt            | 716           | 115           |               | 831           |
| Transportation        | 118           | 59            | 0             | 177           |
| Utilities             | 47            | 187           | 0             | 234           |
| Vacant/Rural          | 5,403         | 9,914         | 0             | 15,317        |
| <b>Total</b>          | <b>10,759</b> | <b>32,645</b> | <b>31,386</b> | <b>74,790</b> |

TABLE IV.3-6A summarizes the land supply, demand, and population data for the Lower Hood Canal Watershed

|       | Avail Land |      | Land Demand |     | Residential |      | Non Residential |      | Population |      |
|-------|------------|------|-------------|-----|-------------|------|-----------------|------|------------|------|
|       | Acres      | %    | Acres       | %   | Acres       | %    | Acres           | %    | Amount     | %    |
| Urban | 1,377      | 4%   | 1,367       | 69% | 586         | 11%  | 781             | 94%  | 3,398      | 56%  |
| RAC   | 1,007      | 3%   | 116         | 12% | 100         | 2%   | 16              | 2%   | 270        | 4%   |
| Rural | 36,222     | 93%  | 4,561       | 13% | 4,525       | 87%  | 36              | 4%   | 2,433      | 40%  |
| Total | 39,223     | 100% | 6,044       | 15% | 5,211       | 100% | 834             | 100% | 6,101      | 100% |

### Oakland Bay Watershed

The Oakland Bay Watershed covers 91,994 acres and includes the City of Shelton. It is centrally located within the County's interior and surrounds Oakland Bay and Hammersley Inlet. It has a number of lakes including Lake Isabella, Cranberry Lake, and Lake Limerick. This watershed also includes Sanderson Field, the airport and industrial park owned by the Port of Shelton.

Forestry represents the major land use in the unincorporated areas of the Oakland Bay watershed. It includes 36,632 acres and accounts for approximately 41.2 percent of the watershed's land.

TABLE IV.3-7 details the distribution of land uses within the Oakland Bay Watershed based on the Assessor's data base.

|                       | Total Acres   |               |               |               |
|-----------------------|---------------|---------------|---------------|---------------|
|                       | Developed     | Vacant        | Timber        | Total         |
| Agricultural          | 1,937         | 115           | 0             | 2,052         |
| Commercial            | 269           | 554           | 0             | 823           |
| Forestry              | 217           | 109           | 36,306        | 36,632        |
| Industrial            | 371           | 14            | 0             | 385           |
| Long Term Com. Forest | 6             | 2             | 23,707        | 23,715        |
| Mineral Extraction    | 0             | 0             | 0             | 0             |
| Residential Land Use  | 3,758         | 2,093         | 0             | 5,851         |
| Tax Exempt            | 986           | 135           | 0             | 1,121         |
| Transportation        | 887           | 23            | 0             | 910           |
| Utilities             | 31            | 15            | 0             | 46            |
| Vacant/Rural          | 6,194         | 11,265        | 0             | 17,459        |
| <b>Total</b>          | <b>14,656</b> | <b>14,325</b> | <b>60,013</b> | <b>88,994</b> |

Source: Mason County Assessor's Office, 1995, and Mason County Department of Community Development.

TABLE IV.3-7A summarizes the land supply, demand, and population data for the Oakland Bay Watershed.

|              | Avail Land    |             | Land Demand  |             | Residential  |             | Non        |             | Population    |             |
|--------------|---------------|-------------|--------------|-------------|--------------|-------------|------------|-------------|---------------|-------------|
|              | Acres         | %           | Acres        | %           | Acres        | %           | Acres      | %           | Amount        | %           |
| Urban        | 4,437         | 11%         | 2,674        | 44%         | 1,854        | 35%         | 820        | 97%         | 14,921        | 83%         |
| RAC          | 160           | 0%          |              |             |              |             |            |             |               |             |
| Rural        | 35,762        | 89%         | 3,472        | 56%         | 3,444        | 65%         | 28         | 3%          | 3,029         | 17%         |
| <b>Total</b> | <b>40,359</b> | <b>100%</b> | <b>6,146</b> | <b>100%</b> | <b>5,298</b> | <b>100%</b> | <b>848</b> | <b>100%</b> | <b>17,950</b> | <b>100%</b> |

### *Skokomish Watershed*

The Skokomish Watershed is located in the northwest corner of the County and is largely occupied by Olympic National Park and Olympic National Forest. Although it is the largest watershed in the County, only 61,468 acres lie outside the National Park and National Forest boundaries. This watershed also includes Lake Cushman. It is Mason County's only lake which is a *Shorelines of Statewide Significance*, as defined by the Washington State Shoreline Management Act.

The Skokomish Indian Tribe Reservation is located at the mouth of the Skokomish River. The Reservation area is approximately 5,000 acres. As of 1992, 525 enrolled tribal members lived on-reservation and 570 members lived off-reservation. A number of facilities are owned and managed by the tribe which provide services to and operate enterprises for the tribal members. These facilities are located on the reservation and include a tribal/community center, health and dental clinics, a fish hatchery, and a grocery/deli.

Long Term Commercial Forests represent the primary land use within the Skokomish watershed. This classification covers 28,704 acres and accounts for 46.7 percent of the watershed's land that lies outside of the National Park and National Forest lands.

TABLE IV.3-8 details the distribution of land uses within the Skokomish Watershed based on the Assessor's data base.

|                       | Total Acres  |               |               |               |
|-----------------------|--------------|---------------|---------------|---------------|
|                       | Developed    | Vacant        | Timber        | Total         |
| Agricultural          | 1,519        | 32            | 0             | 1,551         |
| Commercial            | 76           | 8             | 0             | 84            |
| Forestry              | 187          | 2,470         | 10,073        | 12,730        |
| Industrial            | 3            | 5             | 0             | 8             |
| Long Term Com. Forest | 0            | 4,987         | 23,717        | 28,704        |
| Mineral Extraction    | 0            | 0             | 0             | 0             |
| Residential Land Use  | 587          | 206           | 0             | 793           |
| Tax Exempt            | 596          | 6,767         | 0             | 7,363         |
| Transportation        | 75           | 33            | 0             | 108           |
| Utilities             | 45           | 1,152         | 0             | 1,197         |
| Vacant/Rural          | 3,408        | 5,522         | 0             | 8,930         |
| <b>Total</b>          | <b>6,496</b> | <b>21,182</b> | <b>33,790</b> | <b>61,468</b> |

Source: Mason County Assessor's Office, 1995, and Mason County Department of Community Development

TABLE IV.3-8A summarizes the land supply, demand, and population data for the Skokomish Watershed

|              | Avail Land    |             | Land Demand  |            | Residential  |             | Non Residential |             | Population |             |
|--------------|---------------|-------------|--------------|------------|--------------|-------------|-----------------|-------------|------------|-------------|
|              | Acres         | %           | Acres        | %          | Acres        | %           | Acres           | %           | Amount     | %           |
| Urban        |               |             |              |            |              |             |                 |             |            |             |
| RAC          | 631           | 4%          | 208          | 33%        | 29           | 2%          | 179             | 85%         | 63         | 10%         |
| Rural        | 14,369        | 96%         | 1,311        | 9%         | 1,280        | 98%         | 31              | 15%         | 563        | 90%         |
| <b>Total</b> | <b>15,000</b> | <b>100%</b> | <b>1,518</b> | <b>10%</b> | <b>1,300</b> | <b>100%</b> | <b>209</b>      | <b>100%</b> | <b>626</b> | <b>100%</b> |

**Totten-Little Skookum Watershed**

The Totten-Little Skookum Watershed occupies 27,847 acres. It is the smallest of Mason County's watershed areas. This watershed is bordered on the north and west by the Oakland Bay Watershed, on the south by the Mason/Thurston County Line, and on the east by Totten and Skookum Inlets.

Forestry represents the primary land use within the Totten-Little Skookum Watershed. It covers 11,282 acres and accounts for approximately 41 percent of the watershed's land. Existing activities include a major sawmill and aquaculture industry which provides for local employment. The Squaxin Island Tribe Reservation and trust lands are also located in this watershed.

TABLE IV.3-9 details the distribution of land uses within the Totten-Little Skookum Watershed based on the Assessor's data base.

| <b>TABLE IV.3-9: Land Use by Watershed - Totten Little Skookum</b> |              |              |               |               |
|--|--------------|--------------|---------------|---------------|
|  | Total Acres  |              |               |               |
|  | Developed    | Vacant       | Timber        | Total         |
| Agricultural   | 2,165        | 2            | 0             | 2,167         |
| Commercial   | 42           | 5            | 0             | 47            |
| Forestry   | 155          | 71           | 11,037        | 11,263        |
| Industrial   | 22           | 0            | 0             | 22            |
| Long Term Com. Forest  | 0            | 3            | 8,123         | 8,126         |
| Mineral Extraction   | 0            | 0            | 0             | 0             |
| Residential Land Use   | 1,277        | 266          | 0             | 1,543         |
| Tax Exempt   | 29           | 8            | 0             | 37            |
| Transportation   | 102          | 1            | 0             | 103           |
| Utilities  | 8            | 0            | 0             | 8             |
| Vacant/Rural   | 2,339        | 2,192        | 0             | 4,531         |
| <b>Total</b>   | <b>6,139</b> | <b>2,548</b> | <b>19,160</b> | <b>27,847</b> |

Source: Mason County Assessor's Office, 1995, and Mason County Department of Community Development.



TABLE IV.3-9A summarizes the land supply, demand, and population data for the Totten-Little Skookum Watershed.

| <b>TABLE IV.3-9A: Totten-Little Skookum: Land Availability and Demand</b> |               |             |              |            |              |             |                 |             |            |             |
|---|---------------|-------------|--------------|------------|--------------|-------------|-----------------|-------------|------------|-------------|
|   | Avail Land    |             | Land Demand  |            | Residential  |             | Non Residential |             | Population |             |
|   | Acres         | %           | Acres        | %          | Acres        | %           | Acres           | %           | Amount     | %           |
| Urban   |               |             |              |            |              |             |                 |             |            |             |
| RAC   | 719           | 6%          |              |            |              |             |                 |             |            |             |
| Rural   | 10,646        | 94%         | 1,433        | 13%        | 1,236        | 100%        | 198             | 100%        | 974        | 100%        |
| <b>Total</b>  | <b>11,365</b> | <b>100%</b> | <b>1,433</b> | <b>13%</b> | <b>1,236</b> | <b>100%</b> | <b>198</b>      | <b>100%</b> | <b>974</b> | <b>100%</b> |

**West Hood Canal**

The West Hood Canal Watershed, also known as Hood Canal Watershed, covers 43,571 acres outside of Olympic National Park and Olympic National Forest. It extends along the West Shore of Hood Canal from Potlatch to the Jefferson/Mason County Line, and includes the communities of Lilliwaup, Hoodsport and Eldon.

Long Term Commercial Forests represent the primary land use within the West Hood Canal Watershed. It covers 34,120 acres and accounts for 78% of the watershed's land.

TABLE IV.3-10 details the distribution of land uses within the West Hood Canal Watershed based on the Assessor's data base.

| <b>TABLE IV. 3-10: Land Use by Watershed - West Hood Canal</b> |              |               |               |               |
|--|--------------|---------------|---------------|---------------|
|  | Total Acres  |               |               |               |
|  | Developed    | Vacant        | Timber        | Total         |
| Agricultural   | 197          | 0             | 0             | 197           |
| Commercial   | 273          | 330           | 0             | 603           |
| Forestry   | 18           | 963           | 9,040         | 10,021        |
| Industrial   | 11           | 3             | 0             | 14            |
| Long Term Com. Forest  | 53           | 21,965        | 3,412         | 25,430        |
| Mineral Extraction   | 0            | 0             | 0             | 0             |
| Residential Land Use   | 470          | 82            | 0             | 552           |
| Tax Exempt   | 56           | 1,184         | 0             | 1,240         |
| Transportation   | 68           | 4             | 0             | 72            |
| Utilities  | 56           | 113           | 0             | 169           |
| Vacant/Rural   | 1,300        | 3,973         | 0             | 5,273         |
| <b>Total</b>   | <b>2,502</b> | <b>28,617</b> | <b>12,452</b> | <b>43,571</b> |

Source: Mason County Assessor's Office, 1995; Mason County Department of Community Development

TABLE IV.3-10A summarizes the land supply, demand, and population data for the West Hood Canal Watershed.

|              | Avail Land    |             | Land Demand  |            | Residential  |             | Non Residential |             | Population |             |
|--------------|---------------|-------------|--------------|------------|--------------|-------------|-----------------|-------------|------------|-------------|
|              | Acres         | %           | Acres        | %          | Acres        | %           | Acres           | %           | Amount     | %           |
| Urban        |               |             |              |            |              |             |                 |             |            |             |
| RAC          | 1,551         | 13%         | 172          | 11%        | 24           | 2%          | 148             | 85%         | 46         | 10%         |
| Rural        | 10,391        | 87%         | 1,089        | 10%        | 1,064        | 98%         | 26              | 15%         | 411        | 90%         |
| <b>Total</b> | <b>11,943</b> | <b>100%</b> | <b>1,262</b> | <b>11%</b> | <b>1,088</b> | <b>100%</b> | <b>174</b>      | <b>100%</b> | <b>497</b> | <b>100%</b> |

### ***Land Capacity Analysis***

#### ***Introduction***

This section provides the land capacity analysis for Mason County. It evaluates the ability of the County's land base to accommodate the projected population growth over the 20-year planning period. The land capacity is evaluated on a watershed basis for urban areas, rural activity centers, and rural areas.

The land capacity analysis has two components. Those components include land supply, the amount of land available for development, and land demand, the amount of developable land required to support the projected population growth. The following summary describes the methodologies used to determine Mason County's available land supply and 20-year demand.

#### ***Land Supply***

The Mason County Assessor's database provided the primary source for documenting existing land use within the County. The Assessor maintains land use data under eleven broad categories. Those categories include Residential, Rural/Vacant, Commercial, Industrial, Agriculture/Aquaculture, Forestry, Long Term Commercial Forest Lands, Mineral Extraction, Transportation, Utilities, and Tax Exempt. The Assessor does not maintain data on Federal or Tribal lands.

The data identifies the number of parcels and acres within each land use category. It also identifies how many of those parcels/acres are improved, unimproved, partially improved or timbered. The data was extracted and compiled into several tables. Those tables provided the basis for the land supply analysis. The *Existing Land Use* section of the *Land*

Use Data Book for Mason County Comprehensive Plan Alternatives contains this data. TABLE IV.3-2 through TABLE IV.3-10 in the previous section of this Chapter, summarize the land supply information.

Land available for development within Mason County includes timbered, unimproved and partially improved lands in all land use categories with some exceptions. The exceptions include the following categories:

- Long Term Commercial Forest Lands
- Tax Exempt
- Transportation
- Utilities

Lands within in these categories were excluded from the calculation of land supply. The following factors contributed to the formula for calculating land supply.

- U 100% of unimproved parcels/acres in the applicable land use categories
- Z 50% of the partially improved parcels/acres in the applicable land use categories
- T 100% of timbered parcels/acres in the applicable land use categories
- CA 16% of the gross available land for the Critical Area Factor

The formula for calculating gross available land equals  $U+Z+T$ . Based on that formula, the gross available land for Mason County equals 181,600 acres. The formula for net developable land, or land supply, equals  $U+Z+T - CA$ . On a countywide basis, that results in a net developable land supply of 156,552 acres.

### *Land Demand*

Land demand evaluates the amount of land required to support the anticipated growth within Mason County during the next 20 years. It includes the requirements of both residential and non-residential uses. It also looks at the distribution of the demand for each alternative among the watersheds and within urban areas, RACs, and rural areas.

Several factors affected Mason County's demand formulas. Those factors included:

- P Population
- H Household Size
- D Density
- N Non-residential Uses
- ND Non-residential Distribution (UGA, RAC, Rural Area)
- R Rights-of-Way
- M Market

The values related to those factors vary by watershed and by Alternative. The formulas, however, remain constant. The following equations represent the formulas for calculating residential, non-residential, and total demand.

Residential Demand (RD)  $P/H \times D \times R \times M = RD$

Non-residential Demand (NRD)  $RD \times N \times ND \times R \times M = NRD$

Total Demand (TD)  $RD + NRD = TD$

The Future Land Use Plan

The Future Land Use Plan includes Urban Growth Areas (UGAs), Rural Activity Centers, and Rural Areas. It also provides for a Working Rural Area and a new Fully Contained Community. The proposed UGAs include the City of Shelton and the Community of Belfair. RACs include Allyn, Union, and Hoodport. The Preferred Alternative requires approximately 15 percent of the County's land supply to accommodate the growth associated with Mason County's 20-year population forecast TABLE IV.3-18 identifies the supply of available land within each watershed, and the percent of the countywide demand distributed to each watershed.

| TABLE IV 3-18: Land Capacity Summary |                |                |               |                |
|--------------------------------------|----------------|----------------|---------------|----------------|
| Watershed                            | Total Acres    |                |               |                |
|                                      | Supply         | Percent        | Demand        | Percent        |
| Case Inlet                           | 27,096         | 17.31%         | 6,169         | 25.68%         |
| Chehalis                             | 11,566         | 7.39%          | 1,096         | 4.56%          |
| Lower Hood Canal                     | 39,223         | 25.05%         | 6,044         | 25.16%         |
| Oakland Bay                          | 40,359         | 25.78%         | 6,146         | 25.59%         |
| Skokomish                            | 15,000         | 9.58%          | 2,400         | 9.99%          |
| Totten-Little Skookum                | 11,365         | 7.26%          | 902           | 3.76%          |
| West Hood Canal                      | 11,943         | 7.63%          | 1,262         | 5.25%          |
| <b>Total</b>                         | <b>156,552</b> | <b>100.00%</b> | <b>24,020</b> | <b>100.00%</b> |

Seventy-three percent (73%) of the 20-year population growth is distributed to the UGAs, the new FCC, and the urban portion of the WRA. Within those areas, the allowed density is four dwelling units per acre for both single family and mobile homes, and 12 dwelling units per acre for multi-family. The Future Land Use Plan requires approximately 6,679 acres for urban levels of development, or 3.3 percent of the County's land supply. This includes approximately 4,266 acres for residential uses and 2,413 acres for non-residential uses.

The Future Land Use Plan designates approximately 6,859 acres for urban levels of development throughout the County. The 20-year demand represents approximately 89.3 percent of the proposed urban lands. The Case Inlet Watershed, however, has a demand for 2,638 acres of urban land. Proposed urban areas within that watershed represent approximately 252 percent of the proposed 1,045 acres. This suggests that the County needs to adjustment the distribution of the urban land supply among the watersheds.

Approximately 26 percent of the 20-year population growth is allocated to the Rural Area. Water quality standards, development standards, and other health and environmental criteria are used to establish lot size. Combined, these standards will likely result in a development pattern, that would require approximately 15,909 acres for residential uses within the Rural Area. This represents 78 percent of the total residential land demand.

TABLE IV.3-19 displays the distribution of the land supply, land demand, demand by use, and population by watershed, Urban, Rural Activity Center (RAC), and Rural Area. Residential uses require approximately 26,780 acres and represent 86.2 percent of the County's 20-year land demand.

Table IV.3-19 Land Availability and Land Demand Summary

| Geographic Area         | Avail Land |         | Land Demand |         | Residential |         | Non Residential |         | Population |         |
|-------------------------|------------|---------|-------------|---------|-------------|---------|-----------------|---------|------------|---------|
|                         | Acres      | Percent | Acres       | Percent | Acres       | Percent | Acres           | Percent | Acres      | Percent |
| <b>Greenville</b>       |            |         |             |         |             |         |                 |         |            |         |
| Urban                   | 1,045      | 4%      | 2,638       | 252%    | 1,826       | 34%     | 811             | 95%     | 8,547      | 84%     |
| RAC                     | 1,034      | 4%      | 88          | 1%      | 76          | 1%      | 12              | 1%      | 163        | 2%      |
| Rural                   | 25,017     | 92%     | 3,443       | 56%     | 3,416       | 64%     | 27              | 3%      | 1,467      | 14%     |
| Total                   | 27,096     | 100%    | 6,169       | 23%     | 5,318       | 100%    | 851             | 100%    | 10,177     | 100%    |
| <b>Greenville</b>       |            |         |             |         |             |         |                 |         |            |         |
|                         | Acres      | Percent | Acres       | Percent | Acres       | Percent | Acres           | Percent | Amount     | Percent |
| Urban                   |            |         |             |         |             |         |                 |         |            |         |
| RAC                     |            |         |             |         |             |         |                 |         |            |         |
| Rural                   | 11,566     | 100%    | 1,096       | 9%      | 945         | 100%    | 151             | 100%    | 517        | 100%    |
| Total                   | 11,566     | 100%    | 1,096       | 9%      | 945         | 100%    | 151             | 100%    | 517        | 100%    |
| <b>Lower Hood Canal</b> |            |         |             |         |             |         |                 |         |            |         |
|                         | Acres      | Percent | Acres       | Percent | Acres       | Percent | Acres           | Percent | Amount     | Percent |
| Urban                   | 1,377      | 4%      | 1,367       | 69%     | 586         | 11%     | 781             | 94%     | 3,398      | 56%     |
| RAC                     | 1,007      | 3%      | 116         | 12%     | 100         | 2%      | 16              | 2%      | 270        | 4%      |
| Rural                   | 36,839     | 93%     | 4,561       | 13%     | 4,525       | 87%     | 36              | 4%      | 2,433      | 40%     |
| Total                   | 39,223     | 100%    | 6,044       | 15%     | 5,211       | 100%    | 834             | 100%    | 6,101      | 100%    |
| <b>Oakland</b>          |            |         |             |         |             |         |                 |         |            |         |
|                         | Acres      | Percent | Acres       | Percent | Acres       | Percent | Acres           | Percent | Amount     | Percent |
| Urban                   | 4,437      | 11%     | 2,674       | 60%     | 1,854       | 35%     | 820             | 97%     | 14,921     | 83%     |
| RAC                     | 160        | 0%      |             |         |             |         |                 |         |            |         |
| Rural                   | 35,762     | 89%     | 3,472       | 10%     | 3,444       | 65%     | 28              | 3%      | 3,029      | 17%     |
| Total                   | 40,359     | 100%    | 6,146       | 15%     | 5,298       | 100%    | 848             | 100%    | 17,950     | 100%    |
| <b>Skokholm</b>         |            |         |             |         |             |         |                 |         |            |         |
|                         | Acres      | Percent | Acres       | Percent | Acres       | Percent | Acres           | Percent | Amount     | Percent |
| Urban                   |            |         |             |         |             |         |                 |         |            |         |
| RAC                     | 631        | 4%      | 208         | 33%     | 29          | 2%      | 179             | 85%     | 63         | 10%     |
| Rural                   | 14,369     | 96%     | 1,311       | 9%      | 1,280       | 98%     | 31              | 15%     | 563        | 90%     |
| Total                   | 15,000     | 100%    | 1,518       | 10%     | 1,309       | 100%    | 209             | 100%    | 626        | 100%    |
| <b>Totten-Isle</b>      |            |         |             |         |             |         |                 |         |            |         |
|                         | Acres      | Percent | Acres       | Percent | Acres       | Percent | Acres           | Percent | Amount     | Percent |
| Urban                   |            |         |             |         |             |         |                 |         |            |         |
| RAC                     | 719        | 6%      |             |         |             |         |                 |         |            |         |
| Rural                   | 10,646     | 94%     | 1,433       | 13%     | 1,236       | 100%    | 198             | 100%    | 974        | 100%    |
| Total                   | 11,365     | 100%    | 1,433       | 13%     | 1,236       | 100%    | 198             | 100%    | 974        | 100%    |
| <b>West Hood</b>        |            |         |             |         |             |         |                 |         |            |         |
|                         | Acres      | Percent | Acres       | Percent | Acres       | Percent | Acres           | Percent | Amount     | Percent |
| Urban                   |            |         |             |         |             |         |                 |         |            |         |
| RAC                     | 1,551      | 13%     | 172         | 11%     | 24          | 2%      | 148             | 85%     | 46         | 10%     |
| Rural                   | 10,391     | 87%     | 1,089       | 10%     | 1,064       | 98%     | 26              | 15%     | 411        | 90%     |
| Total                   | 11,943     | 100%    | 1,262       | 11%     | 1,088       | 100%    | 174             | 100%    | 457        | 100%    |
| <b>Mason County</b>     |            |         |             |         |             |         |                 |         |            |         |
|                         | Acres      | Percent | Acres       | Percent | Acres       | Percent | Acres           | Percent | Amount     | Percent |
| Urban                   | 6,859      | 4%      | 6,679       |         | 4,266       | 21%     | 2,413           | 74%     | 26,866     | 73%     |
| RAC                     | 5,102      | 3%      | 585         |         | 230         | 1%      | 355             | 11%     | 542        | 1%      |
| Rural                   | 144,590    | 93%     | 16,405      | 11%     | 15,909      | 78%     | 496             | 15%     | 9,394      | 26%     |
| Total                   | 156,552    | 100%    | 23,669      | 15%     | 20,404      | 100%    | 3,265           | 100%    | 36,802     | 100%    |

### ***Countywide Planning Policies***

In 1992, the City of Shelton and Mason County adopted the *Countywide Planning Policies* to cooperatively guide each agency's GMA Planning processes. The *Countywide Planning Policies* contains several provisions which address land use growth and capacity. They include agreement or cooperation in determining:

1. Urban Growth Area designations around incorporated cities, based on distribution patterns of projected population growth and existing concentrations of population density;
2. Urban Growth Areas designated in other areas of the County, based on population growth and distribution patterns, and existing concentrations of population.
3. Designation of Rural Lands..
4. Level of Service standards for the Urban Growth Areas and Rural Lands.
5. Multimodal transportation systems based on regional priorities and the comprehensive plans of Mason County and the City of Shelton.
6. Need and delivery of affordable housing throughout Mason County and the City of Shelton.
7. Economic development priorities and actions.
8. Balance among property rights, environmental protection, and public trust.
9. Permit processing procedures and shared permitting responsibilities within the Shelton Urban Growth Area.
10. Support and protection for Mason County's resource-based economy.
11. Preservation, protection, and, where appropriate, development of open space and recreation facilities.
12. Environmental management for water resources, critical areas, and wastewater disposal.
13. Public involvement for preparation of the County's and City's respective comprehensive plans and development regulations.
14. Siting and levels of service for utilities, capital facilities, and transportation improvements.

15. Identification and preservation of historic and archeological significance.

*Mason County Planning Policies*

The *Mason County Planning Policies* are intended to guide future land use and capital facility investment decisions. The policies are incorporated a Chapter III in the Comprehensive Plan. The *Mason County Planning Policies* contain numerous policies intended to mitigate the impacts of population growth and land use. Those policies call for:

1. Encouraging the preservation and protection of water quality, critical areas, Resource Lands, and open space.
2. Encouraging the development of passive and active recreation areas.
3. Adopting permanent critical area regulations.
4. Adopting permanent Resource Lands regulations.
5. Encouraging affordable housing.
6. Providing for a range of housing types including single family, multi-family, and mobile homes.
7. Designating an Urban Growth Area of sufficient size to accommodate projected urban population for the next 20 years.
8. Minimizing restrictions on the supply of urban land and offsetting rising housing costs by designating an Urban Growth Area of sufficient size to accommodate growth 50% greater than projected.
9. Minimizing sprawl by allowing sufficient densities within urban areas to reduce the demand for conversion of rural lands to urban areas to accommodate the 20-year forecasted urban population.
10. Providing for a sufficient land supply within urban areas to meet the housing demand of the 20-year forecasted urban population.
11. Establishing Working Rural Areas (WRA) and designating urban areas within the WRA that would become part of Mason County's Urban Growth Area.
12. Adopting development regulations that guide the location and siting of residential and non-residential uses within the WRA.



13. Adopting development standards and design guidelines to manage growth and development within WRA areas.
14. Designating an area for a new Fully Contained Community (FCC) as part of Mason County's Urban Growth Area.
15. Adopting development regulations to guide the location and siting of residential and non-residential uses within the FCC.
16. Adopting development standards and design guidelines to manage growth and development within the FCC.
17. Adopting development regulations that guide the location and siting of residential and non-residential uses within the urban area.
18. Adopting development standards and design guidelines to manage growth and development within urban areas.
19. Planning, designing, and financing of facilities and services that recognize the impacts of population on urban areas and provide for urban levels of service in urban areas.
20. Planning, designing, and financing of transportation facilities and services that recognize the impacts of population on urban areas and provide for urban levels of service in urban areas.
21. Planning, designing, and financing of utilities that recognize the impacts of population on urban areas and provide for urban levels of service in urban areas.
22. Providing for a sufficient land supply within Rural Activity Centers (RACs) to meet the housing demand of the 20-year forecasted population within RACs.
23. Adopting development regulations that guide the location and siting of residential and non-residential uses within the RACs area.
24. Adopting development standards and design guidelines to manage growth and development within RACs areas.
25. Providing for a sufficient land supply in Rural Areas to meet the housing demand of the 20-year forecasted population within the Rural Area.
26. Adopting development regulations that guide the location and siting of residential and non-residential uses within the Rural Area.

27. Adopting development standards and design guidelines to manage growth and development within the Rural Area.
28. Planning, designing, and financing of facilities and services that recognize the impacts of population on rural lands and provide for rural levels of service in Rural Activity Centers, Rural Community Centers, and Rural Areas.
29. Planning, designing, and financing of transportation facilities and services that recognize the impacts of population on rural lands and provide for rural levels of service in Rural Activity Centers, Rural Community Centers, and Rural Areas.
30. Planning, designing, and financing of utilities that recognize the impacts of population on rural lands and provide for rural levels of service in Rural Activity Centers, Rural Community Centers, and Rural Areas.



## **IV.4 CRITICAL AREAS**

### **Geologically Hazardous Areas**

Geologically hazardous areas include areas susceptible to landslide, erosion, earthquake or other geological events. In many cases, hazards can be reduced or mitigated by engineering, design or modified construction practices. Because of their susceptibility however, some of these areas may not be suitable for new development.

Mason County's Interim Resource Ordinance identifies three types of Geologic Hazard Areas: 1) Landslide Hazard Areas; 2) Seismic Hazard Areas; and 3) Erosion Hazard Areas. Landslide Hazard Areas are lands that have an increased potential for landslides and other earth movement. Seismic Hazard Areas are lands that are particularly susceptible to damage from earthquakes and other seismic activity. Lastly, Erosion Hazard Areas are lands that are more susceptible to excessive erosion.

### **Landslide Hazard Areas**

A landslide is a rapid down slope movement of a mass of material such as rocks, soil, or other debris. The speed and distance of movement, as well as the amount of material, vary greatly and depend on a combination of geologic, topographic and hydrologic factors. Especially susceptible to landslide hazards are marine bluffs and unconsolidated glacial deposits on steep hillsides (greater than 40 percent).

Potential Landslide Hazard Areas are areas that meet the following criteria:

1. Areas with indication of earth movement such as debris slides, earth flows, slumps and rock falls; or
2. Areas with artificial over steepened or unengineered slopes, i.e. cuts or fills;
3. Areas containing soft or potentially liquefiable soils;
4. Areas unstable as a result of stream incision, stream bank erosion, and undercutting by wave action;
5. Slopes greater than 15% (8.5 degrees), except areas composed of consolidated rock, and having either of the following:
  - a. Steep hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; or
  - b. Springs or groundwater seepage.

A key indicator of potential landslide areas is slope of the land. Approximately 10% of the landscape in Mason County (excluding Olympic National Forest and Olympic National Park areas) has a slope of 15-30%, and approximately 3% has steeper slopes of 30-45% (see FIGURE IV-4.1, Landslide Hazard Map).

The risk of landslide occurrence depends on a number of factors including soil vulnerability, slope, and the degree of water saturation. Development activities can increase the risk by exposing soil through clearing, altering natural drainage patterns, excavating the "toe" of slopes, or increasing soil moisture content.

An important measure of potential risk for landslide when development occurs is land clearing and alteration for development. Potential impacts to Mason County can be assessed based on the relative amount of land converted to urban uses during the 20-year planning under each of the alternatives.

In addition to the critical area regulations, the comprehensive plan minimizes the amount of land cleared for development by directing up to 70 percent of the County's growth into Urban Areas. Further, options such as Working Rural Areas and Resource Conservation Master Plans require clustering and open space. Both techniques reduce the amount of land disturbed by development while maintaining overall rural densities.

### *Seismic Hazards*

Seismic Hazards occur in areas subject to severe risk of earthquake damage as a result of seismic induced settlement or soil liquefaction. These areas include soils containing high organic content (e.g., wetland soils), areas of loose sand and gravel, artificial fills, landslide deposits, and fine-grained soils with high water tables.

Seismic Hazard Areas are areas susceptible to ground failure, including the following:

1. Mapped geologic faults;
2. Areas of poorly compacted artificial fill;
3. Areas with artificially steepened slopes;
4. Post-glacial stream, lake or beach sediments;
5. River Deltas;
6. Areas designated as potential Landslide Hazard Areas;
7. Bluff areas;
8. Deep road fills and unsupported fills.

Seismic Hazard Areas are shown on the Mason County Seismic Hazards Map (FIGURE IV-4.2), as documented by the *Coastal Zone Atlas of Washington and Geology and Related Groundwater Occurrence, Southeastern Mason County, Washington, Water Supply Bulletin 29*.







Please insert FIGURE IV-4.1, Landslide Hazard Map in front of this page.

Please insert FIGURE IV-4.2, Seismic Hazards Map in front of this page.



# MASON COUNTY

## COMPREHENSIVE PLAN

### CRITICAL AREAS

### SEISMIC HAZARD AREAS

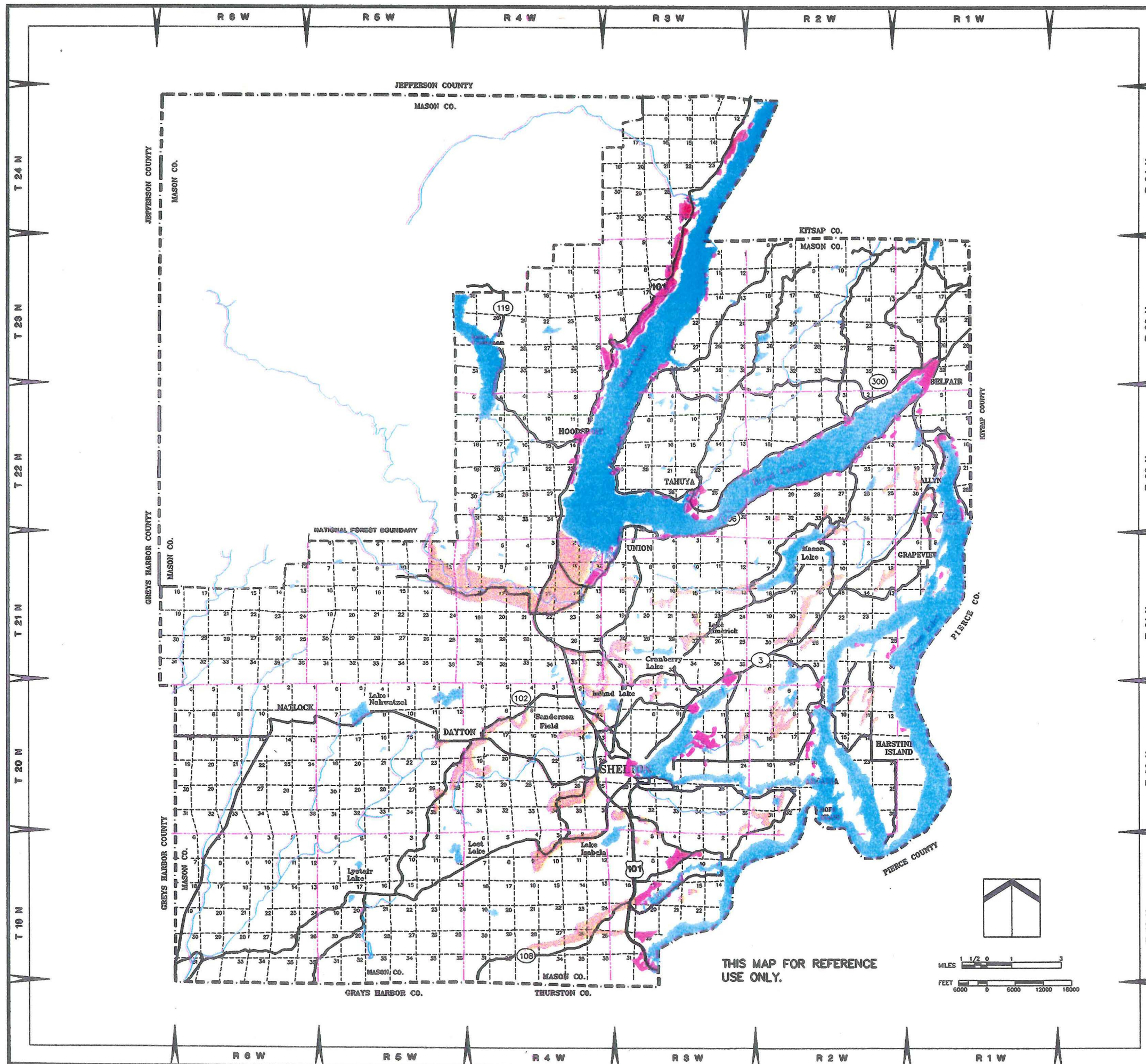
#### LEGEND

- FROM COASTAL ZONE ATLAS OF WASHINGTON
- WATER SUPPLY BULLETIN

**MASON COUNTY**  
Department Of Community Development

Shelton, WA  
November, 1995

FIGURE IV-4.2





All structures in Mason County are subject to the engineering and design requirements of the Uniform Building Code for earthquakes. Seismic hazards focus on effects to buildings and other facilities from intense ground shaking and/or liquefaction. Seismically-induced landslides could also cause structural damage to buildings, particularly on steeper slopes and shoreline bluffs. In addition, the critical area regulations do not allow significant public buildings in seismic hazard areas; and the future land use plan directs most growth away from these areas.

### ***Erosion Hazard Areas***

Erosion is a natural process in which the land surface is worn away by the action of water, wind, ice or other geologic processes. The most common cause of erosion is water falling or flowing across the land. Factors contributing to erosion hazard are soil type and slope. Erosion hazards generally occur on erosive soils where slopes exceed 15 percent.

The Mason County Interim Resource Ordinance classifies Erosion Hazard Areas as areas that have an Erosion Index of 8 or greater as determined by methodologies found in the United States Department of Agriculture, Soil Conservation Service "Food Security Act Manual, Title 180, Second Edition, August, 1988".

The erosion process can be accelerated by development activity that exposes and disturbs soils so they are more vulnerable to erosive forces. Further, increased areas of impervious surfaces reduce the infiltration of rainfall, increase stormwater runoff, and result in even greater erosion potential. Increased runoff, erosion, and sedimentation may adversely affect the physical and biological characteristics of streams and other water resources.

Erosion Hazards are similar to Landslide Hazards in that they are both often created by, or aggravated by development activities such as clearing and grading. The comprehensive plan controls the hazards through the critical areas regulations and by concentrating development in suitable areas.

### ***Mason County Planning Policies***

The recommended policies contain several policies intended to mitigate the impacts of development in geologically hazardous areas. The policies focus on:

1. Adoption of a permanent Critical Areas Ordinance to identify and designate geologically hazardous areas.
2. Identifying areas in which development should be prohibited or restricted due to geological hazards.
3. Adopting new standards for effective erosion control.

4. Requiring a geotechnical report for proposal located on Landslide Hazard Areas.
5. Development standards such as vegetative management, drainage, and buffers.

### Wetlands

Wetlands are natural ecosystems that serve a number of important beneficial functions. They assist in reducing erosion, siltation, flooding, and ground and surface water contamination. Wetlands provide habitat for wildlife, plants, and fisheries. They may also assist in recharging groundwater supplies. In addition, wetlands provide opportunities for recreation and education.

In wetlands, the soil is at least periodically saturated or covered with water. These water conditions support special kinds of plants called *hydrophytes* (Greek for "water loving"). Soils that have been saturated for a sufficient length of time certain properties and are referred to as hydric soils. An area must exhibit all three of the following characteristics in order to be classified a wetland:

1. Inundation or saturation of the soil by water;
2. The presence of wetland plants (*hydrophytes*); and
3. The presence of hydric soils.

Wetlands are generally divided into five classes: *Riparian* wetlands are associated with rivers and streams; *Marine* wetlands are found along ocean shores; *Estuarine* wetlands occur where fresh water and salt water meet; *Lacustrine* wetlands are associated with lakes; and *Palustrine* wetlands include upland freshwater wetlands fed by ground or surface water. The wetlands identified within Mason County include all of these classes.

For the purposes of protection and regulation, wetlands are designated as Category I, Category II, Category III, or Category IV. The Washington State Department of Ecology established these categories.

Category I applies to the most valuable wetlands. These wetlands include a particularly rare plants or animal species, represent a high quality, rare wetland type, are regionally rare, or provide irreplaceable functions and values.

Category II applies to wetlands that provide habitat for very sensitive or important plants or animals, are difficult to replace, or provide very high functions and values, particularly for wildlife habitat.

Category III applies to wetlands that support a variety of wildlife species and occur more commonly throughout Mason County than either Category I or II wetlands.

Category IV applies to smaller, isolated wetlands that have less diverse vegetation but provide important functions and values.

Mason County includes an abundance of wetland areas. Most of these areas are associated with larger freshwater and saltwater systems. The Natural Heritage Program identifies only high quality native wetlands, category 1 under the Western Washington Rating System. As of 1992, there were approximately 20-25 Category I wetlands documented in Mason County.

In total, however, approximately 38,290 acres in the County have been mapped as wetlands as documented by the National Wetland Inventory (see FIGURE IV-4.3, Mason County Generalized Wetland Inventory Map. Agricultural wetlands and isolated wetlands under one acre in size are exempt from most of the regulatory requirements of the Mason County Critical Area Ordinance.

The alteration or destruction of wetlands can eliminate or reduce the variety of biological and hydrological functions that wetlands perform. Direct impacts may result from clearing, grading or filling in advance of development. Of equal potential are indirect impacts from new development which may alter surface water flows, or interrupt the infiltration of groundwater.

New development may increase volumes of sediment-laden runoff entering wetlands. This may inhibit the wetlands' natural capacity to remove nutrients and process chemical and organic wastes. In addition, increased sedimentation within wetlands may reduce their ability to temporarily store flood waters and increase the risk and magnitude of downstream impacts.

Please insert FIGURE IV-4.3, Wetlands Map in front of this page.







Wetlands may also often provide groundwater recharge. Development activities in areas near or hydrologically connected to wetlands in recharge areas could interrupt infiltration to the groundwater system.

The comprehensive plan concentrates growth, allocating as much as 73 percent of the County's population growth to Urban Areas. It also provides for permanent open space and designated natural resource areas in development allowed within Rural Areas.

### ***Countywide Planning Policies***

The *Countywide Planning Policies* call for Mason County and the City of Shelton to:

1. Encourage the retention of open space; and
2. Protect the environment and enhance the County's quality of life; including air and water quality, and the availability of water.

### ***Mason County Planning Policies***

The recommended policies contain several policies intended to mitigate the impacts of development on wetlands. The policies focus on:

1. Avoiding impacts to wetlands due to development and ensuring that no net loss of wetlands in terms of acreage, function and value occurs.
2. Adopting permanent regulations for wetland protection which provide for: restrictions on clearing, grading and filling; stormwater runoff controls; construction practices; sufficient buffers to sustain wetland functions; and mitigation and/or restoration.

Mason County has adopted interim regulations to protect critical areas, including wetlands. The Western Washington Growth Management Hearing Board has ordered the county to re-assess those regulations, but until that can be done, the current regulations will remain in effect.

### ***Fish and Wildlife Habitat***

Mason County contains an abundance of marine, freshwater and upland habitat for fish and wildlife. Preservation of fish and wildlife habitat is critical to protecting suitable environments for animal species, and in providing an important part of the local quality of life for County residents and visitors.

One of wildlife's most important functions is in maintaining the health and diversity of ecosystems. Each species has its role in an ecosystem. When a species is eliminated, the ecosystem loses the functions it performed. As a result, the balance of the ecosystem is sometimes irreversibly lost or diminished. Given the inter-relation of all species in an ecosystem, species elimination may result in unpredictable consequences, though some consequences of habitat impact are known in advance. For example, a loss of marine invertebrates and kelp from over-harvesting ultimately affects the quality of habitat for larger fish, mammals and birds.

Fish and wildlife also provide important in providing recreational and economic benefits such as hunting and fishing opportunities. The continued prosperity of the commercial and recreational fish and shellfish industries depends on maintenance of excellent water quality and unpolluted habitats for fish, shellfish, and their food sources.

Fish and wildlife habitat also provide significant social benefits. Mason County residents are accustomed to occasional encounters with wildlife such as bald eagles, great blue heron and elk. Wildlife provides the opportunity to educate the public about biological and ecological processes. Other less quantifiable benefits include wildlife viewing, and maintaining the historical, cultural, and spiritual values of Native American Tribes and the general public.

The Mason County Interim Resource Ordinance guides management of the County's Fish and Wildlife habitat. It divides critical fish and wildlife habitat areas into two classes: 1) Aquatic Management Areas; and 2) Terrestrial Management Areas.

### *Aquatic Management Areas*

Mason County includes three principal river systems and numerous lakes, small rivers, and streams. The Skokomish and Hamma Hamma rivers are swiftly flowing, deeply incised rivers that originate high in the Olympic Mountains and empty into Hood Canal. The East and Middle Forks of the Satsop River originate in the Olympic Mountains, converge at the southwestern corner of the County and flow southward into the Chehalis River. All of the eastern part of the County is drained by smaller streams which flow only short distances before reaching outlets to Puget Sound. Many of the small streams, as well as the larger systems, support significant fisheries, including anadromous fish. Other surface waters are made up of numerous lakes and wetland areas, some of which include Cushman, Mason, Nahwatzel, Lost, Isabella, Island, Cranberry, Limerick and Spencer lakes.

The waters and shorelines of Mason County are an important resource. In addition to their natural beauty, and cultural value, they provide the base for a sizable shellfish industry, aquaculture, fish and wildlife habitat.



Aquatic Management Areas as classified and designated include the following:

#### Class I Management Area

All areas under the jurisdiction of the Mason County Shoreline Master Program; except State designated Harbor Areas pursuant to RCW 79.90.020 and Article XV of the Washington State Constitution.

#### Class II Management Area

All areas defined as Type 2, 3, or 4 waters as established in WAC 222-16-030, including all naturally occurring lakes and ponds not considered wetlands and not under the jurisdiction of the Mason County Shoreline Master Program; and all lands within:

- a. 200 feet of the ordinary high water mark of Type 2 waters;
- b. 100 feet of the ordinary high water mark of Type 3 waters; or
- c. 50 feet of the ordinary high water mark of Type 4 waters.

The water typing system has been established by the Department of Natural Resources and is based on the size and character of the water body. Type 1 waters are the larger water bodies and rivers which have been classed as Waters of the State, such as the Hood Canal and the Skokomish River. As the size of the river or lake is reduced, the water type becomes a 2, 3, or 4, until a type 5 water is identified. Type 5 waters may be dry beds most of the year, providing only winter flows.

Marine Habitat Areas include the following:

1. All kelp beds (members of the brown algal family Laminariales including *Alaria marginata*, *Alaria nana*, *Alaria tenuifolia*, *Egregia menziesii*, *Eisenia arborea*, *Pterygophora californica*, *Agarum cribosum*, *Agarum fimbriatum*, *Costaria costata*, *Cymathere triplicata*, *Hedophyllum sessile*, *Laminaria spp.*, *Pleurophycus gardneri*, *Dictyoneuroopsis reticulata*, *Dictyoneurum californicum*, *Lessioniopsis littoralis*, *Macrocystis integrifolia*, *Nereocystis luetkeana*, and *Postelsia palmaeformis*) and all eelgrass beds (*Zostera spp.*). These areas are important salt water habitats that support valuable species, providing habitat for plants, fish, shellfish, sea birds and sea mammals.

Recent maps of the location of kelp and eel grass beds in Mason County were not available for inclusion in this DRAFT Plan. The Washington State Department of Natural Resources reports that floating Bull kelp occurs off of the west shore to the

southwest tip of Squaxin Island. The location of eel grass beds can change over time, making the locations of eel grass beds, particularly the deeper, subtidal species hard to track. Eel grass has been found throughout Hood Canal in the past (1995 Mason County Shoreline Inventory).

2. Priority shellfish areas including:
  - a. All public and private tidelands or bedlands which are approved or conditionally approved by the Washington Department of Health for shellfish harvest;
  - b. Any Shellfish Protection District created under RCW 90.72; and
  - c. Areas with all of the following attributes: broad intertidal areas, bays with geographically restricted wave action and circulation, poor or limited flushing, warmer water temperatures, seasonally reduced salinity, and increased potential for algae bloom.
3. All identified smelt spawning areas (these are mapped in the 1995 Mason County Shoreline Inventory).

To protect and preserve aquatic resources, the County has designated the following areas as Aquatic Management Areas:

1. All areas under the jurisdiction of the Mason County Shoreline Master Program; except State designated Harbor Areas pursuant to RCW 79.90.020 and Article XV of the Washington State Constitution;
2. All Type II, III, IV waters as established in WAC 222-16-030, including all naturally occurring lakes and ponds not considered wetlands and not under the jurisdiction of the Mason County Shoreline Master Program, and all lands within (see FIGURE IV-4.4, Mason County Stream Type Map):
  - a. 200 feet of the ordinary high water mark of Type II waters;
  - b. 100 feet of the ordinary high water mark of Type III waters;
  - c. 50 feet of the ordinary high water mark of Type IV waters.

These areas not only protect the aquatic habitats, but they provide preserved areas for habitat for non-aquatic species and establish wildlife corridors between the larger areas of habitat and open space.



# MASON COUNTY

## COMPREHENSIVE PLAN

### CRITICAL AREAS

### WATER TYPES

#### LEGEND

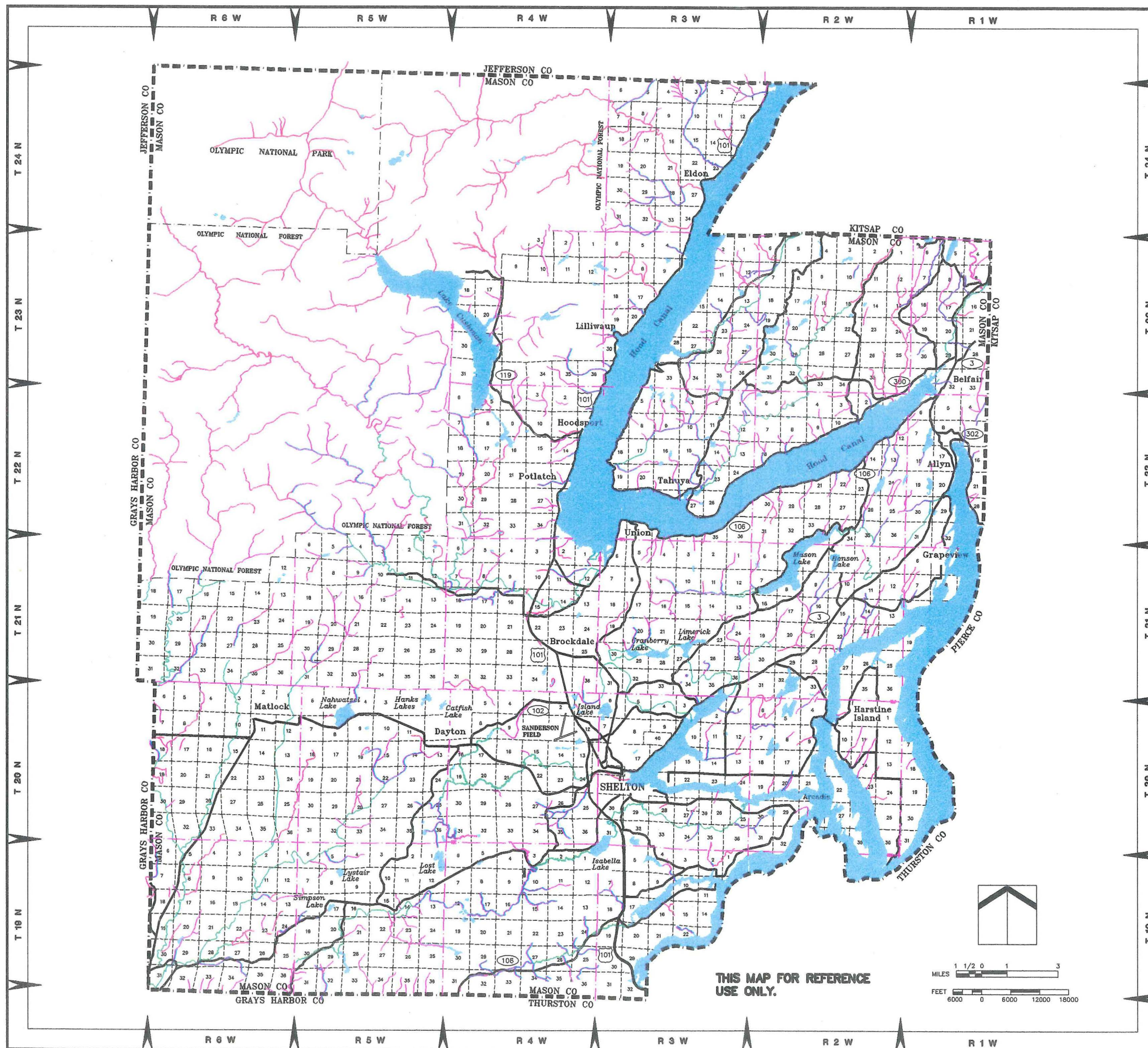
-  TYPE 1 WATERS
-  TYPE 2 WATERS
-  TYPE 3 WATERS
-  TYPE 4 WATERS

DATA SOURCE:  
 Washington State Department Of Natural Resources.  
 Mason County Department Of Community Development

 MASON COUNTY  
 Department Of Community Development

Shelton, WA  
 April, 1996.

FIGURE IV-4.4



THIS MAP FOR REFERENCE  
 USE ONLY.



Please insert FIGURE IV-4.4, Water Types Map in front of this page.

### Terrestrial Management Areas

All development activities have the potential to impact native plant and animal species. Terrestrial Management Areas are those areas where the presence of state endangered or state threatened terrestrial species have been identified. The Mason County Critical Area Ordinance specifies that all development in these areas shall be consistent with State and Federal law.

TABLE IV-4.1 is a compilation of the Priority Habitats and Species and Special Non-Game Species in Mason County. It is summarized from data provided by the Washington State Department of Fish and Wildlife (then the Department of Wildlife) in June, 1991.

There are also a number of publicly and privately managed natural areas in Mason County that have been designated as preserves or refuges. These areas are important for fish and wildlife habitat, scenic vistas, protection of sensitive plant species, and preservation of open space.

The Washington State Department of Natural Resources manages three Natural Area Preserves in Mason County. They include 17 acres at Oak Patch Lake, 28 acres on Skookum Inlet, and a 56 acre site on Totten Inlet. The Washington State Department of Fish and Wildlife manages a number of properties in the County, including the 172-acre Skokomish River Tidelands Wildlife Area and the 122-acre Union River Wildlife Area.

Mason County also includes a number of properties managed by the Hood Canal Land Trust (HCLT). HCLT is a non-profit organization that either owns properties outright or manages them under the terms of conservation easements. Key HCLT sites include the Klingall and Jimmy Bryan Wetland Preserves, 88 acres on the north side of Lynch Cove and 140 acres along the Union River under a conservation easement.

| <b>TABLE IV-4.1</b>   |                          |
|---|--------------------------|
| <b>Priority Habitats and Species and Special Non-Game Species in Mason County</b>   |                          |
| <b>BIRDS</b>  | <b>BUTTERFLIES</b>       |
| Great Blue Heron  | Hoary Elfin Butterfly    |
| Pileated Woodpecker   | American Painted Lady    |
| Osprey  | Oreas Angelwing          |
| Bald Eagle  | Sonnora Skipper          |
| Band-Tailed Pigeon  |                          |
| Common Golden Eye   | <b>FISH</b>              |
| Shorebird Concentrations  | Olympic Mudminnow        |
| Wood Ducks  |                          |
| Waterfowl Concentrations  | <b>REPTILES</b>          |
| Mountain Quail  | Pacific Gopher Snake     |
| Golden Quail  |                          |
| Western Bluebird  | <b>AMPHIBIANS</b>        |
| Purple Martin   | Tailed Frog              |
|   | Van Dyke's Salamander    |
| <b>MAMMALS</b>  | Olympic Salamander       |
| Elk   | Cope's Giant Salamander  |
| Fisher  |                          |
| Shelton Pocket Gopher   | <b>HABITATS</b>          |
|   | Urban Natural Open Space |
|   | Cliffs                   |
|   | Wetlands                 |
| Source: Washington Department of Wildlife, June 1991 (as documented by the 1992 Mason County Growth Management Background Report.)<br>* As defined by WDW data from June 8, 1991. |                          |

***Sensitive Plants and Plant Communities***

The existence of rare and sensitive plants and plant communities is increasingly threatened by the intensive development created by the County's population growth. One of the primary objectives of the GMA is to protect the natural environments that are required to support these communities.

The following is a list of rare and sensitive plant species for Mason County provided by the Washington State Department of Natural Resources, Natural Heritage Program (1995 *Mason County Shoreline Inventory*).

| Scientific Name                          | Common Name                      | State Status |
|--|----------------------------------|--------------|
| <i>Botrychium ascendens</i>              | Triangular-lobed moonwort        | Sensitive    |
| <i>Carex buxbaumii</i>                   | Buxbaum's Sedge                  | Sensitive    |
| <i>Carex circinata</i>                   | Coiled sedge                     | Sensitive    |
| <i>Carex interrupta</i>                  | Green-fruited sedge              | Monitor      |
| <i>Carex pauciflora</i>                  | Few-flowered sedge               | Sensitive    |
| <i>Chrysolepis Chrysophylla</i>          | Golden chinquapin                | Sensitive    |
| <i>Claytonia lanceolata var pacifica</i> | Pacific lanceleaved springbeauty | Sensitive    |
| <i>Cochlearia officinalis</i>            | Scurvygrass                      | Sensitive    |
| <i>Lindernia dubia var anagallidea</i>   | False-pimpernel                  | Sensitive    |
| <i>Ophioglossum pulsillum</i>            | Adder's-tongue                   | Threatened   |
| <i>Parnassia palustris var neogaea</i>   | Northern grass of parnassus      | Sensitive    |
| <i>Potamogeton obtusifolius</i>          | Blunt-leaved pondweed            | Sensitive    |
| <i>Woodwardia fimbriata</i>              | Chain-fern                       | Sensitive    |

In addition to monitoring rare plants, DNR also maintains a data base of sensitive native plant communities and native wetland areas in the County. The Mason County Sensitive Plants Map, presented in the *1995 Mason County Shoreline Inventory* shows the general locations where these natural features exist. Because of the sensitive nature of these areas, only the general area (section to quarter-quarter section) where these features are known to occur is shown on the map as documented in Appendix F of the *1995 Mason County Shoreline Inventory*.

The impacts of development to habitat include the replacement of woodlands, pastures and other undeveloped areas with buildings, roads, parking lots, landscaping, and other structures. Depending on the location, density and intensity of uses, this may result in the removal and displacement of habitat and cause some wildlife species to relocate to other areas. Since most habitats are currently assumed to be at or near their carrying capacity, displaced animals may perish.

Loss of wetlands, riparian areas and adjacent fields may affect the overall number and variety of wildlife and waterfowl. Loss of riparian vegetation could also affect migrating or nesting areas. Plant and animal species can also be affected by erosion and sedimentation of streams, coastal waters, and wetlands. Shoreline and related over-water development can harm valuable kelp and eelgrass beds.

In addition to the critical areas protections adopted by the county, the comprehensive plan concentrates development, allocating approximately 73 percent of the County's population growth and associated development to Urban Areas. The Urban Area will, however, account for only 2.59 percent of the County's land area. The comprehensive plan also provides for permanent open space and designated resource areas in development within Rural Areas. These features will promote the protection, preservation, and enhancement of fish and wildlife habitat.

### ***County-Wide Planning Policies***

The *County-Wide Planning Policies* call for Mason County and the City of Shelton to conserve fish and wildlife habitat.

### ***Mason County Planning Policies***

Mason County's Comprehensive Plan policies intended to mitigate the impacts of development on habitat. The policies focus on:

1. The County providing fish and wildlife habitat information to the public as part of the development process;
2. Adopting new regulations for habitat protection which are consistent with the *Mason County Shoreline Master Program*; and
3. Managing site development activity to reduce/minimize off-site erosion, siltation or other reductions in water quality.

### **Critical Aquifer Recharge Areas**

The State of Washington's definition of aquifer recharge areas for GMA planning purposes focuses on existing areas of supply which are vulnerable to contamination: *Areas with a critical recharging effect on aquifers used for potable water are areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water* (WAC 365-190-030).

Groundwater exists in underground layers of porous rock or soil called *aquifers*. Water stored in aquifers reaches the ground surface through springs, wells, or by seepage into surface water features, including wetlands. Surface waters replenish, "recharge", aquifers through seepage from streams, lakes, and wetlands, and from precipitation that percolates through soil or rock.

Potable water means water suitable for drinking. Groundwater provides virtually all of Mason County's potable water. Protecting aquifers and aquifer recharge areas, therefore, is critical to maintaining Mason County's water supply. Aquifers exist throughout the County. The groundwater supplying most of the County's water is obtained from the aquifers running through the coarser and more permeable glacial and fluvial sedimentary deposits. The older, undifferentiated sedimentary deposits provide large quantities of water for industrial and municipal wells. Bedrock forms the bottom of the groundwater layer although fractures and joints in the relatively impermeable rocks may yield small quantities of water. Most of Mason County enjoys an abundance of good quality water, however, the state Department of Ecology has identified some areas such as the Kennedy and Goldsborough drainages where this may not be the case. There is no prohibition on



new water rights in these drainages, but, further surface water appropriations have been stopped (WAC 173-514). According to the Department of Ecology, the ground water in these areas is hydrologically connected to these streams. If ground water is withdrawn, the stream flows may be impacted. This can form a basis for the denial of new water rights in the area.

Precipitation provides the primary source of recharge for Mason County's groundwater. Precipitation within the County averages 64 inches annually. It increases rapidly towards the Olympic Mountains where, at Lake Cushman, precipitation is in excess of 100 inches per year. Water levels in wells are typically within 125 feet of the land surface. The quality of groundwater in an aquifer is inextricably linked to its recharge area. Approximately 24,970 acres have been mapped as Critical Aquifer Recharge Areas in Mason County (see FIGURE IV-4.5, Critical Aquifer Recharge Areas).

All Critical Aquifer Recharge Areas in Mason County are classified as having either an Extreme, High or Moderate recharge potential, as defined by the County's Interim Resource Ordinance (Mason County Ordinance No. 77-93).

Urban development has two potential impacts on groundwater resources: 1) increases in impervious surfaces reduce the volume of precipitation available to recharge groundwater, and 2) urban development may introduce pollutants into the groundwater system. When groundwater recharge is reduced, groundwater supplies may be depleted. In many instances, this is coupled with withdrawals of groundwater in excess of recharge capacity. Potential long term impacts include reduced capacity of water wells, reduced flows in groundwater-fed streams, and depletion of water supplies to lakes or wetlands.

Pollutants can be introduced into the groundwater system through a variety of means. They include failing septic systems, agricultural chemicals and animal waste, urban runoff, solid waste disposal, and leaking underground storage tanks.

### ***County-Wide Planning Policies***

The *County-Wide Planning Policies* call for Mason County and the City of Shelton to:

1. Protect Resource Lands and Critical Areas.
2. Protect the environment and enhance the County's quality of life; including air and water quality, and the availability of water.


# MASON COUNTY

## COMPREHENSIVE PLAN

### CRITICAL AREAS

### AQUIFER RECHARGE AREAS

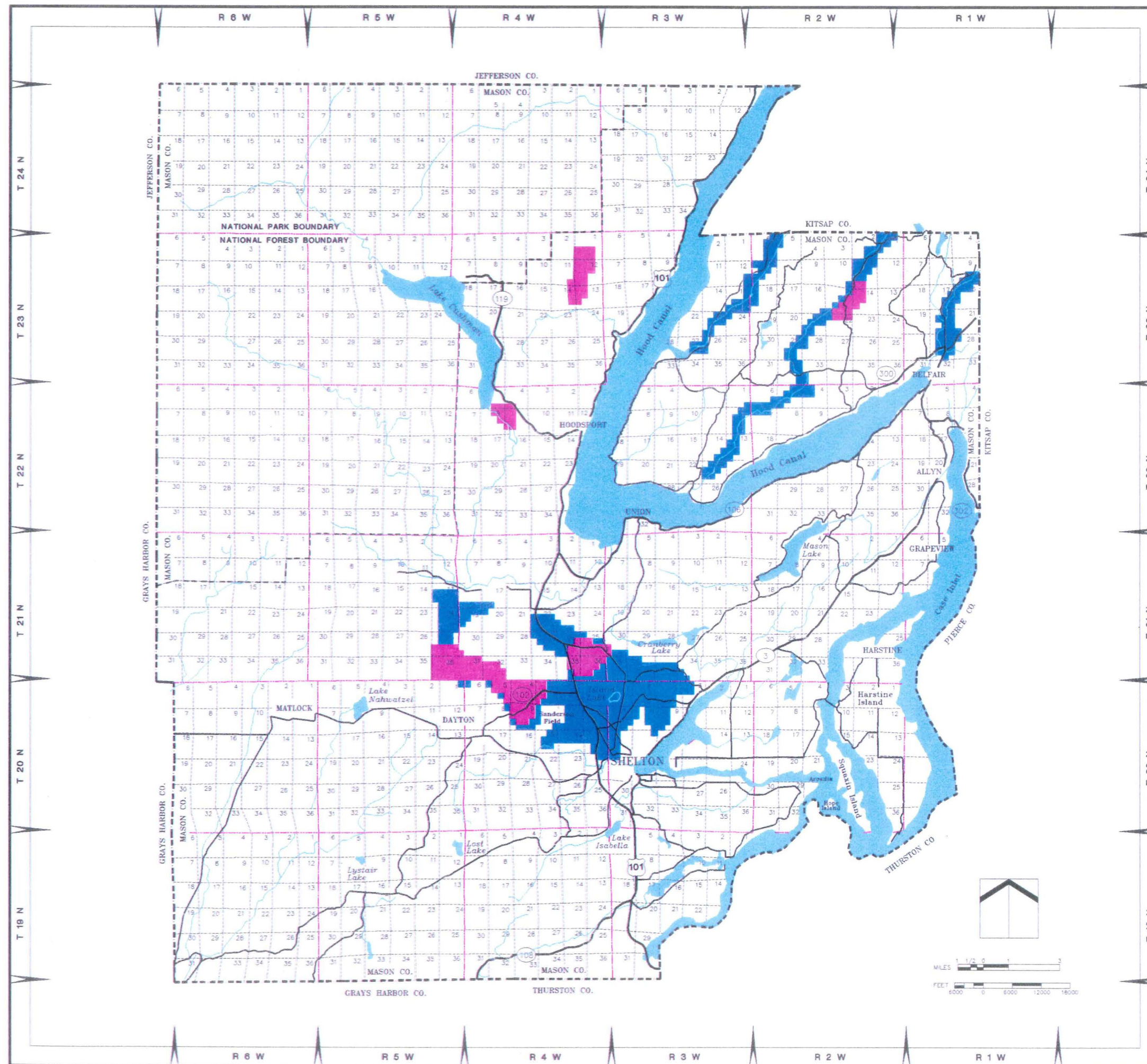
#### LEGEND

-  HIGHLY CRITICAL
-  EXTREMELY CRITICAL

MASON COUNTY  
Department Of Community Development

Shelton, WA  
April, 1996.

FIGURE IV-4.5





Please insert *FIGURE IV-4.5, Critical Aquifer Recharge Areas Map* in front of this page.

### ***Mason County Planning Policies***

The planning policies contain several policies intended to mitigate the impacts of development on aquifer recharge areas. The policies focus on identifying and regulating land uses which could have a potential significant impact on groundwater quality or quantity.

The Natural Systems, On-Site Sewage Disposal, Clearing and Grading, and Stormwater and Surface Water Elements of the Harstine Island Sub-Area Plan contain policies for the protection of groundwater quality and quantity.

The Shoreline, On-Site Sewage, Groundwater Management, Monitoring and Education Elements of the North Mason Sub-Area Plan contain policies for the protection of groundwater quality and quantity.

The Commercial and Industrial Land Uses, Natural Systems, On-Site Sewage Disposal and Treatment, Clearing and Grading, and Stormwater and Surface Water Elements of the Southeast Mason Sub-Area Plan contain policies for the protection of groundwater quality and quantity.

In addition, Mason County has adopted interim regulations to protect critical areas, including aquifer recharge areas. As part of the joint planning effort to be made by the City of Shelton and Mason County, the county will continue to examine whether additional protections are needed within the urban growth areas to adequately protect the critical areas.

### **Flood Hazard Areas**

Flood hazard areas are lands subject to a one percent or greater chance of flooding in any given year. In Mason County they include areas identified as potential or historic flood areas in the Department of Ecology's *Coastal Zone Atlas* or areas identified as "Zone A" flood areas on the National Flood Insurance Program Flood Insurance Rate Maps Mason County.

Flooding in Mason County generally occurs from November through April. The greatest cause of flooding is heavy rainfall combined with snow melt. The Mason County Flood Insurance Study lists four areas as most susceptible to flooding. Those areas include the Skokomish, Tahuya and Union Rivers, and Goldsborough Creek.

The Skokomish River Valley floods several times annually. In recent history there have been large flood events in 1955, 1972, and 1990. Many homes, pastures and personal property were damaged in those years as well as lessor damage on a more frequent basis.

Flooding on the Tahuya River and Goldsborough Creek have been known to cause some damage, whereas the Union River tends to have high flows, but minimal overbank flooding.

Flooding of marine shorelines is caused by a number of factors which can occur individually or in combination. They include extreme high tides, waves generated by winds, tsunamis of distant origin, and locally generated seismic waves or boils. Wind-driven waves, superimposed on extreme high tides, represent the most common form of coastal flooding in Mason County.

Floodways, floodplains and coastal flood areas are identified by the Mason County Federal Flood Insurance Study FEMA maps.

The comprehensive plan protects Flood Hazard areas because it concentrates urban development on the least amount of land, considers the suitability of the land for development through the use of performance standards, and provides for significant open space and resource use areas in development within the Rural Area.

The *County-Wide Planning Policies* call for Mason County and the City of Shelton to protect Critical Areas.

Mason County has adopted interim regulations to protect flood hazard areas, however, the Western Washington Growth Management Hearings Board has ordered the county to reconsider the protections in those areas. Until that is done, the current critical area regulations remain in effect.



## **IV.5 NATURAL RESOURCE LANDS**

Natural resources abound in Mason County and provide the foundation for the County's economy. While timber has played the dominant role, other natural resources including agricultural lands and minerals, have also fostered economic development within the County.

### **Forestry**

Without question, timber is the foundation upon which Mason County's economy is built. Forestry continues to be Mason County's premier natural resource industry. The early explorers marveled at the vast timber expanse in the region, describing it as "thick as fur on a dog's back." For 140 years, Mason County's extensive forests have supplied logs, lumber, building components, pulp, and other products to national and international markets.

One unique feature of Mason County's forest lands is the sustained yield management of public and private forest land. This ensures that the cut of timber would not exceed the growth of new trees. The only cooperative agreement established under the Sustained Yield Forest Management Act of 1944 (Public Law 273) was between Simpson Timber Company and the U.S. Forest Service. The agreement, called the Shelton Cooperative Sustained Yield Unit (CSYU), provides for the continuous harvesting and restocking of forest lands, to perpetuate the supply of timber within Mason County. This has ensured a stable employment base in Shelton and other timber communities in Mason and Grays Harbor Counties.

Long Term Commercial Forest lands and Forestry represent the primary land uses throughout Mason County and within each of its seven watersheds. FIGURE IV-5.1, shows the Long Term Commercial Forest and Inholding lands in Mason County. As previously mentioned in the discussion of Mason County land use, these figures do not include federal and tribal lands. Thus, Long Term Commercial Forest lands and Forestry play an even greater role in the County's land use, due to the acreage that the U.S. Forest Service maintains as well as lands forested by both the Skokomish and Squaxin Island Tribes.

Mason County currently has an abundance of forested lands with long term commercial significance. Although continued population growth will place additional demands on forest resources, these are not expected to significantly effect the County's forest resources during the 20 year planning period. Impacts associated with forestry operations include erosion and sedimentation, noise from machinery and vehicles, fugitive dust, and the visual impacts of harvested areas. The state Department of Natural Resources is responsible for regulating these impacts. The comprehensive plan concentrates urban development on the least amount of land. It also provides for permanent open space and resource use areas in development allowed within the Rural Areas.

Please insert "Long Term Commercial Forest and Inholding Lands" map, Figure IV-5.1, in front of this page.







### ***County-Wide Planning Policies***

The *County-Wide Planning Policies* call for Mason County and the City of Shelton to:

1. Maintain and enhance natural resource based industries, including those dependent on forest resource lands; and
2. Encourage the conservation of productive forestry lands.

### ***Mason County Planning Policies***

The *Mason County Planning Policies* contain policies intended to mitigate the impacts to forest resource lands. These policies focus on:

1. The designation criteria of Long Term Commercial Forest:
2. Ensuring that forestry operations are conducted according to forest practices regulations; and
3. Lot size and development policies for designated forest lands.
4. The establishment of various performance districts intended to concentrate growth and protect critical areas and resource lands.

Mason County has adopted interim regulations to protect resource lands, including forest resource lands. The Western Washington Growth Management Hearings Board has ordered Mason County to re-assess these regulations; however, until this is completed, the existing ordinance will remain in effect.

The Forest Land Use Element of the North Mason Subarea Plan contains policies addressing Forest Resource uses.

The Forest Land Use Element of the Southeast Mason Subarea Plan contains policies addressing Forest Resource uses.

### ***Agriculture***

The State of Washington's GMA guidelines define agricultural land as land primarily devoted to the commercial production of horticultural, viticultural, floricultural, dairy, apiary, vegetable, or animal products or of berries, grain, hay, straw, turf, seed, Christmas trees, or livestock, and that has long term commercial significance for agricultural production. Long term commercial significance includes the growing

capacity, productivity, and soil composition of the land for long term commercial production, while considering the land's proximity to population areas, and the possibility of more intense uses of the land.

Agricultural practices have taken place in Mason County since the early days of logging. The clear-cutting practices of those early logging companies opened a considerable amount of County land to agriculture, particularly to dairying and cattle raising. Crop production was limited to the growing of hay, berries and potatoes. In the eastern part of the County where the weather was milder, extensive vineyards and fruit orchards were planted.

Despite its rich agricultural history, however, Mason County is not well-endowed with the resources necessary to create a strong competitive advantage for agricultural production. Consequently, agriculture's current role in Mason County's economy is relatively minor. The 145 farms currently in operation in the County represent less than two percent of Mason County's land area, among the lowest within the State. Continued growth in Mason County is likely to increase land use conflicts between urban uses and remaining agricultural uses. As land values rise, the potential economic returns will likely increase the pressure on owners to sell or develop their properties.

Much of the agricultural land within the County is located in the Oakland Bay, Skokomish and Totten-Little Skookum Watersheds. To the extent that urban growth occurs within the Oakland Bay Watershed, it is highly probable that agricultural soils will continue to be converted to urban uses in this area during the 20-year planning period.

The comprehensive plan directs up to 70 percent of the County's growth into Urban Areas. Further, options such as Working Rural Areas and Resource Conservation Master Plans require clustering and open space. Both techniques reduce the amount of land disturbed by development while maintaining overall rural densities.

### *County-Wide Planning Policies*

The *County-Wide Planning Policies* call for Mason County and the City of Shelton to:

1. Maintain and enhance natural resource based industries, including those dependent on agricultural resource lands; and
2. Encourage the conservation of productive agricultural lands.

### *Mason County Planning Policies*

Many of these policies serve as mitigation to reduce the potential impacts to agricultural lands. These policies direct most growth to Urban Areas, protect the right to farm, and support best management practices for agricultural operations.

Also, Mason County has adopted interim regulations to protect resource lands, and non-designated agricultural lands. The Western Washington Growth Management Hearings Board has ordered Mason County to re-address its protection of agricultural lands. Until this process is completed, the existing regulations will be in effect.

The Agriculture Element of the North Mason Sub-Area Plan contains policies addressing agricultural uses.

The Agricultural Land Use Element of the Harstine Island Sub-Area Plan contains policies addressing agricultural uses.

The Agricultural Land Use Element of the Southeast Mason Sub-Area Plan contains policies addressing agricultural uses.

### **Mineral Resource Lands**

The State of Washington's GMA guidelines define mineral resource lands as lands primarily devoted to the extraction of minerals, or that have known or potential long term significance for the extraction of minerals. Minerals include gravel, sand, and valuable metallic substances.

FIGURE IV-5.2, Mason County Mineral Resource Map, shows the location of known and potential mineral resources. The mineral resources identified on the map are based primarily on soil types identified by the SCS in the *Mason County Soil Survey* and the Department of Ecology in the *Coastal Zone Atlas of Washington*. It should be noted that many of the soil characteristics which increase an area's potential as a source of mineral resources also increase its potential for aquifer recharge (see AQUIFER RECHARGE AREAS).

Mason County contains a near-infinite supply of construction aggregate (i.e., sand and gravel). There are three remaining, undeveloped, large sources of high-quality sand and gravel located in close proximity to the waters of Puget Sound, such that materials can be transported from the site by barge to water-dependent metropolitan construction aggregate markets also located on the Puget Sound tide lands. Two of these large deposits of aggregate are located in Mason County. They include the proposed Hamma Hamma site at Eldon on Hood Canal, and the permitted Johns Prairie site north of Shelton on Oakland Bay. Both Mason County sites contain a high-volume source of high-quality sand and gravel. These resources are suitable for processing into a wide variety of finished construction aggregate classes, all meeting government and ASTM (American Society for Testing and Materials) specifications

Mason County has 21 operating surface mines at the present time. Pending permit approval, there will be an additional 415 acres devoted to mineral extraction at the Manke

site. The Mason County Interim Resource Ordinance designated approximately 4,022 acres as mineral resources lands and protects the future use of these areas for mineral resource extraction.

Continued population growth may place additional demands on local mineral resources. Impacts associated with mineral extraction include erosion and sedimentation, noise from machinery and vehicles, fugitive dust, and the visual impacts of excavated areas.

The *County-Wide Planning Policies* call for Mason County and the City of Shelton to maintain and enhance natural resource based industries.

The planning policies in the plan are intended to mitigate the impacts to mineral resource lands and focus on:

1. Ensuring that mineral resource operations comply with appropriate development standards; and
2. Ensuring that excessive noise and light levels do not result from mineral resource operations.



# MASON COUNTY

## COMPREHENSIVE PLAN

### LONG-TERM COMMERCIAL MINERAL LANDS, 1992. AMENDED ORDINANCE 85-95

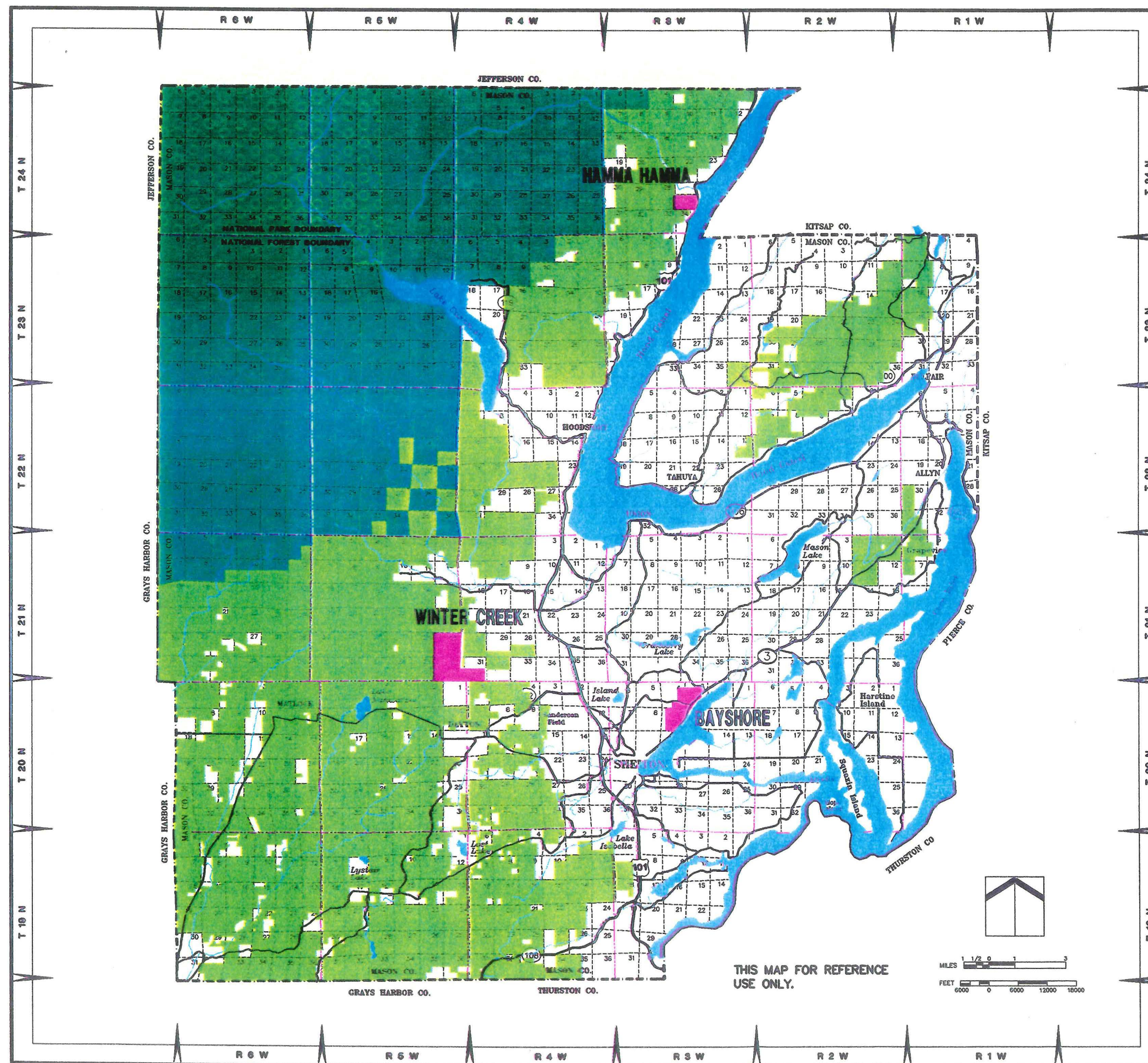
#### LEGEND

-  OLYMPIC NATIONAL FOREST
-  DESIGNATED MINERAL LANDS
-  OLYMPIC NATIONAL PARK

 MASON COUNTY  
Department Of Community Development

Shelton, WA  
November, 1995

FIGURE IV-5.2





Insert Figure IV-5.2 - Mason County Mineral Resource Lands Map





## IV.6 OPEN SPACE

There are three kinds of open space land: private, common use, and public open space. Private open space includes farms, forest lands, and other parcels of undeveloped land. Common use open space is land within a residential development or other development which is designated for common access by the residents of the development or by the general community. Public open space is publicly-owned land available for recreational use of the entire community. Open water areas, such as the Hood Canal or lakes, is also often considered as open space because it creates a sense of openness.

Open space land is valuable to the community for a number of reasons. It can provide recreational opportunities, it is aesthetically pleasing, it enhances the quality of life in urban areas, and it increases property values. It creates natural boundaries, which can act as greenbelts and define neighborhood identity and can protect natural resources such as groundwater recharge areas, streams, soils, tidal areas, agricultural areas, and wildlife. Open space often provides habitat areas for wildlife.

Open space land is an essential component of rural character. Without adequate open space, the land will not appear rural. Rural character is discussed in the rural lands section of this chapter.

Mason County enjoys extensive open spaces. In addition to the Olympic National Park and Olympic National Forest, there are significant tracts of state owned or privately held timber. Farmlands in river valleys, particularly the Skokomish, also are open space lands. A detailed listing of park and recreation facilities in the County is presented in the Capital Facilities element of the Mason County Comprehensive Plan.

FIGURE IV-6.1, Existing Open Space Map, shows the existing open space in Mason County in terms of the following four categories as documented in the *1992 Mason County Growth Management Report*:

1. Private Commercial Forest - Includes all privately held properties under the Designated Forest, Classified Forest or Open Timber current use tax programs. While these properties do not have public access rights, they fulfill many of the traditional functions of open space.
2. Streams, Ponds and Floodplains - Includes all water bodies that are rated by DNR as Type I through IV Waters. Undeveloped floodplains associated with those waters are also considered existing open space, but are not shown on the map.
3. Electrical Transmission Lines - Includes only those main transmission lines that are for regional distribution.

4. Other Open Space - Includes all properties under the Open Agriculture and Open Space current use taxation programs, National Park Service lands, National Forest Service lands, State and local public recreation areas, natural preservation reserves, tribal natural areas, and landslide hazard areas.

Continued growth in Mason County is likely to increase the pressure for conversion of existing open space to urban uses. As land values rise, the potential economic returns will likely increase the pressure on owners of larger tracts of undeveloped land to sell or develop their properties.

The comprehensive plan provides for the preservation, protection, and enhancement of open space. It does this by directing up to 70 percent of the County's growth into Urban Areas. Urban Areas, however, will account for only 2.59 percent of the County's land. Further, options such as Working Rural Areas and Resource Conservation Master Plans require clustering and open space. Both techniques reduce the amount of land disturbed by development.

#### *County-Wide Planning Policies*

The *County-Wide Planning Policies* call for Mason County and the City of Shelton to:

1. Define uniform terminology, definitions, standards and methodology for regulations affecting agricultural resource lands, an important part of the open space system.
2. Establish goals for open space and buffers within the UGA.
3. Include policies for the protection of open space in the Land Use Elements of their Comprehensive Plans.

#### *Mason County Planning Policies*

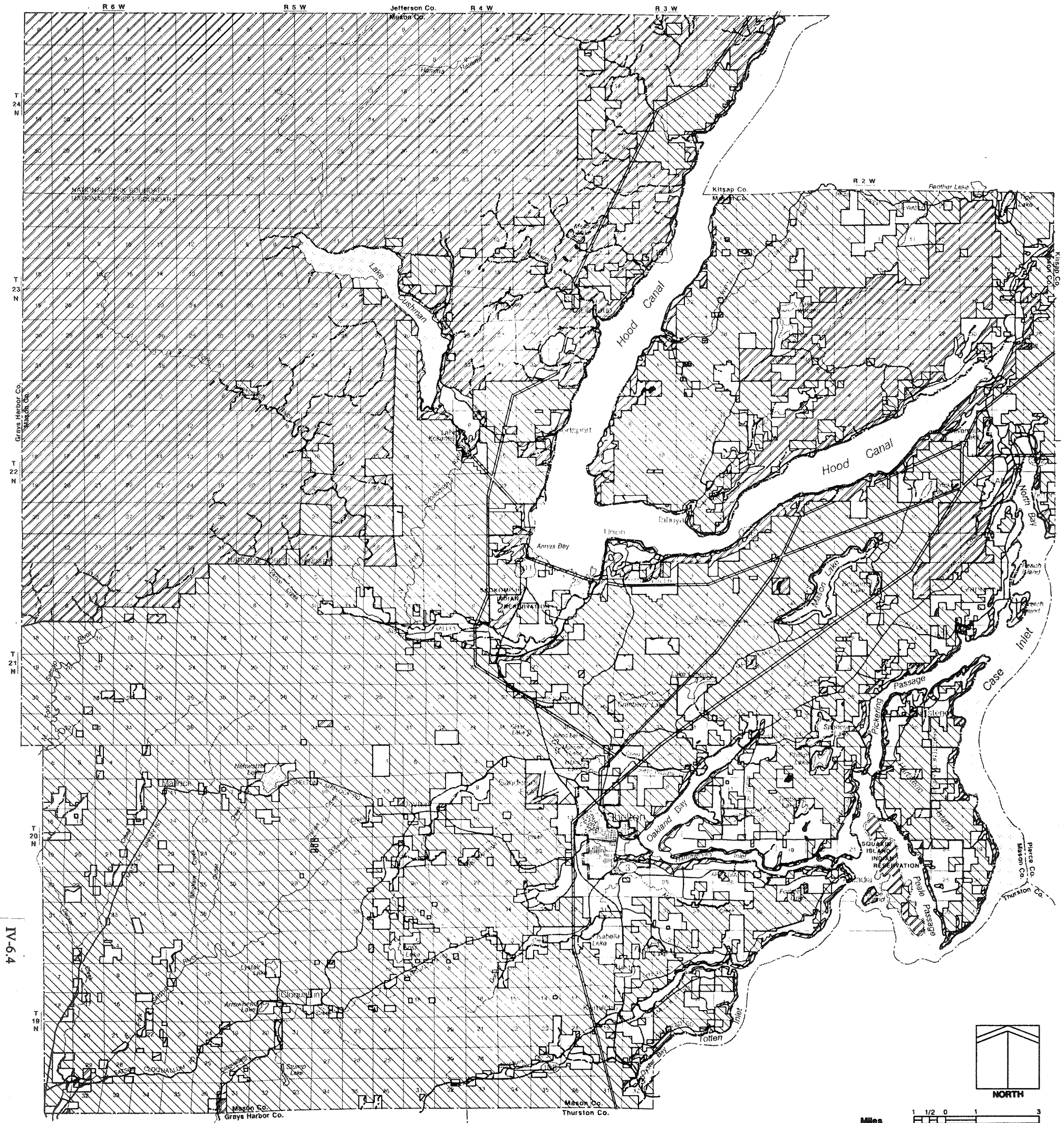
Mason County Comprehensive Plan Policies provide for the protection of open space throughout the County. They focus on:

1. Requiring the protection of open space provided by critical areas.
2. Encouraging, through incentives, the protection of public open space within new developments.
3. Coordinating with State agencies to improve access to saltwater shorelines.





With the adoption of policies and regulations to protect critical areas, the county has established protections for many areas which will result in additional open space. The Long-Term Commercial Forest Lands are essentially open space lands, although that is not the primary reason they are protected.

There are also planning policies included in the comprehensive plan which specifically address the protection of open space.

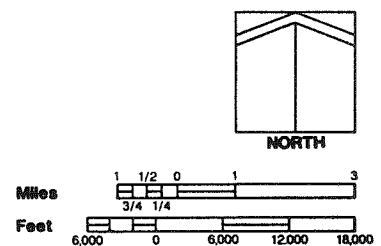
Insert Figure IV-6.1, Open Space Map  
(From 1992 Background Report)



IV-6.4

-  Private Commercial Forest
-  Other Open Space
-  Streams & Ponds  
Full extent of floodplains not shown
-  Electrical Transmission Corridor

Source: Mason County Land Use Inventory, 1991  
 Geologic Hazards and Aquatic Habitat Areas Maps, this series  
 Map prepared by Richard Carothers Associates



Existing Open Space

Mason County  
 Growth Management  
 Background Report  
 Mason County, Washington  
**Figure IV-6.1**  
 Figure C-10

#### IV.7 WATER QUALITY/RUNOFF

Mason County has an abundance of marine and freshwater areas that include Puget Sound, Hood Canal, and thousands of rivers, streams, lakes, ponds, and wetlands. Surface water flows in the County result from precipitation. Precipitation occurs year round. It tends to be particularly heavy during the months of November through April, when heavy rainfall at the lower elevations combines with seasonal snowmelt in the mountains.

Mason County's drainage system for surface runoff is characterized by thousands of small tributaries which form the several hundred streams and rivers that eventually make their way into Hood Canal, Oakland Bay, Totten Inlet, Skookum Inlet and Case Inlet (see FIGURE IV.4-4, Mason County Stream Type Map, in the *Critical Areas* section). Some of the larger of these rivers include the Skokomish, Union, and Tahuya Rivers.

Mason County's natural drainage system contains hundreds of lakes and ponds that further help to moderate the effects of surface water storm flows. The largest of these include: Lake Cushman, Mason Lake, Cranberry Lake, Lake Limerick, and Lake Nahwatzel.

The County has over 38,000 acres of documented wetlands, 20-25 of which have been listed as *High Quality Native Wetlands* by the Department of Natural Resources.

Throughout unincorporated Mason County, the existing drainage system primarily consists of passive open conveyance in the form of roadside ditches.

Urban development often results in the clearing of vegetated areas; increases in impervious surfaces and resulting runoff; increased soil erosion and sedimentation during and after clearing (see *EROSION HAZARDS*); encroachment into streams and wetlands; alteration of stream courses; and loss of habitat. All of these activities result in nonpoint pollution of surface waters. Increased runoff may also increase the incidence of downstream flooding and erosion.

Pavement, roofs, and other impervious surfaces allow less water to infiltrate into the soil, thereby decreasing groundwater recharge and increasing runoff (see *AQUIFER RECHARGE AREAS*). Reductions in the amount of natural vegetation also increases runoff rates and volumes. Because a major portion of urban runoff originates from streets, buildings and other developed areas, runoff may contain nutrients, bacteria, and toxic substances such as metals and organic chemicals. Increased runoff and impacts to water quality are similar to erosion hazards in that they are created by, or aggravated by development activities such as clearing and grading.

These impacts are addressed in the comprehensive plan in a number of ways discussed below.

The plan provides for performance districts which require clustering and open space. Both techniques reduce the amount of land disturbed by development while maintaining overall rural densities.

The *Countywide Planning Policies* call for Mason County and the City of Shelton to provide for the protection of water quality and address public education, stormwater management, and watershed management.

The *Mason County Planning Policies* include a number of policies for the protection of water quality in Mason County. They focus on:

1. Countywide water conservation and efficiency strategies;
2. Countywide education efforts on water use, conservation and protection;
3. Ensuring that the Mason County Comprehensive Plan is compatible with the Mason County Shoreline Master Program; and
4. Promoting the concept of watershed management.

The comprehensive plan also include the following:

1. The Land Use Element to include policies which address water quality and runoff.
2. The Natural Systems, On-Site Sewage Disposal, Clearing and Grading, and Stormwater and Surface Water Elements of the Harstine Island Sub-Area Plan contain policies that address water quality and runoff.
3. The Shoreline, Surface and Stormwater Management, On-Site Sewage, Groundwater Management, Monitoring, and Education Elements of the North Mason Sub-Area Plan contain policies that address water quality and runoff.
4. The Commercial and Industrial Land Uses, Natural Systems, On-Site Sewage Disposal, Clearing and Grading, and Stormwater and Surface Water Elements of the Southeast Sub-Area Plan contain policies that address water quality and runoff.
5. The Capital Facilities Element calls for the adoption of a stormwater ordinance based on the Department of Ecology's Stormwater Management Manual.

## **IV.8 RURAL LANDS**

### **Description**

The rural lands are those lands which are outside of the designated urban growth areas, but which are not designated as resource lands. Mason County has created a number of performance districts by which to regulate land use in the rural lands. These districts are described in this section. The planning policies which control the land uses in the districts are contained in the planning policies chapter.

### **Rural Character**

Mason County is predominately a rural county. The rural lands element, therefore, focuses on maintaining rural character as the County moves forward to accommodate growth during the next 20 years. Many features contribute to the rural character of Mason County. They include land features, landscapes, and land uses. Many of the elements contributing to the county's rural character were identified during the county's *visioning* process. They include:

- Rural Activity Centers
- Wetlands, streams and lakes
- Shorelines
- Forests
- Pastures and meadows
- Hills and mountains
- Vistas of mountains, forests, or water
- Farmlands and farm buildings
- Rural highways and roads

Rural areas also include well separated small communities located along major arterials and state highways which serve the needs of surrounding rural residents and enterprises. These communities are characterized by limited public services, small commercial uses, and single family houses often on small lots. Community services may include a school, post office, fire stations, churches, community centers and granges. There may be some multifamily development.



### Performance Districts

The plan makes use of rural performance districts to provide an organizing structure. The districts are methods for accomplishing the goals and objectives of the Comprehensive Plan. Each performance district is intended to achieve a distinct function and may allow for a variety of uses which are consistent with that function. In addition, each performance district has a set of performance standards with which development must comply and which ensure that the goals of the plan are met within the district. Several classifications of rural performance districts are provided in the plan. They include:

- Rural Activity Centers (RAC)
- Rural Community Centers (RCC)
- Fully Contained Community (FCC)
- Master Planned Resort (MPR)
- Resource Conservation Master Plan (RCMP)
- Working Rural Areas (WRA)
- Rural Area (RA)

### Rural Activity Centers

Rural Activity Centers (RAC) include existing communities with an established settlement pattern. These communities include a mix of residential uses typically on small lots. RACs are smaller in size and scale than Urban Areas. They serve residents of the surrounding rural area, seasonal residents, and tourists. RACs also include concentrations of commercial, service, industrial, and civic uses but are not currently served by urban levels of facilities and services. Residential areas include small lot, single-family neighborhoods and low-rise multifamily housing. Businesses typically line either side of a highway that runs through the community. Some of the RACs include small shopping centers and strip malls. Industrial uses within RACs are often stand-alone businesses such as welding shops, small shake mills, or food processing operations.

RACs within the County will experience some growth over the next 20 years. Average residential densities will increase as much of the land has been platted into small lots. Business uses will likely grow and intensify. The majority of growth within the RACs will focus on retail, commercial, tourism and industrial uses necessary to support the residential growth in the Rural Area. Some RACs will require sewers or other means of collective wastewater treatment to solve current water quality problems. However, these areas are not expected to incorporate as cities within the next 20 years. They are intended to allow for the natural growth of the community and population, but to concentrate the growth in a way that protects the surrounding rural area and resource lands from sprawling patterns of development.

### Rural Community Centers

Rural Community Centers (RCCs) are intended to provide a focal point and community identity for surrounding rural areas, while they meet some of the immediate needs of the rural residents, resource dependent industry, and visitors. They will provide a rural level of services and facilities. Rural Community Centers may include one or two civic, community, or retail uses such as a post office, community center, church, grange, or gas station. The community centers will be some distance from each other and from the urban centers. They are not intended to compete with the urban areas as employment centers or commercial centers. Residential development at these centers is allowed, but only with Rural Area standards. The designated area of the Rural Community Centers will be kept small, but will allow for some additional development. The designated area will not necessarily include all of the businesses or services that may be identified with the community center.

### Working Rural Area

The Working Rural Areas (WRAs) within Mason County include those forested areas that will remain primarily in forestry uses for the next 15-20 years. While the WRAs have not been designated as resource lands, activities such as commercial forestry, agriculture, aquaculture, and other resource-based industries are the principal intended uses of the land within the WRAs. This is one reason why large lots of 40 acres are required.

Another purpose of the Working Rural Area is as a holding area where the land will be kept in forest or other resource use until it is developed into one of the other categories of land. Some will be converted to another form of rural land or into urban land. Several alternative ways are provided for the conversion to take place. The large minimum lot size preserves the ability of the land to be developed more intensely at a future time.

In order to receive the WRA designation, an area must be a minimum of 2,000 acres in size. Tracts of at least 640 acres may "opt in" to the WRA designation. Within each designated WRA, a maximum of 10% of each individual ownership may include non-resource uses. The minimum lot size within the WRA is 40 acres.

When areas convert out of the WRA designation, permitted residential development would include subdivisions with clustering, planned unit developments, and new fully-contained communities. Residential uses could be either single family or multifamily.

Mixed-use developments, including residential, recreation, retail, commercial and industrial uses

would also be allowed. Other non-residential uses allowed in WRA conversions would include master planned resorts, single-purpose recreational uses, single purpose industrial uses, resource-based uses, home-based businesses, and cottage industries.

All permitted development in WRA conversions would be subject to performance standards.

### **Rural Areas**

Rural Areas (RAs) within Mason County are those areas which are intended to maintain their rural character, while allowing some development. In Rural Areas, the rural landscape will remain dominant, and include a variety of protected natural features. Urban development will not be allowed in the Rural Areas. Resource uses such as farming, forestry, aquiculture, and mining are protected. Residential uses are allowed, provided that they are rural in character. Industrial and commercial uses are only allowed if they are resource dependent or are cottage or home based industries operated by residents of the property. Recreational uses consistent with a rural nature may be allowed. Existing commercial and industrial uses that are non-conforming will be allowed to continue and to expand within limits. Resource dependent industrial and commercial development will be protected from encroaching incompatible uses through performance standards which will buffer one use from the other.

### **Fully Contained Communities**

A Fully Contained Community is not a designated area but a reserved capacity for new urban development that will be characterized by urban densities and intensities, urban governmental services, and meets the criteria established in the comprehensive plan and in RCW 36.70A.350. Fully Contained Communities can be created in designated Working Resource Areas; however, the approval of a Fully Contained Community requires a comprehensive plan amendment.

### **Resource Conservation Master Plan**

Resource Conservation Master Plan areas provide the opportunity for well planned development, consistent with rural character, within Rural Lands. They may be developed through a Planned Unit Development (PUD) or a Mixed Use development. RCMPs would require a 20-acre minimum parcel size, clustering, open space, and a portion of the site to remain in a resource use such as forestry, mineral extraction, horticulture, agriculture, or aquaculture. The Resource Conservation Master Plan development is an option allowed in a Working Rural Area. The criteria for development of a Resource Conservation Master Plan area is detailed in the planning policies.

**Master Planned Resort**

A Master Planned Resort is a self contained and fully integrated development in a setting of significant natural amenities that includes short-term visitor accommodations associated with a range of developed on-site indoor or outdoor recreation facilities. It may also include permanent residential uses as an integrated part of the overall resort development. Development of the Master Planned resort is controlled through the planning policies.



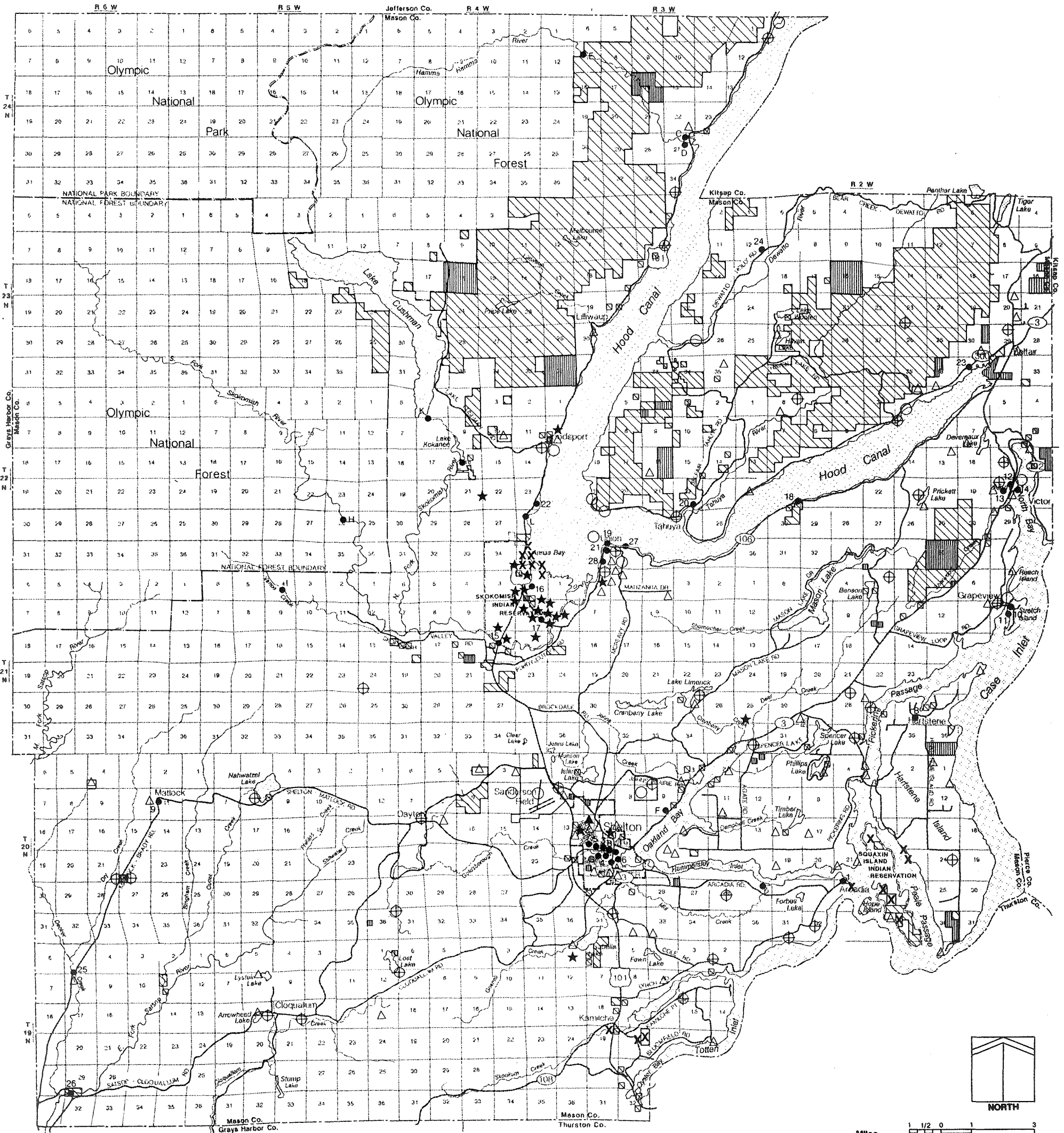
## **IV.9 HISTORICAL PRESERVATION**






As Mason County continues to grow, it is important that the past of the county not be forgotten or destroyed. The state and federal governments have developed inventories of those sites and facilities that have special historical importance. Some of the sites are formally listed on an historical register, which provides some tax and other advantages to their owners for preserving their historic attributes. Native American tribes also have sites identified of cultural or historical significance. Many sites are probably not known.






FIGURE IV-9.1, Public and Historic Lands and Facilities, shows those sites identified by the county.

The county intends to cooperate with the state agencies and the area tribes to protect historically and culturally important areas. The comprehensive plan contains planning policies to guide the county in the protection of these areas.

Insert Figure IV-9.1, Public and Historic Lands and Facilities  
(From 1992 Background Report)



-  Federal
-  State
-  County
-  Ports
-  Tribal Land

-  School & State School
-  Fire
-  Cemetery
-  Hospital
-  Historical Site  
See Listing

1. Arcadia Schoolhouse Site
2. Michael T. Elmore Eschell Site
3. Skopomish River Co. Office Building
4. Mason County Senior Center
5. Mason County Courthouse
6. Skokomish Indian Reservation
7. James Lewis High School (demolished)
8. Skilton Point
9. Matlock Point
10. Island Belle Erpwin
11. St. Charles Winery
12. St. Hugh's Episcopal Church
13. Allam Schoolhouse
14. Allam Dock
15. Skokomish Ferry Bridge
16. Sheryl Wingfield House
17. Skokomish Tribal Center (Old Indian School)
18. Indian Potlatch Site (Lanook State Park)
19. Union Water Wheel
20. Tahuya Schoolhouse
21. John McCreary House
22. Potlatch Town Site
23. Old Bell's Schoolhouse
24. Harrison Town Site
25. Ever's Bridge
26. Schaffer Park Bridge
27. Schaffer Carle
28. Murray Model Art Colony
- A. Galahborough Creek Bridge
- B. Heratone Island Community Hall
- C. North Same Same Silver Bridge
- D. South Same Same Silver Bridge
- E. Same Same Guard Station
- F. Ostland Site
- G. Skilton Public Library and Town Hall
- H. High Steel Bridge
- I. Venice Creek Bridge
- J. Simpson Logging Co. Locomotive No. 7 and Pullman Railway Caboose No. 700
- K. Cushman No. 1 Hydroelectric Power Plant
- L. Cushman No. 2 Hydroelectric Power Plant

Sites Smaller Than 40 Acres Shown by Symbol Only

Source: Mason County  
Map prepared by Richard Carothers Associates

Miles 1 1/2 0 1 3  
Feet 6000 0 6000 12000 18000

Public and Historic  
Lands and Facilities

Mason County  
Comprehensive Plan  
Figure IV-9.1



# Chapter V

## HOUSING

### V.1 INTRODUCTION

#### Relationship to the Growth Management Act

The Growth Management Act requires that comprehensive plans include a housing element. This requirement grew out of concerns over affordability, availability, and housing condition. The public also identified environmental regulations and the infrastructure financing demands imposed by GMA as potentially having negative impacts on housing. As a result, GMA set the following as a statewide goal for housing:

“Encourage the availability of affordable housing to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.”

GMA also requires that housing elements recognize the “vitality and character of established residential neighborhoods. Further, housing elements must:

1. include an inventory and analysis of existing and projected housing needs;
2. include a statement of goals, policies, and objectives for the preservation, improvement, and development of housing;
3. identify sufficient land for housing, including, but not limited to, government assisted housing, housing for low-income families, manufactured housing, multifamily housing, group homes, and foster care facilities; and
4. make adequate provision for existing and projected needs of economic segments of the community.

#### Housing Policies

GMA requires Counties planning under GMA, and the cities within them, to jointly prepare countywide planning policies to guide development of their comprehensive plans. The following policies are excerpts from Mason County's Countywide Planning Policies.

They represent policies that both Mason County and the City of Shelton will use to prepare the Housing Elements of their respective Plans.

- 6.1 Encourage the availability of affordable housing to all economic segments of the population, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.
- 6.2 Define and establish the need for affordable housing through development of a Housing Plan.
- 6.3 Encourage affordable housing through innovative land use techniques such as clustering, planned unit development, infill housing incentives, density bonuses, etc.
- 6.4 The housing and land use elements of the Comprehensive Plans for Mason County and its cities will include an assessment of land availability and general criteria for siting special purpose housing within the Urban Growth Areas to ensure that such housing can be accommodated.
- 6.5 Within the Urban Growth Areas, a wide range of housing types, densities, and mixtures will be encouraged.
- 6.6 As part of a comprehensive program to address the affordability issue, examine current local regulations and policies for impacts on housing cost. Prior to adoption of any new ordinance or regulation affecting home building, evaluate the impact on the provision of affordable housing options.
- 6.7 To avoid tightening of the urban land supply and rising housing cost, Growth area boundaries may be drawn to accommodate a county-wide population greater than Office of Financial Management (OFM) projections. It is recognized that growth will occur outside of Growth Areas.
- 6.8 Affordable housing should be convenient to public transportation, major employment centers, and public services.
- 6.9 Affordable housing needs will be examined in both city and rural contexts. Strategies to address housing affordability will reflect local definitions of affordable housing, urban and rural values, cost and availability of land, infrastructure cost, private property rights, and broad-based citizen involvement.

**Mason County Land Use Policies**

The *Mason County Land Use Policies* in Chapter III, Section 8, contain a number of policies which are related to housing and are intended to implement housing goals and address housing needs. These include:

- Encouraging a range of lot sizes, development densities and housing types to meet the needs of a diverse population and provide affordable housing choices for all income levels.
- Establishing an Urban Growth Area large enough to minimize restrictions on the residential land supply that would limit access to affordable housing for numerous economic segments of the County's residents.
- Providing for clustering, planned unit developments, and other innovative techniques which will result in a greater variety of lot sizes and housing types.
- Providing for a new fully contained community which is required to provide for variety of housing options for households with different incomes.



## **V.2 SEPA/GMA COMPLIANCE**

### **Overview**

The Mason County comprehensive plan was prepared using an integrated process for complying with the requirements of the Growth Management Act and the State Environmental Policy Act. TABLE V.2-1, *GMA/SEPA Housing Requirements*, identifies the elements addressed in this Housing chapter that satisfy requirements for collection of data, analysis of consistency and impacts, and mitigation in both GMA and SEPA. Under the SEPA/GMA integrated strategy, the analysis of these elements will focus on the requirements of GMA as the means to achieve compliance with both GMA and SEPA.

| <b>TABLE V.2-1: GMA/SEPA Housing Requirements</b> |                                  |                              |
|---|----------------------------------|------------------------------|
| <b>Element/Requirement</b>                        | <b>GMA<br/>(WAC 365-195)</b>     | <b>SEPA<br/>(WAC 197-11)</b> |
| Inventories                                       | 310(1), (2)                      | 440(6)(e)                    |
| Forecast  | 310(1), (2)<br>RCW 36.70A.070(2) | 444(2)(b)                    |
| Analysis  | 310(1), (2)<br>RCW 36.70A.070(2) | 440(6)(e)<br>444(2)(b)       |
| Strategies  | 310(1), (2)<br>RCW 36.70A.070(2) | 440(6)(e)<br>444(2)(b)       |



### V.3 EXISTING CONDITIONS

#### Overview

Mason County uses four sets of housing data to address housing issues within the County. They include population, affordability, housing type, and housing condition. Together, these data create a picture of existing conditions of housing within Mason County and the County's future housing needs.

- **Population** addresses the existing and forecast population of Mason County by watershed and the demand that the forecast population creates for housing countywide and within each watershed.
- **Affordability** analyzes the cost to rent or purchase housing in relationship to household income.
- **Housing Type** identifies the kind of housing available throughout the County. It describes housing in terms of single family, multifamily, manufactured homes, and group quarters.
- **Housing Condition** describes the quality of Mason County's housing stock. The County conducted a housing condition survey in 1993. Mason County used four categories to rate housing quality. These categories included Category 1, Sound; Category 2, Basically Sound; Category 3, Deteriorated; and Category 4, Dilapidated.

#### Population

Mason County relies on population data provided by the U. S. Bureau of the Census and Washington States Office of Financial Management. It also uses forecast data prepared by E.D. Hovee and Company to further refine Mason County's population data for planning purposes.

Mason County's population reached 44,300 full time residents as of April, 1994. This represents an average annual growth rate of 3.38 percent since 1950. In accordance with GMA, Mason County has considered three different forecast growth rate scenarios through 2014, the County's 20-year planning horizon. The County has selected the high growth scenario for planning purposes because it matches the Mason County's historic growth rates most closely.

| <b>Watershed</b>          | <b>Urban</b>        | <b>Rural</b>       |
|---------------------------|---------------------|--------------------|
| Case Inlet                | 8,547               | 1,630              |
| Chehalis                  | 0                   | 517                |
| Skokomish                 | 0                   | 626                |
| Oakland Bay               | 14,921              | 3,029              |
| Lower Hood Canal          | 3,398               | 2,703              |
| Totten-Little Skookum     | 0                   | 974                |
| West Hood Canal           | 0                   | 457                |
| <b>Total Mason County</b> | <b>26,866 (73%)</b> | <b>9,936 (27%)</b> |

Source: Washington State Office of Financial Management, E.D. Hovee & Company, and Butler & Associates.

The County anticipates that an additional 36,802 people will reside within Mason County by 2014 creating the need for an additional 24,924 units. While there may be a need in the future to replace close to 10 percent of the County's existing housing stock, the greatest pressure for additional housing units will be created by the population increases within the County. TABLE V.3-1, presents the distribution of the County's 20-year projected population.

### **Affordability**

#### *Overview*

Federal and state governments define housing as being affordable when the occupants are spending 30% or less of their gross household income on housing costs. For rental housing, housing costs include rent and utilities. For owner-occupied housing, housing costs include mortgage principal and interest, property taxes, property insurance, and utilities.

### **Income Distribution**

The government uses standard categories to classify income levels and determine eligibility for housing programs and resources. Income levels are based on percentages of the median household income within the County. The following list provides definitions for income levels commonly used to characterize housing affordability:



- **Extremely Low Income:** Below 30 percent of the median income.
- **Very Low Income:** Between 31 and 50 percent of the median income.
- **Low Income:** Between 51 and 80 percent of the median income.
- **Moderate Income:** Between 81 and 95 percent of the median income.
- **Middle Income:** Between 96 and 120 percent of median income.
- **High Income:** Above 121 percent of median income.

The 1990 census reports that the median income in Mason County was \$26,304 in 1989. The Washington State Office of Financial Management (OFM) reports that the Mason County median income in 1990 was \$27,050. TABLE V.3-2, *Income Distribution and Housing Costs*, illustrates the income ranges of Mason County households. It also identifies the affordable cost of housing for each of income classification.

Eleven percent of County's residents earn incomes that place them in the extremely low income category. This means they live on less than \$658 per month. Affordable housing for that eleven percent of the population would have to cost less than \$197.28.

According to TABLE V.3-3, *Housing Assistance Needs*, 5,082 households or roughly 41 percent of all the households in Mason County lived below the poverty level.

| Income Status        | Definition                            | Annual Income Range                 | Monthly Affordable Housing Costs | Households |                  |
|----------------------|---------------------------------------|-------------------------------------|----------------------------------|------------|------------------|
|                      |                                       |                                     |                                  | Number     | Percent of Total |
| Extremely Low Income | Below 30% of Median Income            | Below \$7,891.20                    | 197.28                           | 1,546      | 11%              |
| Very Low Income      | Between 31% and 50% of Median Income  | Between \$8,154.24 and \$13,152     | \$210.65 to \$328.80             | 1,996      | 14%              |
| Low Income           | Between 51% and 80% of Median Income  | Between \$13,415 and \$21,043.20    | \$335.38 to \$526.08             | 1,540      | 11%              |
| Moderate Income      | Between 81% and 95% of Median Income  | Between \$21,306.24 and \$24,988.80 | \$532.66 to \$624.72             | 1,128      | 8%               |
| Middle Income        | Between 96% and 120% of Median Income | Between \$25,251.84 and \$31,564.80 | \$631.30 to \$789.12             | 1,744      | 13%              |
| High Income          | Above 121% of Median Income           | Above \$31,827.84                   | Above \$795.61                   | 5,929      | 43%              |

Source: United States Bureau of the Census, and Butler and Associates

### Housing Needs Assessment

The U.S. Department of Housing and Urban Development (HUD) calculates housing need for every county in the nation. Households that pay more than 30 percent of their incomes for rent or housing costs are considered in need of housing assistance. Households with incomes under 50 percent of median income are eligible for most assistance programs. This analysis includes households earning between 50 and 80 percent of median income because a significant number of them also pay high proportions of their income for housing. Most households which earn above 80 percent of median income can afford rental housing.

TABLE V.3-3, *Housing Assistance Needs*, shows households in need as analyzed by HUD for Mason County as a whole. In 1990, 898 households in Mason County earned 30 percent or less of the median county income or paid housing costs that exceeded 30 percent of the household's income. Of the households that earned between 31 and 50 percent of median income, 830 paid more than 30 percent for housing.

Another 430 households that earned between 51 and 80 percent of median income, also paid more than 30 percent of incomes for rent.

| Households by Income           | Households<br>Number of Renters | Gross Rent (% of Income) |                     | Households<br>Number of Owners | Owner Costs (% of Income) |                |
|--------------------------------|---------------------------------|--------------------------|---------------------|--------------------------------|---------------------------|----------------|
|                                |                                 | Greater than<br>30%      | Greater than<br>50% |                                | Greater than<br>30%       | Greater<br>50% |
| Less than 30%<br>Median Income | 723                             | 535                      | 434                 | 625                            | 363                       | 244            |
| 31% to 50%<br>Median Income    | 584                             | 403                      | 164                 | 1221                           | 427                       | 171            |
| 51% to 80%<br>Median Income    | 673                             | 175                      | 13                  | 1613                           | 355                       | 81             |
| <b>Total</b>                   | <b>1980</b>                     | <b>1113</b>              | <b>611</b>          | <b>3459</b>                    | <b>1145</b>               | <b>495</b>     |

Source: Judith Stoloff Associates, and HUD Data Book, 1994  
Comprehensive Housing Affordability Strategy, State of Washington, 1994

According to the 1994 Washington State Comprehensive Housing Affordability Strategy (CHAS), 598 renter households were at risk of homelessness, meaning that they earned less than 50 percent of median income and paid more than 50 percent of their incomes for rent. The Mason County Housing Authority reports that a considerable number of low income rental units do not meet federal housing quality standards.

Housing affordability is a complex and changing issue. For example, in 1990, when HUD and Census data were collected, interest rates were high. Since then, interest rates have fluctuated dramatically, thereby affecting the number of people who could afford to buy a home. As the federal government continues to reduce its role in low income housing, a greater burden will fall on local government to assist low income and special needs households.

## Housing Type

### *Overview*

Mason County had 22,292 housing units in 1989 according to the 1990 Census. Of these, approximately 70 percent were single family units. Further, 14,565 or 65 percent of these units, were permanently occupied. The remaining 7,727 units, 35 percent, consisted of seasonal residences or unoccupied units. Mason County Public Utility District No. 3 reports that the number of its seasonal customers within the County has decreased over the past few years, as more and more seasonal residents make Mason County their primary home. TABLE V.3-4, *Number of Units by Structure*, presents the number and types of housing units in Mason County as of the 1990 census. It also identifies owner-occupied and rental housing for the permanently occupied units.

| Type of Housing Structure  | Total Units   | Percent of Total | Vacant Units | Occupied      |               |              |
|----------------------------|---------------|------------------|--------------|---------------|---------------|--------------|
|                            |               |                  |              | Total         | Owner         | Renter       |
| <b>Single Family</b>       |               |                  |              |               |               |              |
| Detached                   | 15,420        | 69.20%           | 5,385        | 10,035        | 8,332         | 1,703        |
| Attached                   | 227           | 1.00%            | 114          | 113           | 47            | 66           |
| <b>Total Single Family</b> | <b>15,647</b> | <b>70.20%</b>    | <b>5,499</b> | <b>10,148</b> | <b>8,379</b>  | <b>1,769</b> |
| <b>Multi-Family</b>        |               |                  |              |               |               |              |
| 2 Units                    | 203           | 0.90%            | 33           | 170           | 20            | 150          |
| 3 - 4 Units                | 265           | 1.20%            | 30           | 235           | 0             | 235          |
| 5 - 9 Units                | 203           | 0.90%            | 51           | 152           | 0             | 152          |
| 10 - 19 Units              | 153           | 0.70%            | 16           | 137           | 0             | 137          |
| 20 - 49 Units              | 222           | 1.00%            | 19           | 203           | 0             | 203          |
| <b>Total Multi-Family</b>  | <b>1,046</b>  | <b>4.70%</b>     | <b>149</b>   | <b>897</b>    | <b>20</b>     | <b>877</b>   |
| <b>Mobile Home</b>         | <b>5,370</b>  | <b>24.10%</b>    | <b>1,940</b> | <b>3,430</b>  | <b>2,720</b>  | <b>710</b>   |
| <b>Other</b>               | <b>229</b>    | <b>1.00%</b>     | <b>139</b>   | <b>90</b>     | <b>53</b>     | <b>37</b>    |
| <b>County Total</b>        | <b>22,292</b> | <b>100.00%</b>   | <b>7,727</b> | <b>14,565</b> | <b>11,172</b> | <b>3,393</b> |

Source: United States Bureau of the Census, 1990

### *Housing Stock*

According to the 1990 census data, owner-occupied housing accounted for 77 percent (11,172 units) of the County's occupied units. This is significantly higher than the statewide average of 62 percent. Single-family units represent the vast majority (70.2 %) of the County's 1990 housing stock. Mobile homes and trailers account for 24.1% of the housing units in the County. Multi-family units comprise approximately 4.7% of the County's housing stock. Most of the multi-family housing are located in the City of Shelton.

The total housing stock grew by approximately 11 percent from 1990 through 1993. TABLE V.3-5, *Existing Housing Stock*, illustrates the composition and size of Mason County's housing stock as of 1993. It shows the percent increase in numbers of units by housing type since the 1990 Census. Mobile home units saw the largest percent increase, followed by single-family, and multi-family units. The ratio of housing types remained constant however, with single family units accounting for 70 percent, multi-family units equaling 4 percent, and mobile homes representing 26 percent of the total units.

| Type of Housing Unit         | Number of Units | Percent of Total | Percent Change 1990-1993 |
|------------------------------|-----------------|------------------|--------------------------|
| Single Family                | 17,064          | 70%              | 9.10%                    |
| Multi-Family                 | 1,091           | 4%               | 4.30%                    |
| Mobile Homes                 | 6,387           | 26.0%            | 19.00%                   |
| <b>Total Number of Units</b> | <b>24,542</b>   | <b>100%</b>      | <b>11.20%</b>            |

Source: Washington State Office of Financial Management

### *Housing Distribution*

TABLE V.3-6, *Housing Units by Watershed*, presents the number of housing units by watershed and according to type of structure. Amounts shown in TABLE V.3-6 were extrapolated from the 1990 census data because census data was recorded by census tract rather than watershed. The difference in the census tract and watershed boundaries account for the differences in the "Total" columns in TABLE V.3-4 and TABLE V.3-6.

| Watershed             | Houses        | Mobile Homes | Multi-Family Homes | Special    | Group Quarters | Total         |
|-----------------------|---------------|--------------|--------------------|------------|----------------|---------------|
| Skokomish             | 1,129         | 359          | 0                  | 16         | 0              | 1,504         |
| West Hood Canal       | 897           | 345          | 8                  | 9          | 0              | 1,349         |
| Lower Hood Canal      | 3,617         | 1,479        | 166                | 74         | 70             | 5,406         |
| Totten-Little Skookum | 854           | 393          | 6                  | 5          | 32             | 1,390         |
| Chehalis              | 646           | 343          | 6                  | 17         | 8              | 1,020         |
| Case Inlet            | 3,169         | 821          | 31                 | 25         | 0              | 4,046         |
| Oakland Bay           | 3,203         | 1,324        | 179                | 25         | 1,365          | 6,096         |
| <b>Total</b>          | <b>13,515</b> | <b>5,154</b> | <b>396</b>         | <b>171</b> | <b>1,475</b>   | <b>20,711</b> |

Source: United States Bureau of the Census, 1990 Census, and Mason County Department of Community Development

FIGURE V.1 illustrates the distribution of the County's housing stock by watershed, as of the 1990 census. It shows that the Oakland Bay, Case Inlet, and Lower Hood Canal watersheds have the highest concentrations of the County's housing stock.

FIGURE V.1: Distribution of Housing Units

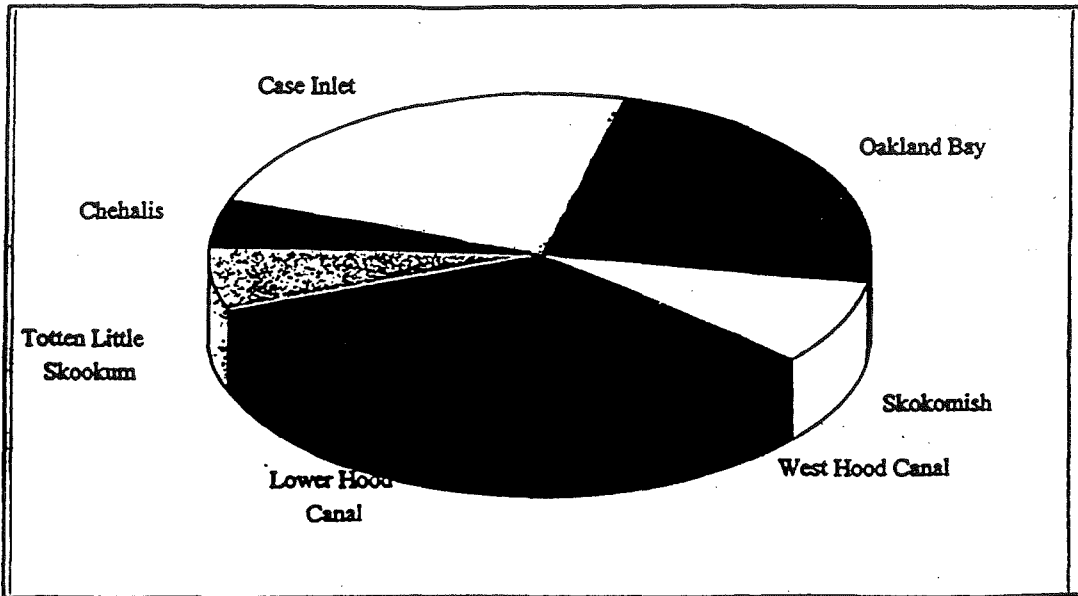
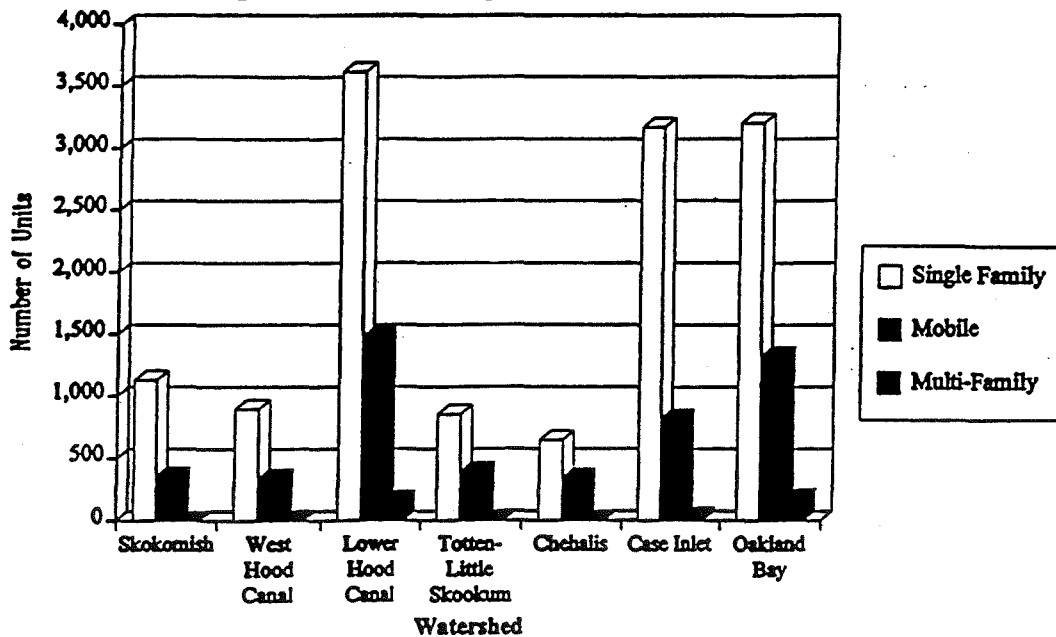


FIGURE V.2 illustrates the number and type of housing units by watershed. Totals for the Oakland Bay watershed do not include housing units within the City of Shelton. In addition, totals for the Lower Hood Canal watershed include a number of recreational homes and cabins along its waterfront properties. FIGURE V.2 includes 1990 Census Data and Mason County records.

FIGURE V.2: Composition of Housing Stock



Source: United States Bureau of the Census and Mason County Department of Community Development

## Home Ownership

TABLE V.3-7, *Housing Units - Mason County and Surrounding Counties*, presents the rate of home ownership in Mason County as of the 1990 Census. It demonstrates that the County has a higher rate of home ownership than occurs in its neighboring counties or Washington State as a whole. Further, the percentage of the County's housing stock made up of mobile homes and trailers is higher than in other counties.

Approximately one quarter of the existing housing units in Mason County are older mobile homes and trailers. These units tend to be more affordable but have a higher rate of dilapidation than other types of housing within the County. Therefore, while many of the residents of Mason County are home owners, it should not be assumed that they are not in need of housing assistance programs. TABLE V.3-4 also identifies Mason County's relatively low concentration of multi-family units. This pattern is similar to other rural counties.

| Jurisdiction     | Total Housing Units | Percent Owner Occupied | Percent Single Family | Percent Multi-Family | Percent Mobile Homes |
|------------------|---------------------|------------------------|-----------------------|----------------------|----------------------|
| Mason            | 22,292              | 77%                    | 70%                   | 5%                   | 25%                  |
| Clallam          | 25,225              | 70%                    | 69%                   | 11%                  | 20%                  |
| Grays Harbor     | 29,932              | 67%                    | 69%                   | 15%                  | 16%                  |
| Jefferson        | 11,014              | 74%                    | 69%                   | 8%                   | 24%                  |
| Lewis            | 25,487              | 70%                    | 69%                   | 10%                  | 21%                  |
| Pacific          | 12,404              | 72%                    | 68%                   | 7%                   | 24%                  |
| Thurston         | 66,464              | 65%                    | 65%                   | 20%                  | 16%                  |
| Washington State | 2,032,378           | 63%                    | 65%                   | 25%                  | 10%                  |

Source: Washington State Office of Financial Management

## Housing Quality

### Overview

The age of a structure can indicate the amount of repair or maintenance that may be needed to maintain the safety and habitability of the structure. As a structure ages, it requires more maintenance, without which it may fall into disrepair. TABLE V.3-8, *Year Structure Built*, chronicles the age of Mason County's housing stock, the number of homes that are either renter or owner occupied, and the number of vacant units. It shows that the greatest percentage of homes in the County were built in the 1970s. Roughly 77 percent of the occupied housing units in the County are owner occupied.

TABLE V.3-8, *Year Structure Built*, also demonstrates that there is a correlation between the age of a housing unit and whether the unit is renter or owner occupied. In general, the newer the home, the higher the rate of owner occupancy. Homes built between 1989 and 1990 did not follow this trend, however.

| Year Built   | Total Units   | Percent of Total | Vacant Units | Occupied      |               |              |
|--------------|---------------|------------------|--------------|---------------|---------------|--------------|
|              |               |                  |              | Total         | Owner         | Renter       |
| 1989 to 1990 | 789           | 3.50%            | 349          | 440           | 309           | 131          |
| 1985 to 1988 | 2,251         | 10.10%           | 996          | 1,255         | 1,054         | 201          |
| 1980 to 1984 | 3,555         | 15.90%           | 1,270        | 2,285         | 1,802         | 483          |
| 1970 to 1979 | 7,089         | 31.80%           | 2,422        | 4,667         | 3,690         | 977          |
| 1960 to 1969 | 3,271         | 14.70%           | 1,225        | 2,046         | 1,615         | 431          |
| 1950 to 1959 | 1,936         | 8.70%            | 661          | 1,275         | 967           | 308          |
| 1940 to 1949 | 1,511         | 6.80%            | 351          | 1,160         | 780           | 380          |
| Before 1940  | 1,890         | 8.50%            | 453          | 1,437         | 955           | 482          |
| <b>Total</b> | <b>22,292</b> | <b>100.00%</b>   | <b>7,727</b> | <b>14,565</b> | <b>11,172</b> | <b>3,393</b> |

Source: United States Bureau of the Census, 1990 Census

### Housing Condition Survey

In 1993, Mason County conducted a housing condition survey. The survey evaluated the number, type, and physical condition of housing units within the County. The size of the sample group was large enough to present a statistically valid representation of all units in the County. The County used four categories to evaluate the condition of the housing stock. They included Category 1 - Sound, Category 2 - Basically Sound, Category 3 - Deteriorated, Category 4 - Dilapidated. TABLE V.3-9, *Housing Condition Criteria*, lists the criterion used to classify the units surveyed. The rating criteria evaluate cosmetic, structural, and maintenance factors to determine the overall condition of the structure.

TABLE V.3-10, *Housing Condition Survey*, presents the findings of the survey. Overall, 90.5% of the County's housing stock falls within categories 1 and 2. Only 9.5% of the housing units fall within either category 3 or 4, including 26% of singlewide mobile homes and 16% of travel.

| Category | Rating          | Criteria  |
|----------|-----------------|---|
| 1        | Sound           | Structure provides safe, adequate housing. It is well maintained... |
| 2        | Basically Sound | Structure is sound, but has slight or minor defects ...             |
| 3        | Deteriorated    | Structure provides shelter, but has one or more major defects ...   |
| 4        | Dilapidated     | Structure is unsafe, has several critical deficiencies ...          |

Source: Mason County Department of Community Development

Further, 12% of the singlewide mobile homes, and 10% of the travel trailers surveyed were classified Category 4. These figures indicate that mobile homes and trailers are the most likely form of housing to fall into disrepair. Multi-family units appeared to be in the best condition, with 89% classified Category 1.

| Type of Structure     | Condition |        |        |       | Total Number of Units |         |
|-----------------------|-----------|--------|--------|-------|-----------------------|---------|
|                       | 1         | 2      | 3      | 4     |                       |         |
| Multi-Family          | 366       | 45     | 0      | 0     | 411                   |         |
| Single Family         | 9,959     | 4,806  | 808    | 243   | 15,816                |         |
| Manufactured          | 1,340     | 1,013  | 261    | 20    | 2,634                 |         |
| Single-Wide Mobiles   | 249       | 643    | 378    | 175   | 1,445                 |         |
| Double-Wide Mobiles   | 518       | 500    | 139    | 16    | 1,173                 |         |
| Travel Trailers       | 188       | 126    | 70     | 42    | 426                   |         |
| Cabins                | 354       | 398    | 2      | 1     | 755                   |         |
| Total Number of Units | #         | 12,974 | 7,531  | 1,658 | 497                   | 22,660  |
|                       | %         | 57.30% | 33.20% | 7.30% | 2.2%                  | 100.00% |

Source: Mason County Department of Community Development



## V.4 HOUSING NEEDS

### General

Mason County projects a countywide population of 81,102 by the year 2014. The housing impact analysis assesses the effect each alternative has on the need for and distribution of housing units throughout the County. It also evaluates the number of affordable housing units that would be required by each alternative.

TABLE V.4-1 presents the distribution of Mason County's 20-year projected housing unit demand by watershed.

| <b>Watershed</b>           | <b>Urban</b>  | <b>Rural</b> |
|----------------------------|---------------|--------------|
| Case Inlet                 | 4,775         | 910          |
| Chehalis                   | 0             | 229          |
| Skokomish                  | 0             | 339          |
| Oakland Bay                | 5,235         | 1,063        |
| Lower Hood Canal           | 1,531         | 1,217        |
| Totten-Little Skookum      | 0             | 291          |
| West Hood Canal            | 0             | 284          |
| <b>Mason County Totals</b> | <b>11,541</b> | <b>4,332</b> |

Source: Butler & Associates

### Housing Demand

The population in Mason County is expected to increase from 44,300 in 1994 to 81,102 in 2014, (an increase of 36,802). The total number of housing units required in the presently unincorporated region of the County is projected to increase from 22,626 in 1994 to 38,500 in 2014. This represents a demand for an additional 15,874 housing units. Single family units would increase by 9,753, multi-family units would increase by 2,605, and mobile homes would increase by 3,516. A breakdown of the required units by housing type is presented by watershed in TABLE V.4-7.

The Oakland Bay Watershed is expected to account for the largest share (39.7%) of housing unit demand during the planning period, followed closely by the Case Inlet Watershed (35.8%). The Case Inlet Watershed is projected to have the highest share of demand for single family homes (39.1%), while the Oakland Bay Watershed is projected to have the highest share of the demand for both multi-family units (60.4%) and mobile homes (39.4%).

| Watershed             | Single Family |         | Multi-Family |         | Mobile Homes |         | Total  |
|-----------------------|---------------|---------|--------------|---------|--------------|---------|--------|
|                       | Units         | Percent | Units        | Percent | Units        | Percent |        |
| Case Inlet            | 3,814         | 39.11%  | 735          | 28.21%  | 1,136        | 32.31%  | 5,685  |
| Chehalis              | 144           | 1.48%   | 7            | 0.26%   | 78           | 2.21%   | 229    |
| Skokomish             | 254           | 2.60%   | 4            | 0.15%   | 81           | 2.30%   | 339    |
| Oakland Bay           | 3,338         | 34.23%  | 1,575        | 60.44%  | 1,386        | 39.41%  | 6,298  |
| Lower Hood Canal      | 1,810         | 18.56%  | 267          | 10.25%  | 671          | 19.09%  | 2,748  |
| Totten Little Skookum | 192           | 1.97%   | 12           | 0.45%   | 87           | 2.48%   | 291    |
| West Hood Canal       | 201           | 2.06%   | 6            | 0.23%   | 77           | 2.19%   | 284    |
| Total                 | 9,753         | 100.00% | 2,605        | 100.00% | 3,516        | 100.00% | 15,874 |

Source: Butler & Associates

### Housing Affordability

Approximately 36% of the housing demand (5,715 units) is a combination of purchase and rental housing that is affordable to households earning less than 80% of the County's median income. This includes 11% (1,746 units) for *Extremely Low Income* households, 14% (2,222 units) for *Very Low Income* households, and 11% (1,746 units) for *Low Income* households.

# Chapter VI

## CAPITAL FACILITIES

### VI.1 INTRODUCTION

#### Purpose

The Capital Facilities Element (CFE) is one of the six elements required for Mason County's Comprehensive Plan under the Growth Management Act (GMA) (36.70A.070 RCW). This element provides an inventory of existing conditions and publicly owned facilities by quantifying capital facilities currently provided by Mason County or by other jurisdictions operating in the County.

The element also contains goals and policies are listed for all capital facilities inventoried.

The capacity of the inventoried facilities and the level of service they provide is discussed and compared with the County's desired levels of service. The "level of service" is an objective measure of how well services are provided to the public. Deficiencies and improvement needs are identified, improvement costs are estimated, projects are scheduled for 6- and 20-year planning horizons, and a finance plan and possible financing options are discussed.

Besides the City of Shelton, there are other public organizations and special districts which have capital facilities and taxing authority exist in the county. These include the school districts, hospital district, port districts, cemetery district, regional library system, and fire districts. These districts have their own governing body and capital facilities planning. The county coordinated the comprehensive plan with these bodies, through meetings, correspondence, and by providing draft of the comprehensive plan to these districts for comment. A list of these districts is provided below.

#### Organization and Contents

The following section of this element includes a list of goals and policies that provides the direction for future capital facility decisions for the Mason County.

Subsequent sections profile and analyze the seven types of capital facilities in the County, as follows:

- ¥ Wastewater/Sanitary Systems
- ¥ Water Supply Systems
- ¥ Parks and Recreation Facilities
- ¥ County Administration Buildings
- ¥ Police and Criminal Justice Buildings
- ¥ Stormwater Management Facilities
- ¥ Solid Waste Facilities

Each section includes a brief description of the existing systems and public entities that provide the facilities. An assessment of future facility needs is also developed for each category of facility.

### *Facility Needs*

A number of methods can be used to determine Mason County's capital facility needs over the next 6- and 20-year GMA planning periods. As not all capital facilities require the same level of analysis to determine needed improvements, different analytical techniques can be employed to identify facility needs as long as they accomplish the CFE's goal of determining future need for the capital facilities.

While the state Growth Management Act requires that level of service (LOS) standards be established to identify transportation improvements, the CFE can use either LOS or planning level assumptions to determine facility needs (WAC 365-195-315).

The advantage of using LOS standards is the ability to quantify deficiencies and identify improvement needs. The LOS can also be used as a performance standard for concurrency by comparing the service level being provided by a capital facility against the quantitative LOS standard. The service is considered deficient if it does not meet the service level standard that the County has determined it wants to deliver to its residents and users. The LOS approach makes the most sense where there are easily quantifiable facilities or where the state has defined the standards, such as for sewer and water facilities.

The less rigorous planning assumptions approach also has advantages. The capital facilities planning assumptions are not quantitative measures of facility need. Instead, they identify facility improvements based upon the need to serve growth and development anticipated in the land use element. This approach works best where identification of quantitative measures would be difficult, where there are no statewide standards, or where the necessary information or data to apply quantitative measures would be difficult or too time-consuming to obtain. Facilities such as parks and recreation and stormwater facilities might best be handled with this approach.

### **Financing**

Facility needs are identified, and a finance plan is developed, in this CFE for the following County-owned-and-operated facilities.

- Sewer
- Water
- Parks and recreation
- Stormwater

The CFE also includes the results of facility planning efforts completed by the County for County administrative buildings, police and criminal justice facilities, and solid waste facilities. Financing needs and options are included for these facilities as well.

### **Concurrency Management**

One of the Growth Management Act goals, referred to as "concurrency," is the provision of infrastructure facilities and services to serve projected growth at the time such growth occurs, or within a reasonable time afterwards. This starts with identifying specific facility needs using the strategies previously discussed. Another important aspect of concurrency is the ability to monitor the development of infrastructure improvements to assess whether they keep pace with approved development.

Concurrency management, as it is called, involves a set of land use and permit approval processes designed to ensure that facilities and services keep pace with growth. In some cases, development codes could be enacted to require that specific LOS standards be promulgated through the development of identified improvements.

In other cases, restrictions to growth may be imposed until appropriate service standards for capital facilities are achieved. This might be the approach required for unincorporated areas within the City of Shelton Urban Growth Area (UGA), for instance. Land use applications for certain development proposals, in areas targeted for future growth, could have their approvals withheld pending concomitant development of appropriate urban service level facilities (e.g., sewer facilities). The municipality would be responsible for managing the concurrent development of these urban services. This can be accomplished by requiring that individual developers fund and implement needed improvements. Under this arrangement, the final tenant (e.g., home buyer or building purchaser) would ultimately pay for the new facilities through a higher initial purchase price or through a periodic assessment.

Computer software now being developed can be used by county and municipal jurisdictions to track, update, and compare permit approvals and subsequent development with the availability of infrastructure resources. This approach provides jurisdictions responsible for upholding the concurrency of their comprehensive plans with a continuous update of the level of approved development and the availability of appropriate levels of urban and rural services.

## **VI.2 GOALS AND POLICIES**

### **Introduction**

Mason County's Capital Facilities Element is guided by goals and policies for the preferred service philosophy of the County. Goals and policies are required as part of the Capital Facilities Element (RCW 36.70A) of the overall GMA Comprehensive Plan.

### **Development Process**

Mason County evaluated its existing facilities, its future needs, its costs, and the types and levels of services which it should require or provide in the county. The goals and policies listed herein are the result of this process. Some items have been slightly modified from their original format to more directly address issues relevant to Mason County. Policies listed under General Capital Facilities apply to all facilities addressed in the CFE. Facility-specific policies apply only to those facilities.

### **General Capital Facilities Policies**

#### **Land Use**

Manage land use change and develop County facilities and services in a manner that directs and controls land use patterns and intensities.

- CF-101      Establish urban services that shall require concurrency under the GMA.
- CF-102      Ensure that future development bears a fair share of capital improvement costs necessitated by the development. The County shall reserve the right to collect mitigation impact fees from new development in order to achieve and maintain adopted level of service standards.
- CF-103      Extend facilities and services in a manner consistent with the following County-wide policies previously adopted in 1992 (see Section II-3).
- CF-104      County facilities shall be provided at urban or rural levels of service, as defined in the Capital Facilities Element of the Comprehensive Plan.
- CF-105      Develop capital facilities within established urban growth areas (UGAs) to conform to urban development standards.

- CF-106      Develop capital facilities within UGAs that are coordinated and phased through inter-jurisdictional agreements.
- CF-107      Coordinate and support other capital facility plans from special purpose districts, cities and towns, and other noncounty facility providers that are consistent with this and other chapters of the Comprehensive Plan.

***Concurrency***

Establish standards for levels of service for County public facilities, and ensure that necessary facilities are available at the time new development impacts existing systems.

- CF-201      After adoption of this Comprehensive Plan and subsequent development regulations, level of service standards for each type of public facility shall apply to development permits issued by Mason County.
- CF-202      Adopt level of service standards recommended in this plan for wastewater/sanitary systems, water supply systems, parks and recreation facilities, County administrative services, police and criminal justice services, stormwater management facilities, and solid waste facilities.
- CF-203      Public facilities needed to support development shall be available concurrent with the impacts of development. Follow procedures for attaining concurrency for County public facilities outlined in this plan.
- CF-204      Phase in concurrency requirements that are triggered by future proposed development and based on established levels of service for all County facilities, including county and state roads.

***Finance***

Develop a six-year finance plan for capital facilities that meets the recommendations of the comprehensive plan, achieves the County's levels of service, and is financially attainable.

- CF-301      Adopt a six-year capital improvement program that identifies projects, outlines a schedule, and designates realistic funding sources for all County capital facility projects.
- CF-302      For all capital facility projects, evaluate alternatives to programs, purpose, and service as a method to reduce capital facilities and associated operating costs.



- CF-303      Develop a public process that informs, notifies and allows participation on all capital facility proposals.

*Essential Public Facilities*

Facilitate the siting of essential public facilities sponsored by public or private entities within unincorporated areas when appropriate.

- CF-401      Identify and allow for the siting of essential public facilities according to procedures established in this plan. Essential public facilities shall include group homes, state and local correctional facilities, substance abuse facilities, and mental health facilities. Work cooperatively with the City of Shelton and neighboring counties in the siting of public facilities of regional importance. Work cooperatively with state agencies to ensure that the essential public facilities meet existing state laws and regulations which have specific siting and permitting requirements.
- CF-402      Review proposed development regulations to ensure they allow for the siting of essential public facilities consistent with the goals, policies and procedures established in this plan.

*Facility-Specific Policies*

*Wastewater/Sanitary Sewer*

Assure that wastewater facilities necessary to carry out comprehensive plan are available when needed, and finance these facilities in an economic, efficient, and equitable manner.

- CF-501      Maintain a safe, efficient and cost-effective sewage collection and treatment system.
- CF-502      Require all new development within designated urban and rural activity centers and urban growth areas to connect to existing or proposed sewer systems.
- CF-503      Allow existing single-family homes with septic systems to continue using septic systems that conform to existing standards. Replace deficient septic systems in a timely fashion.
- CF-504      Provide a septic system management and education program to protect groundwater quality and promote the proper care and use of septic systems.

- CF-505      Eliminate any unlicensed point or nonpoint pollution sources associated with sewage transport and disposal.
- CF-506      Monitor infiltration and inflow in major public systems through routine inspection. Conduct improvements to limit and reduce current infiltration and inflow.
- CF-507      Encourage innovative approaches to onsite wastewater treatment.

***Water Supply***

Assure that water facilities necessary to carry out the comprehensive plan are available when needed, and finance those facilities in an economic, efficient and equitable manner.

- CF-601      Ensure that the supply and distribution of water in public systems is consistent with the Mason County Comprehensive Plan.
- CF-602      Ensure that future water system expansions and service extensions are provided in a manner consistent with the Land Use Element of the Comprehensive Plan. Where possible, those uses designated by the Land Use Element to require fire flow should be serviced by a Class A water system.

***Parks and Recreation***

Achieve level of service targets for park land and facilities that support County objectives and priorities.

- CF-701      Identify and preserve significant geographic and environmental features and other characteristics that reflect Mason County's natural heritage.
- CF-702      Increase park development within urban areas and develop a comprehensive system of multi-purpose trails throughout the County.
- CF-703      Develop and adopt a realistic long-range schedule for park management, maintenance, and operation. Adopt a workable County capital improvement program (CIP) every six years, to be amended as needed.
- CF-704      Update current 1991 Comprehensive Parks, Recreation and Open Space Plan in 1996 to project future demands and needs; define acquisition, leases, and development opportunities; draft financial implementation

programs; and be eligible for state and federal grants.

***Administrative Services***

Develop and implement a long-range program of expansion and improvement to accommodate the County's projected administrative staffing requirements.

CF-801        Annually review the long-range facilities plan for buildings and space improvements to efficiently provide work space for projected staffing levels.

***Police and Criminal Justice***

Develop and implement a coordinated facility program among the departments and agencies that provide the County's police and criminal justice services.

CF-901        Complete a strategic long-range plan for the effective and coordinated operation and management of all County police and criminal justice functions, including a full analysis of all space and facility needs required to support the plan.

CF-902        Explore alternative funding sources for law and justice facilities and operations, including contracts for service with other agencies and joint use of facilities.

***Stormwater Management***

Create a facilities strategy which preserves and supplements necessary natural drainage processes and other natural systems to minimize runoff impacts from development.

CF-1001       Investigate needs and means for implementing and maintaining a safe and cost-effective storm and stormwater collection system in identified problem areas.

CF-1002       Protect surface and ground water quality through state and local controls and public education on water quality issues.

CF-1003       Design stormwater systems to meet the approval standards prescribed in the Mason County Stormwater Management Ordinance.

CF-1004       Protect physical and biological integrity of wetlands, streams, wildlife

habitat, and other identified critical areas.

- CF-1005 Maintain water quality within all Shoreline Management Act waterfront areas through careful design, operation, construction, and placement of public facilities.
- CF-1006 Carefully control development in areas with steep slopes where surface water runoff can create unstable conditions. Maintain natural vegetation for slope stabilization.
- CF-1007 Public facility development shall minimize impacts to shorelines, preserving the natural stream environments where possible.
- CF-1008 Comply with the National Pollutant Discharge Elimination System (NPDES) and state regulations.
- CF-1009 Under no circumstances should hazardous waste be allowed to contaminate the groundwater, surface water, or sewer systems of Mason County. Dispose of hazardous wastes only in locations designated for that purpose.

***Solid Waste***

Ensure that garbage collection and recycling needs of the County are met in an efficient and cost-effective manner.

- CF-1101 Manage a cost-effective and responsive solid waste collection system.
- CF-1102 Manage solid waste collection methods to minimize litter, neighborhood disruption, and degradation of the environment.
- CF-1103 Promote the recycling of solid waste materials through waste reduction and source separation. Develop educational materials on recycling and other waste reduction methods.
- CF-1104 Work cooperatively with cities, the Washington State Department of Ecology, and the Mason County Health District to achieve an environmentally safe and cost-effective solution to the disposal of catch basin wastes and street sweepings.

### VI.3 WASTEWATER/SANITARY SEWER

#### System Description

Wastewater in the County is handled through a variety of mechanisms. Mason County owns and operates two sewage treatment plants that serve local communities. The City of Shelton has its own municipal treatment system. The Corrections Center near Shelton and the community of Alderbrook operate their own small sewage treatment plants. The locations of these treatment facilities are shown in FIGURE VI.3-1.

Most of the County is unsewered and depends on onsite treatment facilities for the treatment of wastewater. A few large onsite systems serve a business or multiple residences, but most domestic sewage is treated by single-residence onsite systems.

A review of many of these small individual systems is being conducted by two clean water districts that serve local areas. The Lower Hood Canal Clean Water District was formed in January 1994. As of March 1995, a total of 1,659 systems were inspected, 194 failures were detected, and 62 systems were repaired. The Totten/Little Skookum Clean Water District, formed in July 1993, has completed 1,145 system surveys, detected 97 failures, and repaired 54 systems (Mark Tompkins, Mason County Water Quality Program Manager, 1995, personal communication).

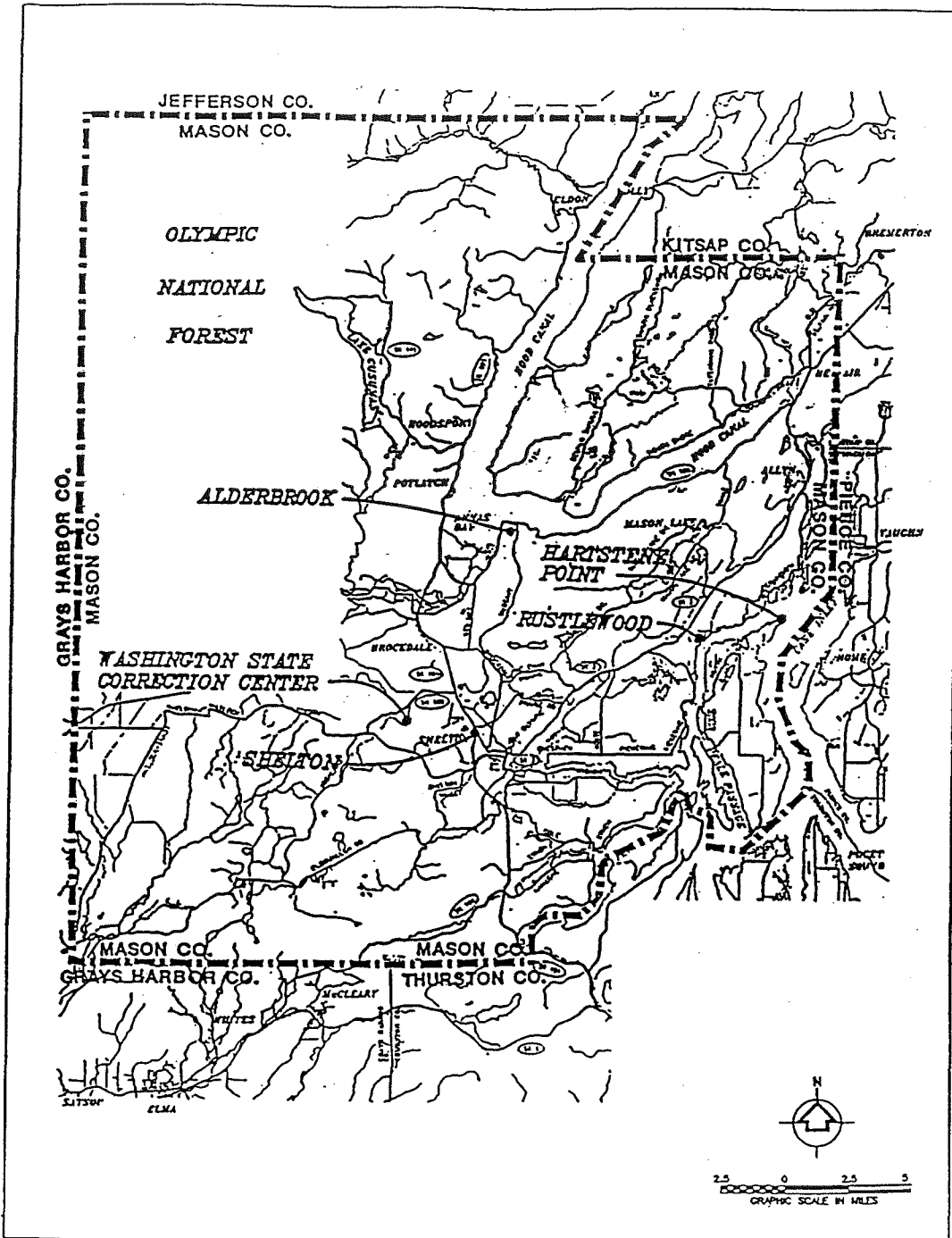
#### Inventory

##### *County Systems*

The County owns and operates Hartstene Pointe Treatment Plant and the Rustlewood Treatment Plant. Both facilities provide secondary treatment. Secondary treatment removes 85 percent of the biological oxygen demand (BOD) and volatile solids. Sludge from the treatment process is collected and taken to a site in Mason County where it is lime stabilized by a private company (Bio-Recycling) and land applied. Most of the material accepted by the company is septage from pumping out onsite septic tanks. The plant is located at Webb Hill and applied at the site. System components for the two plants are detailed in TABLE VI.3-1.

*Hartstene Pointe*

The Hartstene Pointe facility, recently upgraded to secondary treatment, serves the Hartstene Point community. The facility is currently in a one-year certification process that started in July 1994. The treated effluent is discharged to Case Inlet.



**KCM**

MASON COUNTY CFE  
FACILITIES INVENTORY

FIGURE 3-1  
SEWER TREATMENT FACILITIES

VI.3-4

**TABLE VI.3-1. Public Sewer Systems**

| Name                               | Population | Average Winter Flow (gpd x 1,000) | Average Summer Flow (gpd x 1,000) | Design Flow (gpd x 1,000) | Service Area (acres) | Treatment    | Discharge         | Sewage Lift Stations | Motor             | Discharge Capacity/ THD | Collection System Diameter (inches) | Total Length (feet) | Man-holes |
|------------------------------------|------------|-----------------------------------|-----------------------------------|---------------------------|----------------------|--------------|-------------------|----------------------|-------------------|-------------------------|-------------------------------------|---------------------|-----------|
| Hartstene Pointe                   | 680        | 100                               | 50                                | 185                       | 232                  | County WWTP  | Case Inlet        | 2                    | 5 hp, 1,735 rpm   | 75 gpm @ 45 feet        | 10                                  | 500                 | 113       |
|                                    |            |                                   |                                   |                           |                      |              |                   | 5                    | 5 hp, 1,735 rpm   | 75 gpm @ 33 feet        | 8                                   | 21,100              |           |
|                                    |            |                                   |                                   |                           |                      |              |                   | 8                    | 7.5 hp, 1,750 rpm | 75 gpm @ 66 feet        | 6                                   | 18,300              |           |
|                                    |            |                                   |                                   |                           |                      |              |                   |                      |                   |                         | 4                                   | 20,300              |           |
| Alderbrook                         |            |                                   |                                   | 30                        |                      | Private WWTP |                   | 1                    |                   |                         |                                     |                     |           |
| Rustlewood                         |            | 65                                | 15-30                             | 50                        |                      | County WWTP  | Pickering Passage | 1                    | 1.5 hp, 1,750 rpm | 125 gpm @ 20 feet       | 8                                   | 9,200 approx        | 41        |
|                                    |            |                                   |                                   |                           |                      |              |                   | 2                    | 3 hp, 3,450 rpm   | 40 gpm @ 80 feet        |                                     |                     |           |
|                                    |            |                                   |                                   |                           |                      |              |                   | 3                    | 5 hp, 3,450 rpm   | 60 gpm @ 120 feet       |                                     |                     |           |
| Shelton                            |            | 3,000 - 3,500                     | 2,000                             | 4,000                     |                      | City WWTP    | Oakland Bay       |                      |                   |                         |                                     |                     |           |
| Washington State Correction Center |            | 160 - 200                         |                                   | 80                        |                      | State WWTP   | Drain Field       |                      |                   |                         |                                     |                     |           |



*Rustlewood*

The Rustlewood facility is a secondary treatment facility that serves the Rustlewood community and a small number of lots to the south. The clarified and disinfected effluent is discharged to Pickering Passage.

*Municipal Systems*

*City of Shelton*

The City of Shelton treatment plant is a secondary facility that serves the City of Shelton. The current design flow is 4.0 million gallons per day (mgd). Average dry and wet weather flows are 2.0 mgd and 3.0 to 3.5 mgd, respectively. The peak wet-weather flow, the flow rate that approximates the impact of a 100-year storm event, is 8.0 mgd. In this situation, the plant exceeds design flow, but still has the capability to treat all effluent it receives.

The facility provides extended aeration to remove 85 percent of BOD. The processed waste is treated by clarifiers and sludge digesters before the sludge is removed and transported for disposal. The clarified effluent is disinfected with chlorine and discharged into Oakland Bay.

*Washington State Corrections Center*

A small onsite secondary sewage treatment plant, operated by the Washington State Department of Corrections, is located at the Washington State Corrections Center west of Shelton. The treated effluent is discharged into the ground through several drain fields. Sludge from this facility is land applied on grassland and nonmerchantable timber within the Corrections Center's property. The design flow is 80,000 gallons per day (gpd). The system is currently overloaded and operating at twice its design capacity rating. Average flows are calculated to be 160,000 to 200,000 gpd.

System improvements are currently being designed by Gray and Osborne. The capacity of the system will be increased to 400,000 gpd.

***Alderbrook Sanitary System (Private)***

The only private sanitary sewer treatment system in Mason County is the Alderbrook Sewage Treatment System. The facility includes a collection system for its resort facilities and a recently upgraded secondary treatment plant. The facility employs an extended aeration sludge system and has a capacity of 30,000 gpd. No septage is accepted at the treatment facility.

***Large Onsite Systems***

Large onsite systems (3,500-14,000 gpd) such as commercial septic systems and community drain fields are permitted and monitored by the Washington State Department of Health (DOH). Some of the larger onsite systems in Mason County monitored by DOH are listed in TABLE VI.3-2.

| TABLE VI.3-2. Larger Onsite Systems |                             |
|-------------------------------------|-----------------------------|
| System                              | Design Flow (gpd)           |
| <b>Currently Operating</b>          |                             |
| Belfair Stockmarket Foods           | 5,040                       |
| Mission Creek Youth Camp            | 10,000                      |
| Sand Hill Elementary School         | 4,850                       |
| Park Place Market and RV Park       | Unknown                     |
| Fawn Lake Community System          | Unknown                     |
| Allyn Inn                           | Unknown                     |
| <b>Proposed Projects</b>            |                             |
| Squaxin Island Casino               | 14,000                      |
| Potlatch State Park (Repair)        | In preliminary design stage |

***Facility Needs***

Mason County is currently under a state consent order with respect to sanitary sewer collection within its jurisdiction. Improvements to both onsite sewage management and sewer collection and treatment systems are required by DOH.

The LOS for wastewater facilities owned by the County includes the completion of planned treatment plant and infiltration/inflow (I/I) improvements. Costs for these improvements are detailed in Section VI.10, Finance Plan. In addition, planning-level costs are developed for additional facilities in potential rural activity centers and urban areas, such as Belfair, Hoodspout, and Allyn, in order to meet concurrency requirements. The

County's role in facilitating innovative onsite treatment systems for unsewered areas is also defined in the Finance Plan.



## VI.4 WATER SUPPLY SYSTEMS

### System Description

There is, in general, an abundance of good-quality drinking water in Mason County. Specific concerns regarding the supply of water are discussed in the Land Use Element.

The majority of homes in the County are served by single-connection onsite wells. Approximately 30 percent of County residents are served by public or large private water systems.

Mason County operates three water systems. Other major water purveyors include Belfair Water District No. 1, Mason County Public Utility District (PUD) No. 1, and a variety of community and private water systems. Publicly owned water systems are summarized in TABLE VI.4-1.

### Inventory

#### *County-Owned Facilities*

Mason County's three water systems are the Hartstene Point and Rustlewood facilities (combination water and sewer treatment utilities) and the Beards Cove system (water only).

#### *Hartstene Pointe*

The Hartstene Pointe system provides water to the Hartstene Pointe community. The system is supplied by two wells having an approximate combined capacity of 195 gallons per minute (gpm). The system is currently approved for 347 connections and serves an approximate population of 860 with 110 full time equivalent (FTE) connections (i.e., residential equivalents). Well No. 1 is now in the process of being upgraded to allow connection approval for 540, the total number of lots.

#### *Rustlewood*

The Rustlewood system provides water to the Rustlewood community. The system is supplied by three wells having an approximate combined capacity of 165 gpm. The system also has a storage capacity of 65,000 gallons. The system is approved for 161 connections and serves an approximate population of 216 with 97 FTE connections.

*Beards Cove*

The Beards Cove system provides water to the local community. The system is supplied by three permanent wells with a combined capacity of 385 gpm. In addition, the system has approximately 400,000 gallons of water storage. The Beards Cove system is approved for 522 connections and serves an approximate population of 520 with 320 FTE connections.

| TABLE VI.4-1: Publicly Owned Water Systems |                     |                       |                                    |                   |                      |                     |
|--|---------------------|-----------------------|------------------------------------|-------------------|----------------------|---------------------|
| Owner/Operator                             | Number of Customers | Number of Connections | Million Gallons Delivered per Year | Storage (gallons) | Total Capacity (gpm) | Water Source        |
| County-owned facilities                    |                     |                       |                                    |                   |                      |                     |
| Hartstene Point                            | 860                 | 110                   |                                    |                   | 195                  | 2 wells             |
| Rustlewood                                 | 216                 | 97                    |                                    | 65,000            | 165                  | 3 wells             |
| Beards Cove                                | 520                 | 320                   |                                    | 400,000           | 385                  | 3 wells             |
| Belfair Water Dist No. 1                   | 1,150               |                       |                                    | 250,000           | 300                  | 2 artesian wells    |
| Mason County PUD No. 1                     |                     |                       |                                    |                   |                      |                     |
| Union                                      | 290                 | 144                   |                                    |                   | 210                  | 1 well <sup>b</sup> |
| Highland Park                              | 75                  | 40 <sup>c</sup>       |                                    | 23,000            | 100                  | 1 well              |
| City of Shelton                            | 7,620               | 3,410                 |                                    | 1,845,000         | 8,475 <sup>a</sup>   | 3 wells, 1 spring   |
| Port of Shelton                            |                     |                       |                                    |                   |                      |                     |
| Sanderson Field                            |                     |                       | 12.2 (1993)                        | 675,000           | 770                  | 2 wells             |
| Johns Prairie Industrial                   |                     |                       | 5 (1993)                           | 550,000           | 320                  | 2 wells             |
| Public Community Systems                   |                     |                       |                                    |                   |                      |                     |
| Maggie Lake                                | 108                 | 49                    |                                    | 86,000            | 400                  | 2 wells             |
| Trails End                                 | 233                 | 122                   |                                    | 130,000           | 70                   | 2 wells             |
| Washington State Correction Center         | 1,850               |                       |                                    |                   | 1,125 <sup>d</sup>   | 2 wells             |

## NOTES:

- City has the capacity to withdrawal 5,000 gpm from the spring, however, City water rights allow no withdrawal in excess of 2,244 gpm.
- PUD No. 1 has an additional temporary well with a capacity of 35 gpm.
- PUD No. 1 has requested from the DOH an increase in the number of allowable connections from 40 to 67.
- The system also has two emergency wells with a combined capacity of 323 gpm.

### *Belfair Water District No. 1*

Belfair Water District No. 1 is at the end of Hood Canal and serves the local community of Belfair. The system's water is supplied from two artesian wells located along SR-3, with a combined capacity of 300 gpm. Two booster pumps take the water from the wellhead and distribute it to two sets of storage tanks. The North Tank site is located at the northern end of the system approximately 0.5 mile uphill (east) of SR-3. The South Tank site is located on Razor Road approximately 0.75 mile from SR-106. Each site contains two tanks with a total storage capacity of approximately 127,000 gallons per site.

The district serves approximately 1,150 people with 438 connections. The Hummingbird Lane well, which has been drilled but is not yet in active service, is expected to provide an additional 300 gpm when it is added to the system later in 1995. This addition will increase the number of allowable connections from 540 to 1,180.

### *Mason County PUD No. 1*

PUD No. 1 operates the Union water system and the recently acquired Highland Park water system. PUD No. 1 has recently taken over day-to-day operations of five local water utilities. These systems, which are still privately owned by Evergreen Land and Water, Inc., serve a total of 225 customers. This action was ordered by the Thurston County Superior Court to bring these systems into compliance with state drinking water standards.

#### *Union*

The Union water system provides water to the local community of Union and is supplied by one permanent well with a capacity of 210 gpm and one temporary well with a capacity of 35 gpm. The system is approved for 205 connections and currently serves a population of approximately 290 with 144 connections.

#### *Highland Park*

The Highland Park community water system is supplied by one well with a capacity of 100 gpm, and a recently constructed tank now provides 23,000 gallons of storage. The system serves a population of approximately 75, with 40 connections. PUD No. 1 has requested from DOH an increase in the number of allowable connections from the 40 currently authorized to 67.

### *City of Shelton*

The Shelton water system serves the City of Shelton and is supplied by three wells and a spring. The wells provide a combined capacity of approximately 3,475 gpm. The spring flow varies from 5,000 gpm in the winter to 500 gpm in the summer, however the City water right allows no withdrawal in excess of 2,244 gpm.

The system has seven pumping stations and four storage tanks for a combined storage capacity of approximately 1,845,000 gallons. The system serves a population of approximately 7,620 with 3,410 connections. The 1993 City of Shelton Water Comprehensive Plan (Draft) projected that peak day demand will exceed present source capacity in 1996. The plan made a number of recommendations to assure that the City system will be able to accommodate future growth. Recommendations include implementation of a conservation program and reevaluating the current timetable for adding new supply sources.

### *Port of Shelton*

The Port of Shelton operates two water systems, one at Sanderson Field and one at Johns Prairie Industrial. These systems primarily supply commercial tenants and port facilities at the two complexes.

#### *Sanderson Field*

The system at Sanderson Field has two wells with a combined capacity of 770 gpm. The system also has two storage tanks providing a total of 675,000 gallons of water storage. The Mason County Fair is the largest water customer supplied by this system, using nearly 4.8 of the 12.2 million gallons provided in 1993.

#### *Johns Prairie Industrial*

The water system at Johns Prairie Industrial has two wells with capacities of 240 and 80 gpm, respectively. The system also has 550,000 gallons of water storage capacity provided by a single storage tank. The Mason County Recreation Area (MCRA) park is the largest water customer supplied by this system, using over half of the 5 million gallons provided in 1993. The port plans to replace the smaller well pump with a larger capacity pump in the near future, which will increase to 250 gpm.



### *Public Residential Community Systems*

Two other public residential community water systems are operating in Mason County, the Maggie Lake Water District and the Trails End Water District.

#### *Maggie Lake Water District*

The Maggie Lake water system is supplied by two wells with a combined capacity of 400 gpm and reservoir storage of 86,000 gallons. The system serves approximately 108 people through 49 connections.

#### *Trails End Water District*

The Trails End water system is supplied by two wells with a combined capacity of 70 gpm and reservoir storage of 130,000 gallons. The system serves approximately 233 people, with 122 connections.

#### *Washington State Corrections Center*

The water system at the Washington State Corrections Center west of Shelton is operated by the Washington State Department of Corrections. The system is supplied by two permanent wells with a combined capacity of 1,125 gpm. Two emergency wells provide a combined capacity of 323 gpm. According to DOH records, the system serves approximately 1,850 people.

### *Large Non-government Systems*

A number of large water utilities in the County are not owned or operated by a government entity. The DOH has 486 registered water systems in Mason County, of which approximately 470 are privately owned and operated. Private systems serving 200 or more people are shown in TABLE VI.4-2.

### *Facility Needs*

Mason County has no plans for developing more water systems beyond the three already owned by the County (the Hartstene Pointe and Rustlewood facilities and Beards Cove).

The County regularly receives requests from smaller independent water systems for some kind of County management. However, the County is in no position to take on additional

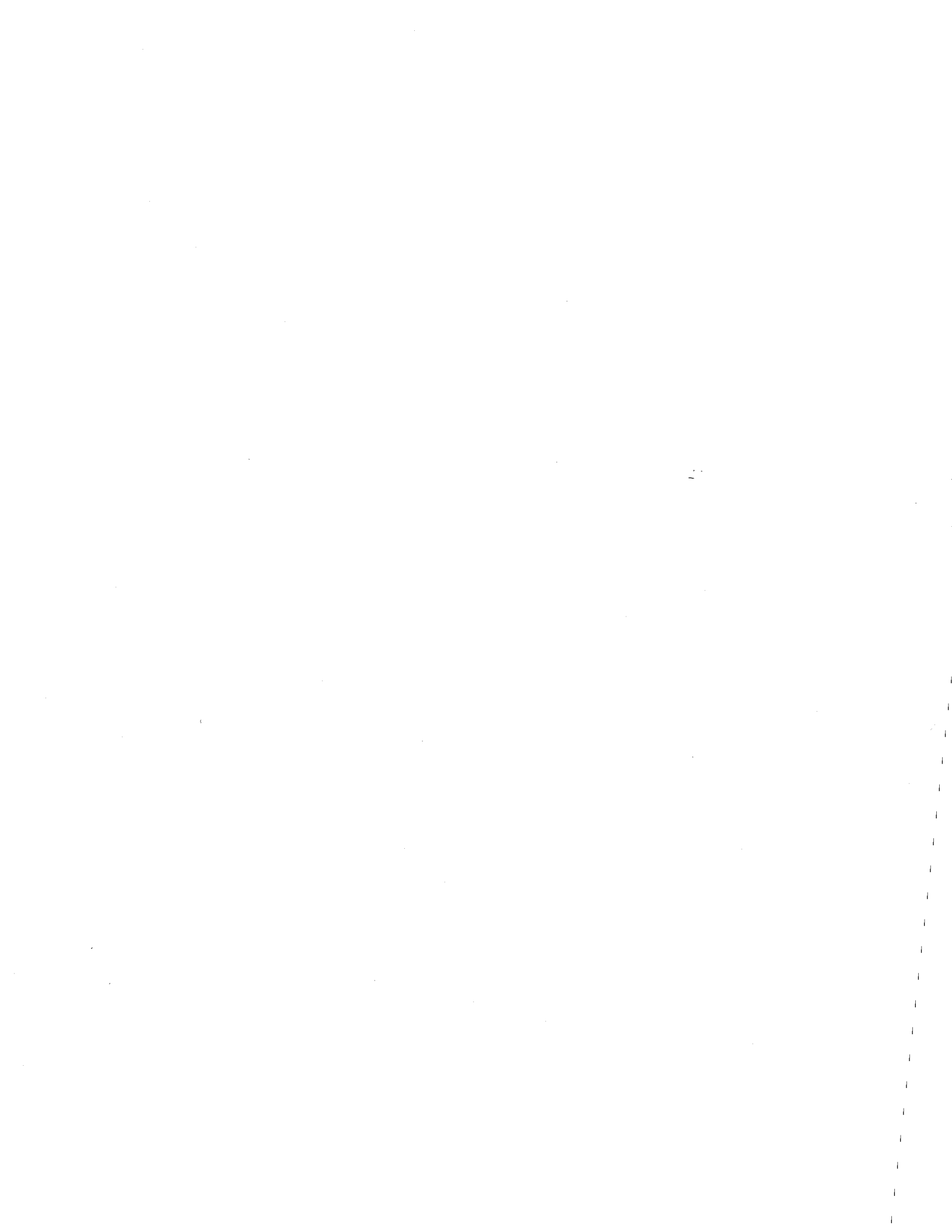
systems. Some requests are from subdivisions where less than 20 percent of the lots are occupied. The financial burden of developing a system in this type of situation would be impossible for individual home owners to bear, and the County is currently unable to subsidize such systems.

Satellite management agencies (SMAs) are required by the state for all systems serving two or more connections. The County is temporarily on the state DOH list of approved SMAs until the end of 1995. PUD No. 1 has expressed an active interest in taking over other systems that request such action and is being added to the list, as is Arcadia Well Development, a private company.

In addition, a particular problem for systems of 30 to 45 connections and other new developments in rural areas (e.g., fringe development associated with the new Squaxin Island Tribal Casino) is the lack of water pressure for fire flows. The County Fire Marshal's office is currently developing an LOS for fire flows.

| <b>TABLE VI.4-2: Privately Owned Public Water Systems</b> |                          |
|---|--------------------------|
| <b>Water System</b>                                       | <b>Population Served</b> |
| Alderbrook Water Company                                  | 390                      |
| Belwood LP #1   | 250                      |
| Collins Lake  | 208                      |
| Fawn Lake   | 450                      |
| Hoodsport   | 315                      |
| Lake Cushman Division 1                                   | 368                      |
| Lake Cushman Division 3                                   | 798                      |
| Lake Cushman Division 5                                   | 1,703                    |
| Lake Cushman Division 10                                  | 565                      |
| Lake Limerick   | 859                      |
| Lakeland Village  | 1,164                    |
| Lynch Cove  | 200                      |
| Oak Park Water Company                                    | 612                      |
| Riverhill   | 200                      |
| Squaxin Island Tribal Housing                             | 250                      |
| Tahuya River Valley                                       | 270                      |
| Timberlakes Club  | 997                      |
| Treasure Island Country Club                              | 200-500                  |
| Twanoh Fall Beach Club                                    | 625                      |
| View Ridge Heights  | 365                      |

The County is now completing an upgrade to Well No. 1 at Hartstene Pointe. Aside from a need to increase its operations and maintenance budget, however, no major capital facility improvements are contemplated within the next six years. Financing needs in this regard are detailed in Section VI.10, Finance Plan. The State DOH supports a longer range strategy of expanding the Beards Cove system to eventually connect with the Belfair system (Orr, S., 1995, personal communication).



## **VI.5 PARKS AND RECREATION FACILITIES**

### **System Description**

Recreational opportunities in Mason County include parks for day-use activities and overnight camping; fresh and salt water areas for boating and other water sports; facilities and equipment for sports and play activities; and wilderness areas and other open spaces for hiking, hunting, and horseback riding.

Existing parks and recreation facilities in Mason County are available through a variety of public and private entities. Federal and state facilities include camping, boating, and day-use parks. The County-owned park system includes day-use and water access facilities, sports fields, and related recreational areas. Other agencies providing park and recreational resources include municipalities, port districts, and public schools. Some private recreational facilities are open to the public as well.

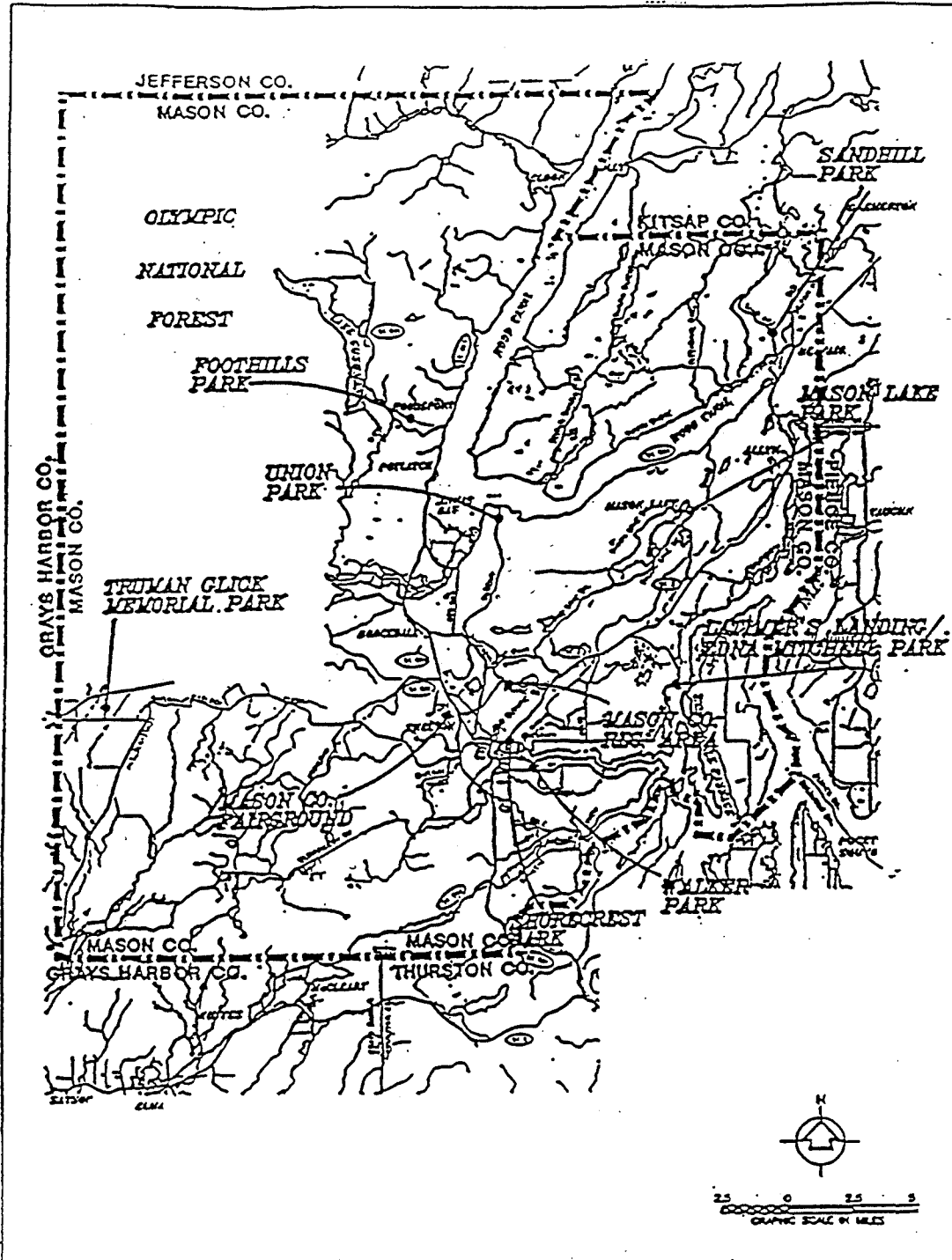
The County currently maintains 10 community parks, 4 saltwater access parks, 1 freshwater access park, and 5 sports and recreation parks (see FIGURE VI.5-1). The conditions of these facilities vary. The heavy use and demand from both County and non-County residents are particularly high during the summer.

In recent years, parks operated by Mason County have received substantial increases in visitors. Total visits increased 52 percent from 1992 to 1993, from 180,600 to 274,500 annual visits. Nearly half of the total increase was at Sandhill Park, a sports park in Belfair. Sandhill's visitation increased by 230 percent, from 20,300 to 67,000 visits, due in large part to increased use of the park by local baseball, softball, and soccer leagues.

There are no facilities for overnight camping or hiking throughout the Mason County Parks system. The 1991 Parks, Recreation and Open Space Comprehensive Plan labeled two sites that should be developed into overnight camping facilities. They are Truman Glick Memorial Park and Mason Lake Park. The land is available and designated for this capital improvement. These projects await funding.

### **Inventory**

An inventory of all Mason County parks including federal, state, private, and County-owned parks is listed in TABLE VI.5-1. Also included are the number of acres and amenities available at each park location. The locations of parks and recreational facilities operated by the County are shown on FIGURE VI.5-1.



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MASON COUNTY CFE FACILITIES INVENTORY

FIGURE 5-1  
MASON CO. PARKS AND RECREATION DEPARTMENT

| TABLE VI.5-1. Inventory of Parks |                               |   |
|----------------------------------|-------------------------------|---|
| Name of Facility                 | Acres                         | Amenities Available   |
| <b>Washington State Parks</b>    |                               |   |
| Belfair State Park               | 62.77 (3,780 ft tidelands)    | Camping: 134 tent sites, 47 utility sites, primitive sites, wheelchair accessible trails, trailer dump facility.  |
| Hartstene Island State Park      | 310 (3,100 ft tidelands)      | Currently undeveloped. Future development plans include: day use area; walking/hiking trails; 50 camp sites.  |
| Harvey Rendsland Jiggs Lake      | 8                             | Currently undeveloped; 1,905 feet waterfront.   |
| Hoodspout Trails                 | 80                            | Natural area with trails.   |
| Hope Island                      | 106<br>(8,540 ft tidelands)   | Currently undeveloped. Future development plans include: trails; picnic tables; rest rooms; 6 to 8 camp sites; group camping for 150 people. Washington Water Trails site.  |
| Jarrel Cove                      | 42.6<br>(3,500 ft tidelands)  | Camping: 20 tent sites; group site for maximum of 64 people, 2 picnic shelters, facilities for handicapped, wheelchair accessible trails, marine pump out station, 2 docks providing 500 feet of moorage, 14 mooring buoys. Fee required. |
| Lake Cushman                     | 602.9                         | Camping: 51 tent sites, 30 utility sites, 2 primitive walk-in sites, group site with cooking shelter for maximum of 56 people, rest rooms with showers; facilities for handicapped, boat launch, trailer dump facility.                   |
| Lake Isabella                    | 193.75                        | Currently undeveloped. Future development plans include: full-service park, camping, picnic area, lake-front beach, rest rooms. Plans will be completed in the next 10 to 20 years.   |
| Lilliwaup Tide Land              | (4,100 ft tidelands)          | Tidelands for public use. No facilities. Small shoulder area for parking.   |
| McMicken Island                  | 11.45<br>(1,660 ft tidelands) | Currently undeveloped. Boater destination; clamming. Plans to develop include: 5 to 8 camping sites, composting toilet.   |

| TABLE VI.5-1. Inventory of Parks (Continued)            |                                 |   |
|---|---------------------------------|---|
| Name of Facility  | Acres                           | Amenities Available   |
| <b>Washington State Parks (Continued)</b>               |                                 |   |
| Potlatch State Park                                     | 56.95<br>(9,570 ft tidelands)   | Camping: 17 tent sites; 18 utility sites; primitive sites. Underwater park, trailer dump facilities.            |
| Schafer State Park                                      | 119                             | Camping: 47 tent sites, 6 utility sites, primitive sites, day use group area, trailer dump facilities           |
| Squaxin Island  | 31.4                            | Closed indefinitely.  |
| Stretch Point   | 4.2<br>(610 ft tidelands)       | Natural area. Day use only; 5 mooring buoys. No plans for future development.                                   |
| Twanoh State Park                                       | 182<br>(3,167 ft tideland)      | Camping: 30 tent sites, 9 utility sites, primitive sites, handicapped facilities, wheelchair accessible trails. |
| <b>Total</b>  | 1811.02<br>(38,027 ft tideland) |   |
| <b>Washington State Department of Fish and Wildlife</b> |                                 |   |
| Aldrich Lake  | 0.5                             | Unpaved boat launch, parking for 15 vehicles.   |
| Benson Lake   | 78.8                            | Boat launch, beach access, parking for 100 vehicles.  |
| Cady Lake   | 1.6                             | Unpaved boat launch, parking for 10 vehicles.   |
| Clara Lake  | 9                               | Unpaved boat launch, parking for 30 vehicles.   |
| Devereaux Lake  | 1.3                             | Boat launch, beach access, parking for 40 vehicles.   |
| Haven Lake  | 4.1                             | Unpaved boat launch, parking for 50 vehicles.   |
| Island Lake access                                      | 1                               | Freshwater boat launch, toilets.  |
| Isabella Lake   | 1.6                             | Boat launch, parking for 20 vehicles.   |
| Lake Kokanee  | 44                              | Boat Launch, parking for 100 vehicles.  |
| Lake Limerick   | 0.5                             | Boat launch, beach access, parking for 30 vehicles.   |
| Lost Lake   | 1.3                             | Boat launch, parking for 40 vehicles.   |
| Maggie Lake   | 0.4                             | Unpaved boat launch, parking for 15 vehicles.   |
| Mason Lake  |                                 | Boat launch, parking for 30 vehicles.   |



| TABLE VI.5-1. Inventory of Parks (Continued)                        |                 |   |
|---|-----------------|---|
| Name of Facility  | Acres           | Amenities Available   |
| <b>Washington State Department of Fish and Wildlife (Continued)</b> |                 |   |
| Panhandle Lake  | 20              | Undeveloped.  |
| Panther Lake  | 3.8             | Unpaved boat launch, parking for 30 vehicles.   |
| Phillips Lake   | 1               | Boat launch, beach access, parking for 40 vehicles.   |
| Pricket Lake  | 0.5             | Unpaved boat launch, parking for 30 vehicles.   |
| Skokomish River   | 64              | 30.6 feet of riverfront, shore access, parking for 20 vehicles.   |
| Spencer Lake  | 2               | Boat launch, beach access, parking for 50 vehicles.   |
| Tahuya River  | 2.9             | 4,400 feet of riverfront, parking for 10 vehicles.  |
| Tee Lake  | 3.6             | Unpaved boat launch, parking for 20 vehicles.   |
| Twin Lake   | 3.6             | Unpaved boat launch, parking for 15 vehicles.   |
| Union River   | 61.8            | 8,098 feet of riverfront, parking for 10 vehicles.  |
| Wildberry Lake  | 10              | Undeveloped.  |
| Wooten Lake   | 1               | Unpaved boat launch, parking for 60 vehicles.   |
| <b>Total</b>  | <b>318.3</b>    |   |
| <b>Washington State Department of Natural Resources</b>             |                 |   |
| Aldrich Lake Camp   | 24<br>(approx.) | 1,700 feet waterfront, hand boat launch, 4 picnic tables, 4 campsites, toilets, drinking water, lake stocked with trout, parking for 16 vehicles. |
| Camp Pond   |                 | Day use only  |
| Camp Spillman   | 10<br>(approx.) | 800 feet waterfront, 6 camp sites, 4 group sites, toilets, drinking water.  |
| Elfendahl Pass Staging Area   | 5               | 11 picnic sites, self-contained RVs okay, toilets, drinking water   |
| Howell Lake   |                 | 3 group sites, 10 campsites, hand boat launch, toilets, drinking water, parking for 20 vehicles.  |

| TABLE VI.5-1. Inventory of Parks (Continued)                        |                 |   |
|---|-----------------|---|
| Name of Facility  | Acres           | Amenities Available   |
| <b>Washington State Department of Natural Resources (Continued)</b> |                 |   |
| Kammenga Canyon   |                 | 2 campsites, toilets  |
| Mission Creek Trailhead   | 1               | Parking for trail access  |
| Robbins Lake  | 1.1             | 175 feet waterfront, hand boat launch, 3 picnic tables, toilets. Day use only.                |
| Tahuya River Horse Camp   | 12<br>(approx.) | 1,600 feet waterfront, 9 campsites, 2 group sites, toilets, drinking water, 20 horse corrals. |
| Toonerville   | 5.7             | 570 feet waterfront, 4 camp sites, 2 picnic sites, toilets.                                   |
| Twin Lakes  |                 | 6 camp sites, 3 picnic sites, toilets, hand boat launch. Lake is stocked with trout.          |
| Melbourne   |                 | Lake setting, 1,000 feet waterfront, 5 campsites, toilets.                                    |
| Lilliwaup   | 7               | Stream setting, 500 feet waterfront, 13 campsites, toilets, drinking water.                   |
| Public Tidelands #24  |                 | Water access only.  |
| Public Tidelands #33  |                 | Water access only.  |
| Public Tidelands #34  |                 | Water access only.  |
| Public Tidelands #43  |                 | Road access, clamming.  |
| Public Tidelands #44 a,b  |                 | Road access, clamming, crab pot fishing.  |
| Public Tidelands #46  |                 | Water access only, clamming, oysters, shrimp pot fishing.                                     |
| Public Tidelands #47  |                 | Water access only, clamming, oysters.   |
| Public Tidelands #48  |                 | Water access only, clamming, oysters  |
| Eagle Creek Recreational Tidelands                                  |                 | Road access, clamming, crabbing.  |
| Rendsland Creek Tidelands   |                 | Road access, clamming.  |
| <b>Total</b>  |                 |   |

| TABLE VI.5-1. Inventory of Parks (Continued)           |           |  |
|--|-----------|--|
| Name of Facility                                       | Acres     | Amenities Available  |
| <b>United States Forest Service</b>                    |           |  |
| Brown Creek Campground                                 | 6         | 78 camp sites, toilets.  |
| Hamma Hamma Campground                                 | 5         | Picnic area, 12 campsites.   |
| Lower Lena Lake Campground                             | 6         | Hike-in only, 40 camp sites, pit toilets.  |
| Upper Lena Lake Campground                             | 7         | Hike-in only, 14 camp sites, pit toilets.  |
| <b>Total</b>   | <b>24</b> |  |
| <b>City of Shelton Parks and Recreation Department</b> |           |  |
| Brewer Park  | 0.3       | 3 picnic tables, curbside parking only.  |
| Callanan Park  | 6.9       | Lighted softball field with spectator stands, 7 picnic tables, 2 swings, 1 slide, rest room, foot trails across 40-foot natural depression, parking space for 30 vehicles plus additional parking along street.  |
| City Park  | 1.75      | Currently undeveloped.   |
| Eleventh Street Site                                   | 0.92      | Deep well location with the potential to be developed into a city park.  |
| Huff and Puff Trail                                    | 80        | 2 miles of jogging trail and 20 incorporated exercise stations, drinking fountain and parking for 20 vehicles at trailhead.  |
| Kneeland Park  | 3.9       | 2 slides, swings, 1 merry-go-round, horizontal bars, 1 dome climber, 1 large sand box, 1 small log playhouse, a few rocking saddle mates, horseshoe pit, aging rest room and picnic shelter, deteriorated clubhouse, 10 picnic tables, 2 tennis courts in need of resurfacing, street parking for approximately 25 vehicles. |
| Johnson Park   | 0.5       | 1 merry-go-round, 1 swing, single basketball backboard and substandard concrete court, street parking for approximately 10 vehicles.   |

| TABLE VI.5-1. Inventory of Parks (Continued)                       |               |   |
|--|---------------|---|
| Name of Facility   | Acres         | Amenities Available   |
| <b>City of Shelton Parks and Recreation Department (Continued)</b> |               |   |
| Loop Field   | 4             | 2 tennis courts, softball field, soccer field, jogging trail along the perimeter, 1 picnic shelter, 5 picnic tables, rest room, parking for 100 vehicles.   |
| Oakland Bay Overlook   | 1.03          | Views of downtown Shelton, industrial waterfront, Oakland Bay, and the Olympic Mountains, historic band saw display with large log section and interpretive information, paved parking for 5 vehicles. Development plans for the next 2 years include: picnic area, rest rooms, kiosk, small shelter, additional parking. |
| Pine Street Boat Launch  | 60 feet       | Crude gravel boat launch and a deteriorating wooden boat repair grid.   |
| <b>Total</b>   | <b>99.3</b>   |   |
| <b>Port of Dewatto</b>   |               |   |
| Port of Dewatto Campground   | 1             | Camping: 11 with hook-ups, 19 tent sites; 2 rest rooms; nature/hiking trails; 23 picnic tables; two picnic shelters; 1 kitchen; fishing. Future plans to add more stoves and picnic tables, and to place gravel around kitchen. Fee required.   |
| <b>Port of Shelton</b>   |               |   |
| Sanderson Ballfield  | 2.1           | Baseball diamond, rest rooms.   |
| Sanderson Field  | 1,170         | Flying: 5,000 feet of runway, tie downs, skydiving; rifle club; model aircraft society. Future plans to provide increased hangar availability.  |
| Oakland Bay Marina   |               | Boat moorage.   |
| <b>Total</b>   | <b>1172.1</b> |   |

| TABLE VI.5-1. Inventory of Parks (Continued) |       |  |
|--|-------|--|
| Name of Facility                             | Acres | Amenities Available  |
| <b>Port of Allyn</b>                         |       |  |
| Waterfront Park in Allyn                     | 2     | 400 feet waterfront, moorage, dock (for up to 15 boats), picnic, gazebo, parking for 20 vehicles. Office building planned.   |
| North Shore Ramp<br>Belfair/North Shore      | 1.2   | 150 feet waterfront, boat launch with floating dock, beach access, parking for 20 vehicles with trailers.  |
| <b>Port of Hoodspout</b>                     |       |  |
| Ingvold Grunvold Waterfront Park             | 2     | Dock, saltwater beach access, tidelands, 2 portable rest rooms. Proposed future development includes an interpretive center and picnic tables.   |
| <b>Mason County</b>                          |       |  |
| Edna Mitchell Park (Picnic)                  | 2.5   | Primary use is to provide parking for neighboring Latimer's Landing, parking for 100 vehicles.   |
| Foothills Park (Sport)                       | 80    | 2 fields which serve as baseball, soccer, and football fields; bleachers; rest rooms; children's play area; parking for 50 vehicles.   |
| Latimer's Landing (Water)                    | .59   | Saltwater access boat launch for vessels no longer than 20 feet, parking for 20 vehicles, small rest room, and boat dock; additional parking available at neighboring Edna Mitchell Park.  |
| Mason County Fairgrounds (Picnic)            | 12    | 100 camp sites with hook ups; additional space for tent camping, rest rooms and showers; 30 picnic tables; horse arena; 2 indoor kitchens; natural area.   |
| Mason County Recreation Area (MCRA Sport)    | 40    | 7 baseball fields which also serve as soccer and football fields; children's play area, bleachers, maintenance shop, user's storage facility, seasonal concession stand; parking for 100 vehicles. This facility serves as the headquarters for the Mason County Parks Department. Fee required for park's facilities. |

| TABLE VI.5-1. Inventory of Parks (Continued) |               |   |
|--|---------------|---|
| Name of Facility                             | Acres         | Amenities Available   |
| <b>Mason County (Continued)</b>              |               |   |
| Mason Lake Park (Water)                      | 17.36         | 1.36 acres currently in use; freshwater access/boat launch for vessels no longer than 18 feet, dock, play area, rest rooms, barbecue pit, 1 picnic table; parking for maximum of 50 vehicles. The County owns 16 unused acres that can be used for expansion of the park including development of an RV area. |
| Sandhill Park (Sport)                        | 30            | 5 baseball fields that are also used as soccer and football fields, bleachers; parking is available for 125 vehicles  |
| Shorecrest Park (Water)                      | 2.8           | 320 feet waterfront, boat launch for vessels no longer than 16 feet, saltwater beach access, 3 picnic tables, 1 barbecue pit, playground.   |
| Truman Glick Memorial Park (Picnic)          | 40            | Natural setting, creek, trails, picnic tables, barbecue pit, portable toilets, RV area. Future improvements include: construction of group camping area with shelter and development of exercise stations along trails.   |
| Union Community Park (Picnic)                | 1.92          | Picnic shelter, children's play area; small baseball diamond, basketball court; rest rooms.   |
| Union Boat Ramp (Water)                      | 0.16          | Boat ramp for access to Hood Canal for vessels no longer than 19 feet, parking for 4 vehicles from May 1 to August 1.   |
| Walker Park (Water)                          | 5.04          | Saltwater access to Hammersly Inlet, gravel beach, picnic tables, barbecues, rest rooms, shelter, interpretive center providing marine information; parking for 15 vehicles.  |
| <b>Total</b>                                 | <b>232.37</b> |   |
| <b>Mason County Public Schools</b>           |               |   |
| Belfair Elementary                           |               | Playground.   |
| Sandhill Elementary                          |               | Playground.   |
| Hood Canal Elementary/Junior High School     |               | 2 baseball backstops, 1 football field, bleachers, playground, track, parking for 30 vehicles.  |

| TABLE VI.5-1. Inventory of Parks (Continued)   |       |  |
|--|-------|--|
| Name of Facility                               | Acres | Amenities Available  |
| <b>Mason County Public Schools (Continued)</b> |       |  |
| Pioneer Elementary                             |       | 2 baseball backstops, covered play area, playground.   |
| Grapeview Elementary                           |       | Playground   |
| Southside Elementary                           |       | 1 baseball backstop.   |
| Bordeaux                                       |       | Football field, soccer field, playground, track.   |
| Evergreen Elementary                           |       | Playground.  |
| Mountain View Elementary                       |       | 5 baseball backstops, football field, soccer field, playground.  |
| Shelton High School                            |       | 6 tennis courts, 2 baseball backstops, football field, soccer field, bleachers, 2 swimming pools, track, rest rooms.   |
| Mary M. Knight District                        |       | 2 baseball backstops, 1 football field, bleachers, playground.   |
| North Mason High School                        |       | 2 baseball backstops, 2 tennis courts, football field, soccer field, bleachers, playground, track.   |
| <b>Private Facilities Open to the Public</b>   |       |  |
| Glen Ayr Canal Resort                          | 10    | Adult-only RV park with hookups; no tent camping, motel, 2 rest rooms, 2 showers, laundry facility, saltwater boat launch, beach access, tidelands, spa, fishing, clamming, oysters, dock.       |
| Lake Nahwatzel Resort                          | 2     | Camping: 12 utility sites, 5 sites without hookups; 2 rest rooms, 2 showers, boat launch, freshwater beach access, nature/hiking trails, 8 picnic tables, restaurant, fishing, swimming, cabins. |
| Minerva Beach RV Resort and Mobile Village     | 20    | Camping: 23 sites without hookups, 50 sites with hookups; 5 rest rooms, 6 showers, laundry facilities, boat launch, saltwater beach access, 60 picnic tables, driving range, scuba dive center.  |

| TABLE VI.5-1. Inventory of Parks (Continued)             |                  |   |
|--|------------------|---|
| Name of Facility   | Acres            | Amenities Available   |
| <b>Private Facilities Open to the Public (Continued)</b> |                  |   |
| Rest-A-While RV Park and Marina                          | 15               | Saltwater boat launch, moorage, dock, 70-80 camp sites with hookups (may be used for RVs or tents), 4 rest rooms, 4 showers, laundry facilities, beach access, clamming, oysters, fishing, boat rentals, nature trail, 60 picnic tables, 2 covered picnic areas with kitchen, concession stand. Future improvements include easier access to marina, and boat fuel. |
| <b>Total</b>   | <b>45</b>        |   |
| <b>Other</b>   |                  |   |
| Olympic National Park - Staircase Campground             |                  | Picnic area, 50 camp sites, parking for 60 vehicles.  |
| Tacoma City Light Saltwater Park                         | 1                | 6 picnic tables, rest rooms, saltwater boat launch, saltwater beach access.   |
| <b>COUNTY TOTAL</b>                                      | <b>63,032.27</b> |   |

### Facility Needs

The County Parks Manager has developed a list of system deficiencies, future project and improvement needs, and costs. The improvements identified incorporate LOS standards promulgated by the National Recreation and Parks Association (NRPA) and standards used by other counties similar in population size. These standards, shown in TABLE VI.5-2, are important considerations for procuring funding from park and recreation resource agencies.

This framework provides the basis for developing a list of improvement requirements and project facility needs on a county-wide basis. Further refinement in identifying facility needs involves applying these standards, under the different alternatives, to sub-regions within the County where population is projected to grow, and resolving suspected concurrency problems.

A list of these facility needs, incorporating anticipated sub-regional growth, is detailed in Section VI.10, Finance Plan, along with potential finance options for these facilities.



| TABLE VI.5-2. Level of Service Standards for Parks and Recreation Facilities |               |   |
|--|---------------|---|
| Activity/Facility  | NRPA Standard | Average Standards of Similar-Sized Counties |
| Softball field   | 1/5,000       | 1/3,000                                     |
| Baseball field   | 1/5,000       | 1/4,500                                     |
| Soccer field   | 1/10,000      | 1/1,500                                     |
| Tennis court   | 1/2,000       | 1/1,830                                     |
| Basketball court   | 1/5,000       | 1/500                                       |
| Handball court   | 1/20,000      | 1/1,500                                     |
| Golf - 18 holes  | 1/50,000      | 1/20,330                                    |
| Golf - 9 holes   | 1/25,000      | 1/7,000                                     |
| Pool - indoor  | —             | 1/10,000                                    |
| Pool - outdoor   | 1/20,000      | 1/25,000                                    |
| Archery  | 1/50,000      | 1/1,500                                     |
| Target shooting  | 1/50,000      | 1/50,000                                    |
| Neighborhood park  | —             | 1/6,000                                     |
| Neighborhood park  | 1-2 ac/1,000  | 2.9 ac/1,000                                |
| Community park   | 5-8 ac/1,000  | 3.5 ac/1,000                                |
| Regional park  | —             | 1/20,000                                    |
| Regional park  | 5-10 ac/1,000 | 6.7 ac/1,000                                |
| Recreation center  | —             | 1/25,000                                    |
| Bicycle trails   | —             | .53 mi/1,000                                |
| Hiking trails  | —             | 1.22 mi/1,000                               |
| Horse trails   | —             | 3.7 mi/1,000                                |
| Picnicking   | —             | 2 ac/1,000                                  |
| Boating  | —             | 4 ac/1,000                                  |
| Beach - swimming   | —             | 4 ac/1,000                                  |



## **VI.6 COUNTY AND ADMINISTRATIVE BUILDINGS**

### **System Description**

Mason County owns several buildings, most of which are located in the City of Shelton, the County seat. These buildings are used to support general County functions such as internal management, health, public service, and general administration. Other buildings owned by the County include Memorial Hall, the Cooperative Extension Office, the Mason County Fair/Convention Center, the Central Shop, the Belfair Annex and the Belfair Shop. TABLE VI.6-1 describes these sites. Locations of these facilities are shown in FIGURE VI.6-1.

Memorial Hall is located in Shelton, a few blocks from the main campus area. The Mason County Extension Office is located about 3 miles north of Shelton, on the northeast side of Highway 101, across from the Shelton airport. The Central Shop is located on Johns Prairie Road near Bayshore. The Belfair Annex is located on Highway 3 in Belfair and the Belfair Shop is situated on the north shore of Hood Canal about 3 miles from Belfair. Locations of these facilities are shown in FIGURE VI.6-1.

### **Inventory**

Mason County's administrative offices and departments housed in the buildings are listed in TABLE VI.6-2. Also provided is a summary of current office area allocations for the County departments and departmental functions.

Most of the County's administrative offices are located in the Shelton Campus, a four-square-block section of the downtown area. At this location, the County operates from seven publicly owned buildings. These include the Courthouse, Jail, Building I, Building II, Building III, Building IV, and Building V. Building V was purchased recently and is not yet used by the County.

### **Facility Needs**

Facility needs are being developed through a space planning effort currently being conducted by the County. This work is based on an assessment of agency needs related to growth in both the 6- and 20-year planning horizons. This plan, currently being finalized, identifies space needs for County administration, law enforcement, and criminal justice facilities. Specific planned improvements and associated financing are detailed in Section VI.10, Finance Plan.

| Site                   | Area            |       |
|------------------------|-----------------|-------|
|                        | Square Feet     | Acres |
| Shelton Campus         | 169,200         | 3.88  |
| Memorial Hall          | 12,000          | 0.275 |
| Extension Office       | approx. 18,600  | 43    |
| Fair/Convention Center | not reviewed    |       |
| Central Shop - Shelton | approx. 156,800 | 3.6   |
| Belfair Annex          | approx. 5,400   | 0.12  |
| Belfair Shop           | approx. 61,000  | 1.4   |

| <b>TABLE VI.6-2. Buildings and Space Allocations for Administrative Offices</b> |                               |  |
|---|-------------------------------|--|
| <b>Department or Office</b>   | <b>Area<br/>(square feet)</b> | <b>Building</b>                            |
| Assessor  | 2,365                         | Building I                                 |
| Auditor   | 2,916                         | Building I, Courthouse,<br>Belfair Annex   |
| Central Services - Administration   | 99                            | Building I                                 |
| Central Services - Maintenance  | 757                           | Building III, Courthouse                   |
| Clerk   | 1,138                         | Courthouse                                 |
| Community Development   | 1,610                         | Building III                               |
| County Commission   | 1,466                         | Buildings I, II                            |
| District Court  | 2,091                         | Courthouse                                 |
| Emergency Services  | 533                           | Courthouse                                 |
| Cooperative Extension Office  | 2,493                         | Extension Office                           |
| General Services  | 1,726                         | Building III                               |
| Health Services   | 4,170                         | Buildings II, III, IV                      |
| Probation Services  | 1,223                         | Courthouse                                 |
| Prosecutor/Coroner  | 2,192                         | Building I                                 |
| Public Works - Administration   | 1,461                         | Building I                                 |
| Public Works - Maintenance  | 13,230                        | Central Shop, Belfair Shop                 |
| Equipment, Rental and<br>Revolving Fund (ER&R)                                  | 374                           | Buildings I, III                           |
| Sheriff   | 7,739                         | Courthouse, Building III,<br>Belfair Annex |
| Superior Court  | 2,833                         | Courthouse, Building II                    |
| Treasurer   | 2,094                         | Building I, Courthouse                     |



## **VI.7 POLICE AND CRIMINAL JUSTICE FACILITIES**

### **System Description**

The Mason County Sheriff's Office provides patrol and detective services to residents of unincorporated Mason County. The Mason County District Court, located in Shelton, handles all County-jurisdiction cases. As Mason County does not have a juvenile detention or lockdown facility, it transports juveniles to other counties with available bed space. The County also has a severe shortage of jail space for adults, resulting in the early release of some offenders.

### **Inventory**

#### ***Law Enforcement***

The County Sheriff's patrol division has a staff of 30 persons, of which 5 are assigned to the detective division. The Sheriff's Office has a total staff of 64. The staff includes 21 jail employees, 30 police officers, 7 support persons, and 6 administrative persons.

#### ***Criminal Activity***

In 1993, the Sheriff's Office received 13,419 calls for service. As of December 21, 1994, the Sheriff's Office had received 15,231 calls for that year. The types of crimes reported in 1992, 1993, and mid-year 1994 are shown in TABLE VI.7-1. Overall, violent crimes account for approximately 8 percent of the criminal activity in Mason County. There has been a slow but steady rise in violent crime from 1992 to 1994. The majority of crimes committed are property crimes, which have also increased steadily since 1992. Total calls for service have been increasing in recent years. As calls have increased, less time has been available for traffic enforcement. As a result, 6,718 criminal traffic and infraction traffic citations were issued in 1992, compared to 4,870 in 1993, and fewer than 2,000 as of December 21, 1994.

#### ***Jail Facilities***

The Mason County Jail opened in 1987 with capacity for 45 inmates. In 1989, capacity was increased to 51, and in 1991 it was increased to 58 beds with floor space for 65. In 1993, the average daily jail population was 62.

| <b>TABLE VI.7-1. Violent and Property Crimes Committed in Mason County</b> |              |              |              |                   |
|--|--------------|--------------|--------------|-------------------|
| Crimes   |              | Years        |              |                   |
|  |              | 1992         | 1993         | 1994 <sup>a</sup> |
| <b>VIOLENT CRIMES</b>  |              |              |              |                   |
| Murder   | Mason County | 2            | 5            | 1                 |
|  | Shelton      | 0            | 2            | 0                 |
| Rape   | Mason County | 35           | 22           | 10                |
|  | Shelton      | 7            | 8            | 4                 |
| Robbery  | Mason County | 7            | 13           | 9                 |
|  | Shelton      | 3            | 10           | 5                 |
| Aggravated Assault   | Mason County | 6            | 72           | 38                |
|  | Shelton      | 19           | 13           | 6                 |
| Unincorporated Mason County (Total)  |              | 81           | 79           | 43                |
| Shelton (Total)  |              | 29           | 33           | 15                |
| <b>Total Violent Crimes in Mason County</b>                                |              | <b>110</b>   | <b>112</b>   | <b>58</b>         |
| <b>PROPERTY CRIMES</b>   |              |              |              |                   |
| Arson  | Mason County | 8            | 2            | 4                 |
|  | Shelton      | 2            | 0            | 0                 |
| Burglary   | Mason County | 554          | 594          | 302               |
|  | Shelton      | 66           | 82           | 27                |
| Larceny  | Mason County | 1,163        | 1,187        | 626               |
|  | Shelton      | 409          | 497          | 247               |
| Vehicle Theft  | Mason County | 95           | 95           | 61                |
|  | Shelton      | 33           | 30           | 19                |
| Unincorporated Mason County (Total)  |              | 1,310        | 1,269        | 700               |
| Shelton (Total)  |              | 510          | 609          | 293               |
| <b>Total Property Crimes in Mason County</b>                               |              | <b>1,820</b> | <b>1,878</b> | <b>993</b>        |
| <b>TOTAL VIOLENT AND PROPERTY CRIMES</b>                                   |              |              |              |                   |
| Unincorporated Mason County (Total)  |              | 1,391        | 1,348        | 743               |
| Shelton (Total)  |              | 539          | 642          | 308               |
| <b>County Total</b>  |              | <b>1,930</b> | <b>1,990</b> | <b>1,051</b>      |

a. As of mid-year 1994.



**Courts**

The Mason County District courts handle about 9,000 cases per year, mostly infractions and misdemeanors. Domestic violence and civil cases make up less than 10 percent of the District Court caseload. Mason County Superior Court handles about 1,600 cases per year, with civil cases being the most common, followed by domestic cases, juvenile offender cases, criminal actions, and probate/guardianship cases, in that order. TABLE VI.7-2 summarizes the caseload for the two courts for the years 1992, 1993, and 1994.

| <b>TABLE VI.7-2 Mason County Court Cases</b> |              |              |              |
|--|--------------|--------------|--------------|
| <b>Case Type</b>                             | <b>1992</b>  | <b>1993</b>  | <b>1994</b>  |
| <b>Mason County District Court</b>           |              |              |              |
| Infractions                                  | 4,213        | 3,839        | 4,096        |
| Misdemeanors                                 | 3,016        | 2,366        | 2,898        |
| Domestic violence                            | 227          | 248          | 292          |
| Civil cases                                  | 634          | 566          | 534          |
| <b>Total</b>                                 | <b>9,294</b> | <b>7,380</b> | <b>9,027</b> |
| <b>Mason County Superior Court</b>           |              |              |              |
| Criminal actions                             | 228          | 221          | 207          |
| Civil actions                                | 429          | 467          | 476          |
| Domestic                                     | 336          | 341          | 332          |
| Probate/guardianship                         | 193          | 201          | 170          |
| Juvenile offender                            | 201          | 175          | 227          |
| <b>Total</b>                                 | <b>1,571</b> | <b>1,601</b> | <b>1,593</b> |

**Facility Needs**

An established Criminal Justice Working Team is developing a programmatic approach to improving facilities in the County. Currently the team is identifying funding sources for the improvements in preparation of a comprehensive plan for the criminal justice system in Mason County. The specific space needs developed through this planning effort will define the basic facility requirements for the future. The projected cost of this plan and potential funding sources are incorporated in the finance plan contained in Section 10 of this element.



## **VI.8 STORMWATER MANAGEMENT FACILITIES**

### **System Description**

Existing stormwater facilities in Mason County include both natural (streams) and manmade (pipeline) collection and conveyance systems. Storm drainage and flooding problems have increased in Mason County as a result of rapid residential and commercial development. Increases in the amount of impervious surfaces, such as rooftops, roads, driveways, and buildings, cause increased stormwater runoff. Forestry practices, such as logging, new roads, and construction, also increase runoff and downstream sedimentation.

The County currently has no stormwater plan or utility. Stormwater is managed primarily through onsite control measures .

### **Inventory**

As an important step in developing adequate stormwater control, Mason County is in the process of formulating a Stormwater Management Ordinance for approval and adoption. This ordinance adopts by reference the latest edition of the Washington State Department of Ecology's Stormwater Management Manual, with the exception of the Minimum Requirements chapter, for use in designing best management practices (BMPs) for new development and other improvements. The ordinance defines specific minimum requirements and other approval standards for development on all ranges of parcel sizes.

Flooding problems in the Skokomish River watershed are being addressed in a Comprehensive Flood Hazard Management Plan now being developed. This plan defines a total program of river maintenance activities, valley creek maintenance measures, flood protection measures, and flood warning and emergency response procedures.

### **Facility Needs**

Mason County is currently developing a stormwater ordinance, based on Ecology's model ordinance for stormwater, to regulate new development. Ecology also requires an operations and maintenance plan and ordinance.

Focused plans for specific problem areas may need to be developed in the future. These plans would integrate solutions to existing problems with the standards set out in the ordinance.

As previously discussed, a flood hazard study is currently underway in the Skokomish River watershed. Similar studies may need to be conducted in special areas of concern, such as Belfair. As future watershed studies are completed, the information would be compiled into the framework of a unified comprehensive stormwater management plan for the County.

## **VI.9 SOLID WASTE FACILITIES**

### **System Description**

Washington State law requires the County to have a Solid Waste Management Plan (SWMP) that is reviewed and updated at least once every 5 years. The County completed its last Solid Waste Management Plan in May 1992. This plan lists specific recommendations for implementing and evaluating solid waste management efforts. The SWMP recommended the following:

- Increase public education in the County and the City of Shelton to educate the public on waste reduction practices.
- Have the County and City adopt a resolution of support for waste reduction practices and forward these to state and national senators and representatives.
- The City of Shelton should consider methods of establishing a waste collection structure to support waste reduction in the community.
- Mason County should require a waste collection rate structure to support waste reduction in the County.
- The County and city should consider additional measures to initiate in-house waste reduction programs.

### **Inventory**

#### ***Collection System***

Following the 1992 SWMP plan, a final development and closure plan was completed on the landfill at the Mason County Solid Waste Facility, just north of Shelton. The landfill was closed September 1, 1993. With this closure, the County signed a 5-year contract with Regional Disposal Company (RDC) to have refuse exported from the main transfer facility, located at the closed landfill site, to a regional landfill in Klickitat County. The County has the option to re-sign for an additional 5 years once the current contract has expired. The expected life of the Klickitat landfill is 40 years, after which time another area will be used.

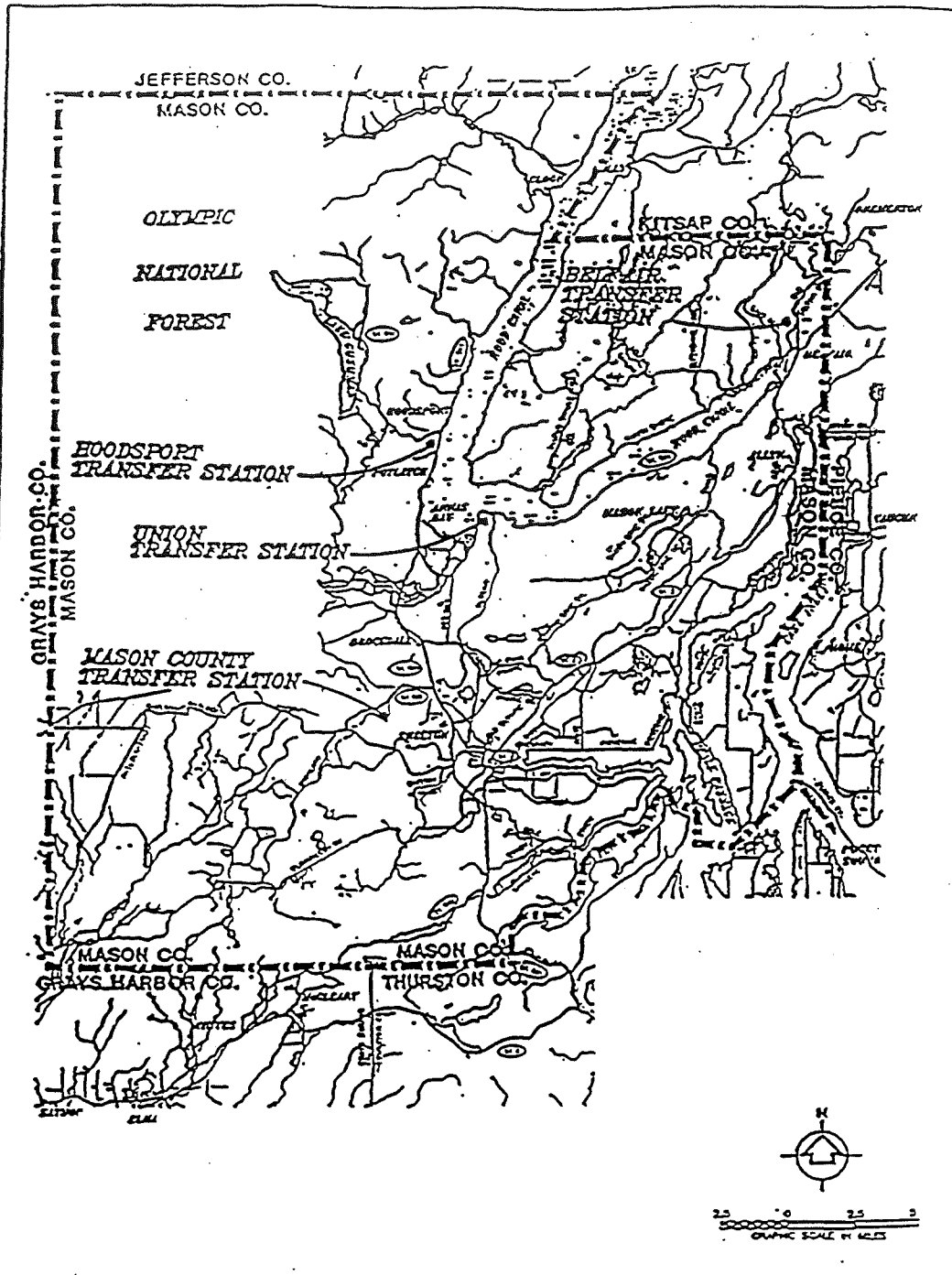
Mason County continues to operate three drop box facilities, located in Union, Hoodspout, and Belfair, that transfer waste to the main transfer station at the County Solid Waste Facility. Capacities and levels of service of all the transfer facilities are shown in TABLE VI.9-1; locations are shown in FIGURE VI.9-1. The current number of transfer stations and drop boxes is adequate for the current population. It is expected to remain adequate in the future, although the capacities of the stations in the more densely populated areas of the County, such as Shelton, may need to be expanded.

As recommended by the 1992 SWMP, the City of Shelton has established a separate solid waste collection program to serve residents within the City. This program includes weekly mandatory curbside collection along with recycling. The unincorporated areas within the County continue to be served by two private firms: Mason County Garbage Company and Rural Garbage SVC. All refuse is transported to the County's transfer station to be exported to the Klickitat County landfill.

The County has increased its public educational programs on waste management practices. The County has also increased its educational programs at local schools and businesses.

| TABLE VI.9-1. 1994 Level of Service (LOS) for Solid Waste - Mason County |                             |           |   |                                    |             |   |
|--|-----------------------------|-----------|---|------------------------------------|-------------|---|
| Facility   | Current Demand (population) | Condition | Capacity                                      | Unit of Measure                    | Current LOS | Projected Demand - Year 2000 (population) |
| All Waste  | 44,300                      | Good      | 4 containers or 120 tons per day <sup>a</sup> | Tons per day                       | 63.1        | 52,716                                    |
| Transfer Stations  |                             | Good      | 1 station                                     | Transfer stations per 1,000 people | 0.02        |   |
| Drop Box Stations  |                             | Good      | 4 stations                                    | Drop box stations per 1,000 people | 0.07        |   |

a. Although four containers (each capable of holding a maximum of 30 tons) is considered the maximum capacity, the hauling company has committed to providing as many containers as needed.



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MASON COUNTY CFE  
FACILITIES INVENTORY

FIGURE 9-1  
SOLID WASTE FACILITIES

### ***Recycling***

Recycling drop boxes are located throughout the unincorporated County area, and a curbside recycling program is in operation within the City of Shelton. Drop boxes are located at nine sites in the County.

In May 1995, five new drop box sites were established, one each in Allyn, Taylor Towne, Bayshore, Matlock, and the Red Apple grocery store on Hillcrest in Shelton.

The County's recycling drop boxes have collection spaces for the following:

- ¥ Plastic soda pop bottles
- ¥ Plastic milk jugs
- ¥ Waxed milk and juice cartons
- ¥ Aluminum cans
- ¥ Newspapers and magazines
- ¥ Corrugated cardboard
- ¥ Green, brown, and clear glass containers

The drop box program was initiated in December 1993. From January 1994 through March 1995, County residents have recycled 205.5 tons of waste. About 2.5 tons of newspapers and magazines are collected each month.

### ***Facility Needs***

In 1992 the County developed a Comprehensive Solid Waste Plan describing how the County is currently involved in a five-year contract with RDC to ship its waste out of the County. The County Commission views this contract, which costs about \$1 million annually, as much more economical than the capital investment required to construct a new landfill. The contract is likely to be renewed in 1998, providing adequate service for the County through the 2001 planning year. Other project needs listed in the 1992 plan include possible expansions and upgrades of the County's waste transfer system and an update of the plan. These facilities and associated finance requirements are addressed in Section 10 of this chapter.



## **VI. 10 FINANCE PLAN**

### **Introduction**

This section discusses Mason County capital facilities needs and related funding sources. As required under the Growth Management Act (GMA) a six-year finance plan has been prepared for the years 1995 to 2001 for those facilities currently, or to be, owned and operated by the County.

The following facilities are included in this section:

- ¥ Water and Wastewater Systems
- ¥ Solid Waste Management Facilities
- ¥ County Administrative and Law Enforcement Buildings
- ¥ Parks and Recreation
- ¥ Stormwater Management Facilities

Only County owned and operated facilities, except for the community-based wastewater systems for rural activity centers, are included in the finance analysis. Several alternatives have been suggested to deal with the problem of providing water and wastewater service in areas outside the existing utility service area in which growth is forecast. The service area for the solid waste utility is county-wide.

The finance plan identifies reasonably reliable funding sources, and forecasts revenue and expenses to the year 2001. Funding varies depending on the facility. The different financing methods, public or private, could have significant implications on the cost of utility service. Potential funding sources that could be used to fund unanticipated needs and shortfalls are also discussed.

**Financial Impact Overview**

The financial impact for capital facility improvements have been analyzed for the six year planning period.

A summary of the six year improvement costs, revenues and financing for all alternatives is listed in Table 10-1. The Table displays the cost by capital facility category.

Table 10-1  
County Owned and Operated Capital Facility  
Improvement & Finance Costs  
Years 1995 - 2001

| Capital Facility Category                            | Improvement Costs | Expenditures | Finance/Revenues |
|--|-------------------|--------------|------------------|
| Water Systems  | \$100,000         | \$1,002,000  | \$1,067,000      |
| Wastewater Systems                                   | \$491,000         | \$1,118,000  | \$1,501,000      |
| Solid Waste Management                               | \$20,000          | \$11,230,000 | \$11,259,000     |
| County Administration & Law<br>Enforcement Buildings | \$19,006,000      | \$14,992,000 | \$34,789,000     |
| Parks & Recreation                                   | \$1,145,000       | \$2,154,000  | \$3,354,000      |
| Stormwater Management Facilities                     | \$562,000         | \$3,929,000  | \$4,480,000      |

**Conventional Water and Wastewater Systems**

The County owns and operates a combined water and wastewater utility which includes the water supply and wastewater treatment facilities at Hartstene and Rustlewood, and the Beard's Cove water supply facility. There is no expansion in the service area planned to accommodate new growth. Information about system improvements needed to maintain acceptable levels of service for residents in the existing service area has been provided by the Mason County Department of Community Development.

Table 10-2 summarizes the planned water supply capital improvements over the next six years. Except for improvements to the Beard's Cover water reservoir (\$100k) in 1996, there are no other planned capital improvements expected for water supply facilities.

Revenues collected from water utility fees during the six year period are to be used to fund the Beard's Cover water reservoir improvement as well as the administrative, operations and maintenance and capital replacement expenditures. During the six year period the revenues remaining at each year end will continue to grow primarily because of the capital replacement fund (\$50k/year) which is designed to off-set future capital improvement replace costs.

Table 10-3 summarizes the planned wastewater facility capital improvements over the same six year period. Both Rustlewood and Hartstene have planned improvements. The Rustlewood facility will conduct Infiltration and Inflow (I&I) and treatment plan improvements between 1996 and 1998. The Harstene facility plans to conduct I&I improvements in 1997. The total cost of these improvements are expected to be \$491k.

To finance the improvements costs the utility will have to secure a loan either through state intergovernmental sources (Department of Ecology) or revenue bonds. In Table 10-3 a revenue bond is used to finance the improvements. The bond will be equal to the cost of the improvements (\$491k) and secured over a three year period as funding is needed. The cost of the revenue bond is based on a 30 year payback at five percent interest, paid annually.

Sewer service customers will pay for all the improvements through utility rate increases. The cost to the customers is displayed under the operations heading in Table 10-3. Rate increases will begin in 1997 for Rustlewood improvements will be completed. Rate increases for Hartstene customers will increase in 1998 when the cost of servicing the bond debt for the I&I improvements begins.

**Wastewater Systems for North Bay/Case Inlet, Rural Activity Centers, and Urban Areas**

The County has also considered the development of community-based wastewater systems in other areas of the County. The finance tables in this section calculate planning level costs to provide service to the North Bay/Case Inlet area, and the rural activity centers (RACs) and unincorporated urban areas that have been identified in the proposed comprehensive land use plan.

***North Bay/Case Inlet Community-Based Wastewater Treatment***

The County is seeking funding to expand wastewater service in the North Bay/Case Inlet area. A study by consultants (Gray & Osborne, Inc., may 1994) has assessed the cost of a community-based wastewater system. The total cost of providing this system is estimated to be approximately \$17.9 million (Table 10-4). They have calculated the cost per household to be approximately \$15,838.

Financing the entire wastewater treatment facility and conveyance system is anticipated to be through intergovernmental low interest loans and grants. These grants and loans will be from state (Department of Ecology) and federal (Rural Economic and Community Development Administration of the Department of Agriculture) sources. In addition to the grant, Mason County currently has received from Department of Ecology (DOE) for \$2.5 million, the County expects to receive another \$5 million grant from DOE over the next two years. Mason County will apply for a DOE state revolving fund of approximately \$9.2 million as well as a grant from the Rural Economic and Community Development Administration (RECD). The RECD grant is expected to be for approximately \$5.5 million.

The debt service on the DOE loan will be paid through utility assessments to customers. The debt will be approximately \$477k/year for each customer.

TABLE 10-2  
MASON COUNTY WATER UTILITIES  
YEARS 1996-2001

| Type                                     | 1996             | 1997             | Years<br>1998    | 1999             | 2000             | 2001             | Total<br>1996-2001*** |
|--|------------------|------------------|------------------|------------------|------------------|------------------|-----------------------|
| <b>Revenues</b>                          |                  |                  |                  |                  |                  |                  |                       |
| Beginning Balance*                       | \$206,300        | \$122,000        | \$136,000        | \$148,000        | \$158,000        | \$166,000        |                       |
| <b>Operations</b>                        |                  |                  |                  |                  |                  |                  |                       |
| Rustlewood Water Utility Fees            | \$35,308         | \$36,368         | \$37,459         | \$38,582         | \$39,740         | \$40,932         | \$228,000             |
| Hartstene Pt. Water Utility Fees         | \$49,399         | \$50,881         | \$52,407         | \$53,979         | \$55,599         | \$57,267         | \$320,000             |
| Beards Cove Water Utility Fees           | \$86,340         | \$86,340         | \$86,340         | \$86,340         | \$86,340         | \$86,340         | \$518,000             |
| subtotal                                 | \$171,047        | \$173,588        | \$176,206        | \$178,902        | \$181,678        | \$184,539        | \$1,066,000           |
| <b>Inter Governmental</b>                |                  |                  |                  |                  |                  |                  |                       |
| State/federal Grants                     |                  |                  |                  |                  |                  |                  |                       |
| State/federal Loans                      |                  |                  |                  |                  |                  |                  |                       |
| subtotal                                 |                  |                  |                  |                  |                  |                  |                       |
| <b>Other</b>                             |                  |                  |                  |                  |                  |                  |                       |
| Interest Income                          |                  |                  |                  |                  |                  |                  |                       |
| District Revenue Bonds                   |                  |                  |                  |                  |                  |                  |                       |
| General Obligation Bond (voter approved) |                  |                  |                  |                  |                  |                  |                       |
| Miscellaneous                            |                  |                  |                  |                  |                  |                  |                       |
| subtotal                                 |                  |                  |                  |                  |                  |                  |                       |
| <b>Total Annual Revenues***</b>          | <b>\$171,047</b> | <b>\$173,588</b> | <b>\$176,206</b> | <b>\$178,902</b> | <b>\$181,678</b> | <b>\$184,539</b> | <b>\$1,066,000</b>    |

VI-10.5

TABLE 10-2 (continued)  
 MASON COUNTY WATER UTILITIES  
 YEARS 1996-2001

VI-10.6

| Type                                       | 1996      | 1997      | Years<br>1998 | 1999      | 2000      | 2001      | Total<br>1996-2001*** |
|--|-----------|-----------|---------------|-----------|-----------|-----------|-----------------------|
| <b>Expenditures</b>                        |           |           |               |           |           |           |                       |
| Administration                             | \$36,029  | \$37,110  | \$38,224      | \$39,370  | \$40,551  | \$41,768  | \$233,000             |
| Operations and Maintenance                 | \$68,861  | \$70,926  | \$73,054      | \$75,246  | \$77,503  | \$79,828  | \$445,000             |
| Capital Replacement                        | \$50,000  | \$51,500  | \$53,045      | \$54,636  | \$56,275  | \$57,964  | \$323,000             |
| Debt Service                               |           |           |               |           |           |           |                       |
| Subtotal                                   | \$154,890 | \$159,537 | \$164,323     | \$169,253 | \$174,330 | \$179,560 | \$1,002,000           |
| Revenue Remaining for Capital Improvements | \$16,157  | \$14,051  | \$11,883      | \$9,649   | \$7,348   | \$4,979   | \$64,000              |
| <b>Capital Improvement Projects</b>        |           |           |               |           |           |           |                       |
| Beards Cove Water Reservoir                | \$100,000 |           |               |           |           |           | \$100,000             |
| Hartstene Pt. Water Plant Upgrade          |           |           |               |           |           |           |                       |
| Total Improvement Expenditures             | \$100,000 |           |               |           |           |           | \$100,000             |
| <b>Revenue/Expenditure Balance</b>         |           |           |               |           |           |           |                       |
| Total Annual Revenues***                   | \$171,000 | \$174,000 | \$176,000     | \$179,000 | \$182,000 | \$185,000 | \$1,067,000           |
| Total Annual Expenditures***               | \$155,000 | \$160,000 | \$164,000     | \$169,000 | \$174,000 | \$180,000 | \$1,002,000           |
| Total Annual Capital Improvements***       | \$100,000 |           |               |           |           |           | \$100,000             |
| Revenues Remaining Year End***             | \$122,000 | \$136,000 | \$148,000     | \$158,000 | \$166,000 | \$171,000 |                       |

\*Includes reserved retained earnings  
 \*\* Hartstene Water System.  
 \*\*\*Rounded to nearest \$1,000.

TABLE 10-3  
MASON COUNTY SANITARY SEWER UTILITIES

YEARS 1996-2001

| Type   | 1996             | Years<br>1997    | 1998             | 1999             | 2000             | 2001             | Total<br>1996-2001*** |
|--|------------------|------------------|------------------|------------------|------------------|------------------|-----------------------|
| <b>Revenues</b>                                |                  |                  |                  |                  |                  |                  |                       |
| Beginning Balance*                             | \$119,640        | \$99,000         | \$79,000         | \$60,000         | \$42,000         | \$26,000         |                       |
| <b>Operations</b>                              |                  |                  |                  |                  |                  |                  |                       |
| Rustlewood Sewer Fees (rate increase for bond) | \$57,577         | \$66,070         | \$68,052         | \$90,389         | \$93,101         | \$95,894         | \$471,000             |
| Hartstene Sewer Fees (rate increase for bond)  | \$80,134         | \$82,538         | \$89,893         | \$92,590         | \$95,368         | \$98,229         | \$539,000             |
| subtotal                                       | \$137,711        | \$148,608        | \$157,945        | \$182,979        | \$188,469        | \$194,123        | \$1,010,000           |
| <b>Inter Governmental</b>                      |                  |                  |                  |                  |                  |                  |                       |
| subtotal                                       |                  |                  |                  |                  |                  |                  |                       |
| <b>Other</b>                                   |                  |                  |                  |                  |                  |                  |                       |
| Interest Income                                |                  |                  |                  |                  |                  |                  |                       |
| Special District Revenue Bonds (Optional)      | \$104,000        | \$75,000         | \$312,000        |                  |                  |                  | \$491,000             |
| Miscellaneous                                  |                  |                  |                  |                  |                  |                  |                       |
| subtotal                                       | \$104,000        | \$75,000         | \$312,000        |                  |                  |                  | \$491,000             |
| <b>Total Annual Revenues***</b>                | <b>\$241,711</b> | <b>\$223,608</b> | <b>\$469,945</b> | <b>\$182,979</b> | <b>\$188,469</b> | <b>\$194,123</b> | <b>\$1,501,000</b>    |

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Mason County Comprehensive Plan - April, 1996

Capital Facilities

TABLE 10-3 (continued)  
MASON COUNTY SANITARY SEWER UTILITIES

YEARS 1996-2001

| Type                                       | 1996             | Years<br>1997   | 1998             | 1999            | 2000            | 2001            | Total<br>1996-2001*** |
|--|------------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------------|
| <b>Expenditures</b>                        |                  |                 |                  |                 |                 |                 |                       |
| Administration                             | \$11,572         | \$11,919        | \$12,277         | \$12,645        | \$13,024        | \$13,415        | \$75,000              |
| Operations and Maintenance                 | \$97,001         | \$99,911        | \$102,909        | \$105,996       | \$109,176       | \$112,451       | \$627,000             |
| Capital Replacement                        | \$50,000         | \$50,000        | \$50,000         | \$50,000        | \$50,000        | \$50,000        | \$300,000             |
| Debt Service (revenue bond)                |                  | \$6,765         | \$11,644         | \$31,940        | \$31,940        | \$31,940        | \$114,000             |
| Subtotal                                   | \$158,573        | \$168,596       | \$176,830        | \$200,581       | \$204,140       | \$207,807       | \$1,117,000           |
| Revenue Remaining for Capital Improvements | \$83,138         | \$55,012        | \$293,115        | (\$17,602)      | (\$15,672)      | (\$13,684)      | \$384,000             |
| <b>Capital Improvement Projects</b>        |                  |                 |                  |                 |                 |                 |                       |
| Rustlewood I&I Improvements                | \$104,000        |                 |                  |                 |                 |                 | \$104,000             |
| Rustlewood Treatment Plant Improvements    |                  |                 | \$312,000        |                 |                 |                 | \$312,000             |
| Hartstene I&I Improvements                 |                  | \$75,000        |                  |                 |                 |                 | \$75,000              |
| <b>Total Improvement Expenditures</b>      | <b>\$104,000</b> | <b>\$75,000</b> | <b>\$312,000</b> |                 |                 |                 | <b>\$491,000</b>      |
| <b>Revenue/Expenditure Balance</b>         |                  |                 |                  |                 |                 |                 |                       |
| Total Annual Revenues***                   | \$242,000        | \$224,000       | \$470,000        | \$183,000       | \$188,000       | \$194,000       | \$1,501,000           |
| Total Annual Expenditures***               | \$159,000        | \$169,000       | \$177,000        | \$201,000       | \$204,000       | \$208,000       | \$1,118,000           |
| Total Annual Capital Improvements***       | \$104,000        | \$75,000        | \$312,000        |                 |                 |                 | \$491,000             |
| <b>Revenues Remaining Year End***</b>      | <b>\$99,000</b>  | <b>\$79,000</b> | <b>\$60,000</b>  | <b>\$42,000</b> | <b>\$26,000</b> | <b>\$12,000</b> |                       |

\*Includes reserved retained earnings

\*\* Debt Service on bonds @ 5% interest over 30 yrs.

\*\*\* Rounded to nearest \$1,000.

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Capital Facilities



TABLE 10-4  
MASON COUNTY NORTH BAY/CASE INLET COMMUNITY SEWER SYSTEM.

YEARS 1996-2001

| Type                                  | 1996               | Years<br>1997       | 1998             | 1999             | 2000             | 2001             | Total<br>1996-2001*** |
|---------------------------------------|--------------------|---------------------|------------------|------------------|------------------|------------------|-----------------------|
| <b>Revenues</b>                       |                    |                     |                  |                  |                  |                  |                       |
| Beginning Balance                     |                    |                     |                  |                  |                  |                  |                       |
| <b>Operations</b>                     |                    |                     |                  |                  |                  |                  |                       |
| No. Bay/Case Inlet Sewer Utility Fees |                    | \$477,457           | \$477,457        | \$477,457        | \$477,457        | \$477,457        | \$2,387,285           |
| subtotal                              |                    | \$477,457           | \$477,457        | \$477,457        | \$477,457        | \$477,457        | \$2,387,000           |
| <b>Inter Governmental</b>             |                    |                     |                  |                  |                  |                  |                       |
| WA Dept. of Ecology Grant             | \$2,500,000        | \$2,500,000         |                  |                  |                  |                  | \$5,000,000           |
| WA Dept. of Ecology Loan              |                    | \$9,179,688         |                  |                  |                  |                  | \$9,179,688           |
| RECD Loan                             |                    |                     |                  |                  |                  |                  |                       |
| RECD Grant                            |                    | \$5,543,000         |                  |                  |                  |                  | \$5,543,000           |
| subtotal                              | \$2,500,000        | \$17,222,688        |                  |                  |                  |                  | \$19,722,688          |
| <b>Other</b>                          |                    |                     |                  |                  |                  |                  |                       |
| subtotal                              |                    |                     |                  |                  |                  |                  |                       |
| <b>Total Annual Revenues**</b>        | <b>\$2,500,000</b> | <b>\$17,700,145</b> | <b>\$477,457</b> | <b>\$477,457</b> | <b>\$477,457</b> | <b>\$477,457</b> | <b>\$22,109,688</b>   |

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Mason County Comprehensive Plan - April, 1996

Capital Facilities

TABLE 10-4 (continued)  
MASON COUNTY NORTH BAY/CASE INLET COMMUNITY SEWER SYSTEM

YEARS 1996-2001

| Type                                       | 1996        | Years<br>1997 | 1998      | 1999      | 2000      | 2001      | Total<br>1996-2001**** |
|--|-------------|---------------|-----------|-----------|-----------|-----------|------------------------|
| <b>Expenditures</b>                        |             |               |           |           |           |           |                        |
| Debt Service *                             |             | \$477,457     | \$477,457 | \$477,457 | \$477,457 | \$477,457 | \$2,387,285            |
| Subtotal                                   |             | \$477,457     | \$477,457 | \$477,457 | \$477,457 | \$477,457 |                        |
| Revenue Remaining for Capital Improvements | \$2,500,000 | \$17,222,688  |           |           |           |           | \$19,723,000           |
| <b>Capital Improvement Projects</b>        |             |               |           |           |           |           |                        |
| No. Bay/Case Inlet Wastewater System       |             | \$17,905,000  |           |           |           |           | \$17,905,000           |
| <b>Total Improvement Expenditures</b>      |             | \$17,905,000  |           |           |           |           | \$17,905,000           |
| <b>Revenue/Expenditure Balance</b>         |             |               |           |           |           |           |                        |
| Total Annual Revenues**                    | \$2,500,000 | \$17,700,000  | \$477,000 | \$477,000 | \$477,000 | \$477,000 | \$22,108,000           |
| Total Annual Expenditures**                |             | \$477,000     | \$477,000 | \$477,000 | \$477,000 | \$477,000 | \$2,385,000            |
| Total Annual Capital Improvements**        |             | \$17,905,000  |           |           |           |           | \$17,905,000           |
| Revenues Remaining Year End**              | \$2,500,000 | (\$682,000)   |           |           |           |           | \$1,818,000            |

\* Debt Service on DOE/RECD loans @ 5% interest over 30 yrs.

\*\*Rounded to nearest \$1,000.

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Mason County Comprehensive Plan - April, 1996

Capital Facilities

### *Rural Activity Center and Urban Area Community-Based Wastewater Treatment*

The cost of providing community based wastewater service to designated RACs and unincorporated urban areas will vary depending on the type of system chosen, the need for new systems to protect the health and environment, and the population affected. To give better understanding of these, a number of alternatives are discussed herein.

Table 10-5 displays the cost for each alternative for the years 2001 and 2015. The cost of providing wastewater service to these areas is based upon the Gray & Osborne report for the North Bay/Case Inlet, existing household counts provided by Mason County, and population forecasts for the RACs and unincorporated urban areas provided elsewhere in this comprehensive plan/EIS. There is a wide discrepancy between the two low cost alternatives and the two high cost alternatives. Community-based wastewater treatment costs for the six year planning period (2001) for Alternative 4 and the Preferred Alternative range from \$22.6 million to \$27.8 million, while Alternative 2 and Alternative 3 costs range from \$69.5 million to \$76.2 million. The high cost of wastewater service in Alternatives 2 and 3 is primarily due to the larger existing number of households within the RACs and unincorporated urban areas and a higher population growth during the six-year planning period.

During the planning period between years 2002 to 2015 all alternatives will experience growth and development which will add to the community-based treatment costs. The differences between the low and high cost alternatives, however, will remain.

The total cost to provide community-based wastewater treatment is also displayed in Table 10-5. The costs will range from \$29.4 million to approximately \$170.3 million. Alternative 4 and the Preferred Alternative total costs will continue to be considerably lower than Alternatives 2 and 3.

While the County has not addressed how to finance community-based wastewater service in the RACs and unincorporated urban areas, one option would be to have the households pay for the cost of the service through a satellite management agency (SMA). There currently exists one state certified SMA in Mason County that could potentially be a manager and operator of these wastewater systems. The County, however, is no longer a certified satellite management agency and so would not have responsibility to own and/or operate the satellite management systems in RACs.

Financing through the SMA could be with a low interest intergovernmental loan or revenue bond to pay for the treatment facility and conveyance system. A rate schedule for customers in the RACs and unincorporated urban areas would be implemented to pay for both the debt service and the operation and maintenance costs of the entire system.

The advantage of a satellite management system program is that it can administer a collection of small, self-sufficient systems providing utility service to a geographically discontinuous area. The use of satellite systems, such as community-based wastewater systems, allows a utility to provide service in a new area without expanding its main system across large areas with no need for service. Customers served by a satellite management system can capitalize on economies of scale by belonging to a large utility. The economies include reduced maintenance and administration costs and more reliable service. Further, since the GMA limits urban growth to areas that can be provided with urban-level services, the use of satellite systems can greatly increase the geographic flexibility of predicted growth.

TABLE 10-5  
MASON COUNTY RURAL ACTIVITY CENTERS & URBAN AREAS  
COMMUNITY BASED WASTEWATER SYSTEM COSTS  
ALTERNATIVES 2, 3, 4, & PREFERRED  
YEARS 2001, 2015

| Alternative                | 2001                        |      |                 |                |                |                          | 2015                        |                 |                |                          | 1995-2015                |
|----------------------------|-----------------------------|------|-----------------|----------------|----------------|--------------------------|-----------------------------|-----------------|----------------|--------------------------|--------------------------|
|                            | Additional<br>Pop. yr. 2001 | PPH  | Total<br>New HH | Existing<br>HH | Cost per<br>HH | Total<br>Capital<br>Cost | Additional<br>Pop. yr. 2015 | Total<br>New HH | Cost per<br>HH | Total<br>Capital<br>Cost | Total<br>Capital<br>Cost |
| <b>Alternative 2 (UAs)</b> |                             |      |                 |                |                |                          |                             |                 |                |                          |                          |
| Belfair                    | 2,576                       | 2.22 | 1,161           | 181            | \$15,838       | \$21,246,962             | 7,729                       | 3,482           | \$15,838       | \$36,760,569             | \$58,007,531             |
| Allyn                      | 1,288                       | 1.79 | 720             | 518            | \$15,838       | \$19,600,366             | 3,864                       | 2,159           | \$15,838       | \$22,792,563             | \$42,392,929             |
| Union                      | 1,288                       | 2.22 | 580             | 439            | \$15,838       | \$16,141,776             | 3,864                       | 1,741           | \$15,838       | \$18,377,787             | \$34,519,563             |
| Hoodsport                  | 644                         | 1.61 | 400             | 392            | \$15,838       | \$12,543,696             | 1,932                       | 1,200           | \$15,838       | \$12,670,400             | \$25,214,096             |
| <b>Total</b>               | <b>5,796</b>                |      | <b>2,860</b>    | <b>1,530</b>   |                | <b>\$69,532,800</b>      | <b>17,389</b>               | <b>8,581</b>    |                | <b>\$90,601,319</b>      | <b>\$160,134,119</b>     |
| <b>Alternative 3</b>       |                             |      |                 |                |                |                          |                             |                 |                |                          |                          |
| Belfair                    | 6,440                       | 2.22 | 2,901           | 722            | \$15,838       | \$57,382,001             | 19,321                      | 8,703           | \$15,838       | \$91,893,931             | \$149,275,932            |
| Allyn                      | 42                          | 1.79 | 23              | 518            | \$15,838       | \$8,575,702              | 127                         | 71              | \$15,838       | \$752,084                | \$9,327,786              |
| Union                      | 86                          | 2.22 | 39              | 412            | \$15,838       | \$7,138,800              | 258                         | 116             | \$15,838       | \$1,227,088              | \$8,365,888              |
| Hoodsport                  | 12                          | 1.61 | 7               | 188            | \$15,838       | \$3,095,591              | 36                          | 22              | \$15,838       | \$236,094                | \$3,331,686              |
| <b>Total</b>               | <b>6,580</b>                |      | <b>2,971</b>    | <b>1,840</b>   |                | <b>\$76,192,095</b>      | <b>19,742</b>               | <b>8,913</b>    |                | <b>\$94,109,197</b>      | <b>\$170,301,292</b>     |
| <b>Alternative 4</b>       |                             |      |                 |                |                |                          |                             |                 |                |                          |                          |
| Belfair                    | 175                         | 2.22 | 79              | 97             | \$15,838       | \$2,784,777              | 526                         | 237             | \$15,838       | \$2,504,116              | \$5,288,893              |
| Allyn                      | 106                         | 1.79 | 59              | 518            | \$15,838       | \$9,141,977              | 317                         | 177             | \$15,838       | \$1,866,937              | \$11,008,914             |
| Union                      | 128                         | 2.22 | 58              | 412            | \$15,838       | \$7,438,438              | 384                         | 173             | \$15,838       | \$1,826,364              | \$9,264,802              |
| Hoodsport                  | 30                          | 1.61 | 19              | 188            | \$15,838       | \$3,272,662              | 90                          | 56              | \$15,838       | \$590,236                | \$3,862,898              |
| <b>Total</b>               | <b>439</b>                  |      | <b>214</b>      | <b>1,215</b>   |                | <b>\$22,637,854</b>      | <b>1,317</b>                | <b>643</b>      |                | <b>\$6,787,654</b>       | <b>\$29,425,507</b>      |
| <b>Preferred Alt.</b>      |                             |      |                 |                |                |                          |                             |                 |                |                          |                          |
| Belfair                    | 1,189                       | 2.22 | 536             |                | \$15,838       | \$8,484,745              | 3,568                       | 1,607           | \$15,838       | \$16,969,490             | \$25,454,234             |
| Allyn                      | 57                          | 1.79 | 32              | 518            | \$15,838       | \$8,708,423              | 171                         | 96              | \$15,838       | \$1,008,677              | \$9,717,100              |
| Union                      | 117                         | 2.22 | 53              | 412            | \$15,838       | \$7,359,961              | 350                         | 158             | \$15,838       | \$1,662,277              | \$9,022,238              |
| Hoodsport                  | 16                          | 1.61 | 10              | 188            | \$15,838       | \$3,134,940              | 48                          | 30              | \$15,838       | \$314,793                | \$3,449,733              |
| <b>Total</b>               | <b>1,379</b>                |      | <b>630</b>      | <b>1,118</b>   |                | <b>\$27,688,069</b>      | <b>4,137</b>                | <b>1,890</b>    |                | <b>\$19,955,236</b>      | <b>\$47,643,305</b>      |

PPH = Persons Per Household, HH = Household

Notes:

- \*Population projections: year 2014 forecast (Source: Community Connections) extrapolated to year 2015 and interpolated to year 2001.
- \*PPH: average household size by watershed in year 1990, assumed to hold constant through year 2015 (source: Community Connections).
- \*The density of new growth in RACs is assumed to be 2.5 du/acre for SP and 10 du/acre for MP. Same density factors used for Urban Areas in Alternative #2.
- \*Housing Distribution: 65% single family; 17.5% multi-family and mobile home (Source: Community Connections)
- \*Housing Density: Rural Activity Center new development single family = 2-3 DU/acre; multi-family = 8-12 DU/acre (Source: Community Connections)
- \*The original estimate of \$18,000 per household from Gray & Osborne "North Bay/Case Inlet/Final Wastewater Facility Plan" (May 1994) has been modified to \$15,838 per household based on cost re-evaluation by Gray & Osborne.
- \*Existing Household data provided by Mason County Dept. of Community Development. It is assumed that each household equals a connection.

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Capital Facilities

TABLE 10-5  
MASON COUNTY RURAL ACTIVITY CENTERS & URBAN AREAS  
COMMUNITY BASED WASTEWATER SYSTEM COSTS  
ALTERNATIVES 2, 3, 4, & PREFERRED  
YEARS 2001, 2015

| Alternative                | 2001                        |      |                 |                |                | 2015                     |                             |                 |                |                          | 1995-2015<br>Total<br>Capital<br>Cost |
|----------------------------|-----------------------------|------|-----------------|----------------|----------------|--------------------------|-----------------------------|-----------------|----------------|--------------------------|---------------------------------------|
|                            | Additional<br>Pop. yr. 2001 | PPH  | Total<br>New HH | Existing<br>HH | Cost per<br>HH | Total<br>Capital<br>Cost | Additional<br>Pop. yr. 2015 | Total<br>New HH | Cost per<br>HH | Total<br>Capital<br>Cost |                                       |
| <b>Alternative 2 (UAs)</b> |                             |      |                 |                |                |                          |                             |                 |                |                          |                                       |
| Belfair                    | 2,576                       | 2.22 | 1,161           | 181            | \$15,838       | \$21,246,962             | 7,729                       | 3,482           | \$15,838       | \$36,760,569             | \$58,007,531                          |
| Allyn                      | 1,288                       | 1.79 | 720             | 518            | \$15,838       | \$19,600,366             | 3,864                       | 2,159           | \$15,838       | \$22,792,563             | \$42,392,929                          |
| Union                      | 1,288                       | 2.22 | 580             | 439            | \$15,838       | \$16,141,776             | 3,864                       | 1,741           | \$15,838       | \$18,377,787             | \$34,519,563                          |
| Hoodsport                  | 644                         | 1.61 | 400             | 392            | \$15,838       | \$12,543,696             | 1,932                       | 1,200           | \$15,838       | \$12,670,400             | \$25,214,096                          |
| <b>Total</b>               | <b>5,796</b>                |      | <b>2,860</b>    | <b>1,530</b>   |                | <b>\$69,532,800</b>      | <b>17,389</b>               | <b>8,581</b>    |                | <b>\$90,601,319</b>      | <b>\$160,134,119</b>                  |
| <b>Alternative 3</b>       |                             |      |                 |                |                |                          |                             |                 |                |                          |                                       |
| Belfair                    | 6,440                       | 2.22 | 2,901           | 722            | \$15,838       | \$57,382,001             | 19,321                      | 8,703           | \$15,838       | \$91,893,931             | \$149,275,932                         |
| Allyn                      | 42                          | 1.79 | 23              | 518            | \$15,838       | \$8,575,702              | 127                         | 71              | \$15,838       | \$752,084                | \$9,327,786                           |
| Union                      | 86                          | 2.22 | 39              | 412            | \$15,838       | \$7,138,800              | 258                         | 116             | \$15,838       | \$1,227,088              | \$8,365,888                           |
| Hoodsport                  | 12                          | 1.61 | 7               | 188            | \$15,838       | \$3,095,591              | 36                          | 22              | \$15,838       | \$236,094                | \$3,331,686                           |
| <b>Total</b>               | <b>6,580</b>                |      | <b>2,971</b>    | <b>1,840</b>   |                | <b>\$76,192,095</b>      | <b>19,742</b>               | <b>8,913</b>    |                | <b>\$94,109,197</b>      | <b>\$170,301,292</b>                  |
| <b>Alternative 4</b>       |                             |      |                 |                |                |                          |                             |                 |                |                          |                                       |
| Belfair                    | 175                         | 2.22 | 79              | 97             | \$15,838       | \$2,784,777              | 526                         | 237             | \$15,838       | \$2,504,116              | \$5,288,893                           |
| Allyn                      | 106                         | 1.79 | 59              | 518            | \$15,838       | \$9,141,977              | 317                         | 177             | \$15,838       | \$1,866,937              | \$11,008,914                          |
| Union                      | 128                         | 2.22 | 58              | 412            | \$15,838       | \$7,438,438              | 384                         | 173             | \$15,838       | \$1,826,364              | \$9,264,802                           |
| Hoodsport                  | 30                          | 1.61 | 19              | 188            | \$15,838       | \$3,272,662              | 90                          | 56              | \$15,838       | \$590,236                | \$3,862,898                           |
| <b>Total</b>               | <b>439</b>                  |      | <b>214</b>      | <b>1,215</b>   |                | <b>\$22,637,854</b>      | <b>1,317</b>                | <b>643</b>      |                | <b>\$6,787,654</b>       | <b>\$29,425,507</b>                   |
| <b>Preferred Alt.</b>      |                             |      |                 |                |                |                          |                             |                 |                |                          |                                       |
| Belfair                    | 1,189                       | 2.22 | 536             |                | \$15,838       | \$8,484,745              | 3,568                       | 1,607           | \$15,838       | \$16,969,490             | \$25,454,234                          |
| Allyn                      | 57                          | 1.79 | 32              | 518            | \$15,838       | \$8,708,423              | 171                         | 96              | \$15,838       | \$1,008,677              | \$9,717,100                           |
| Union                      | 117                         | 2.22 | 53              | 412            | \$15,838       | \$7,359,961              | 350                         | 158             | \$15,838       | \$1,662,277              | \$9,022,238                           |
| Hoodsport                  | 16                          | 1.61 | 10              | 188            | \$15,838       | \$3,134,940              | 48                          | 30              | \$15,838       | \$314,793                | \$3,449,733                           |
| <b>Total</b>               | <b>1,379</b>                |      | <b>630</b>      | <b>1,118</b>   |                | <b>\$27,688,069</b>      | <b>4,137</b>                | <b>1,890</b>    |                | <b>\$19,955,236</b>      | <b>\$47,643,305</b>                   |

PPH = Persons Per Household, HH = Household

Notes:

\*Population projections: year 2014 forecast (Source: Community Connections) extrapolated to year 2015 and interpolated to year 2001.

\*PPH: average household size by watershed in year 1990, assumed to hold constant through year 2015 (source: Community Connections).

\*The density of new growth in RACs is assumed to be 2.5 du/acre for SR and 10 du/acre for MR. Same density factors used for Urban Areas in Alternative #2.

\*Housing Distribution: 65% single family; 17.5% multi-family and mobile home (Source: Community Connections)

\*Housing Density: Rural Activity Center new development single family = 2-3 DU/acre; multi-family = 8-12 DU/acre (Source: Community Connections)

\*The original estimate of \$18,000 per household from Gray & Osborne "North Bay/Case Inlet Final Wastewater Facility Plan" (May 1994) has been modified to \$15,838 per household based on cost re-evaluation by Gray & Osborne.

\*Existing Household data provided by Mason County Dept. of Community Development. It is assumed that each household equals a connection.

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### ***Clean Water Districts***

A different option than the expensive community-based wastewater treatment systems for RACs and unincorporated urban areas might be to initiate an on-site system management program. This program could be implemented through the authority of a Clean Water District. The advantage of this option would be its low cost and quick start-up capability as well as the ability to include all on-site systems within a

clean water district not just those in the RACs and unincorporated urban areas. The use of Clean Water Districts could also be an interim measure to temporarily address non-point source pollution from on-site systems while the County investigated long-term, more permanent solutions such as the community-based wastewater systems..

Mason County currently has two clean water districts that have collected fees for on-site system data collection. Another proposed district has recently been defeated by voters.

The cost of implementing a Clean Water District on-site management program has not been calculated.

### ***On-Site Sewage Operation and Maintenance Program***

Another option for handling wastewater treatment needs in the County is to implement a comprehensive operation and maintenance program for on-site sewage systems. The Mason County Health Department has proposed such a County-wide on-site sewage operation and maintenance program (updated September 1, 1995). This proposal is beneficial in that it:

- ¥ Provides an interim program for reducing on-site non-point pollution while the County seeks appropriate funding and resolves the technical challenges of community-based wastewater treatment, and
- ¥ Extends the facility control and improvement process beyond just new and future households in the rural activity centers to include all on-site systems in all land use classifications.

This program addresses the facility improvement needs not only of new growth and development, but is also aimed at improving deficient systems which currently exist and which now contribute to water quality problems in the County. This program administers

the maintenance of enhanced on-site treatment systems which utilize technologies which are more complex than conventional gravity drain field systems and which, consequently, require professional operation and maintenance. In addition, existing conventional systems are included in the program for inspection, upgrading where needed, and ongoing monitoring and maintenance.

The proposed program involves a phased, 4-year, implementation schedule of voluntary, evolving into-mandatory participation by all owners of new and existing systems. The program provides for new system design review, as well as regular inspection, monitoring, and operational maintenance of all existing and new systems.

The estimated cost of the first phase of the program is \$35k, which includes \$15k for development of a database for the program and \$20k to fund a part-time position to manage program activities. The cost of the second phase is estimated at \$52.5k, which is the updated cost to fund a half-time administrative/inspection position for the program.

The cost of the initial database programming is anticipated by the County proposal to be paid through an "Urgent Needs" grant from the Washington Department of Health. Costs for the program may eventually be paid by those participating in the program. A fee schedule would then be established in the second phase to help offset some of the costs to the County.

### Solid Waste

Table 10-6 presents revenue sources and expenditure levels for Mason County solid waste services from 1996 to 2001. The County's comprehensive solid waste plan (1992) does not identify any solid waste capital improvements over the six year period. The solid waste plan, though, will be updated in 1997 for a cost of approximately \$20k.

The main revenue source to pay for solid waste expenditures are tipping fees, though intergovernmental funding will be used to pay for the solid waste plan update and solid waste program coordination. Tipping fees are estimated to provide \$10.7 million in revenues and the intergovernmental revenues are forecast to be about \$279k. The administration, enforcement, operations and maintenance costs make up all of the expenditures, except for \$20k budgeted to update the Solid Waste Management Plan. The utility is expected to run a surplus totaling \$409k by the year 2001.



TABLE 10-6  
SOLID WASTE REVENUES AND EXPENDITURES

YEARS 1996-2001

| Type   | 1996               | Years<br>1997      | 1998               | 1999               | 2000               | 2001               | Total<br>1996-2001*** |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-----------------------|
| <b>Revenues</b>                                |                    |                    |                    |                    |                    |                    |                       |
| Beginning Balance*                             | \$400,000          | \$325,000          | \$277,000          | \$258,000          | \$272,000          | \$321,000          |                       |
| <b>Operations</b>                              |                    |                    |                    |                    |                    |                    |                       |
| Tipping Fees (Assumes 5% annual rate increase) | \$1,580,050        | \$1,659,053        | \$1,742,005        | \$1,829,105        | \$1,920,561        | \$2,016,589        | \$10,747,000          |
| Other Service Fees                             |                    |                    |                    |                    |                    |                    |                       |
| subtotal                                       | \$1,580,050        | \$1,659,053        | \$1,742,005        | \$1,829,105        | \$1,920,561        | \$2,016,589        | \$10,747,000          |
| <b>Inter Governmental</b>                      |                    |                    |                    |                    |                    |                    |                       |
| State Waste Coordination Grant                 | \$43,200           | \$43,200           | \$43,200           | \$43,200           | \$43,200           | \$43,200           | \$259,000             |
| State Solid Waste Planning Grant               |                    | \$20,000           |                    |                    |                    |                    | \$20,000              |
| subtotal                                       | \$43,200           | \$63,200           | \$43,200           | \$43,200           | \$43,200           | \$43,200           | \$279,200             |
| <b>Other</b>                                   |                    |                    |                    |                    |                    |                    |                       |
| Interest Income                                | \$17,700           | \$17,736           | \$18,048           | \$18,657           | \$19,600           | \$20,896           | \$113,000             |
| Contributions/Miscellaneous                    | \$20,000           | \$20,000           | \$20,000           | \$20,000           | \$20,000           | \$20,000           | \$120,000             |
| subtotal                                       | \$37,700           | \$37,736           | \$38,048           | \$38,657           | \$39,600           | \$40,896           | \$233,000             |
| <b>Total Annual Revenues***</b>                | <b>\$1,660,950</b> | <b>\$1,759,988</b> | <b>\$1,823,253</b> | <b>\$1,910,962</b> | <b>\$2,003,360</b> | <b>\$2,100,685</b> | <b>\$11,259,200</b>   |

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TABLE 10-6 (continued)  
SOLID WASTE REVENUES AND EXPENDITURES

YEARS 1996-2001

| Type                                       | 1996        | Years<br>1997 | 1998        | 1999        | 2000        | 2001        | Total<br>1996-2001*** |
|--|-------------|---------------|-------------|-------------|-------------|-------------|-----------------------|
| <b>Expenditures</b>                        |             |               |             |             |             |             |                       |
| Salaries & Benefits **                     | \$267,300   | \$275,319     | \$283,579   | \$292,086   | \$300,849   | \$309,874   | \$1,729,000           |
| Operations and Maintenance **              | \$1,454,750 | \$1,498,393   | \$1,543,344 | \$1,589,645 | \$1,637,334 | \$1,686,454 | \$9,410,000           |
| Intergov. Services **                      | \$14,000    | \$14,420      | \$14,853    | \$15,298    | \$15,757    | \$16,230    | \$91,000              |
| Subtotal                                   | \$1,736,050 | \$1,788,132   | \$1,841,775 | \$1,897,029 | \$1,953,940 | \$2,012,558 | \$11,229,483          |
| Revenue Remaining for Capital Improvements | (\$75,100)  | (\$28,143)    | (\$18,522)  | \$13,934    | \$49,421    | \$88,127    | \$30,000              |
| <b>Capital Improvement Projects</b>        |             |               |             |             |             |             |                       |
| Solid Waste Mngt. Plan Update              |             | \$20,000      |             |             |             |             | \$20,000              |
| <b>Total Improvement Expenditures</b>      |             | \$20,000      |             |             |             |             | \$20,000              |
| <b>Revenue/Expenditure Balance</b>         |             |               |             |             |             |             |                       |
| Total Annual Revenues***                   | \$1,661,000 | \$1,760,000   | \$1,823,000 | \$1,911,000 | \$2,003,000 | \$2,101,000 | \$11,259,000          |
| Total Annual Expenditures***               | \$1,736,000 | \$1,788,000   | \$1,842,000 | \$1,897,000 | \$1,954,000 | \$2,013,000 | \$11,230,000          |
| Total Annual Capital Improvements***       |             | \$20,000      |             |             |             |             | \$20,000              |
| <b>Revenues Remaining Year End***</b>      | \$325,000   | \$277,000     | \$258,000   | \$272,000   | \$321,000   | \$409,000   |                       |

\*Includes reserved retained earnings

\*\*Based on 1996 budget increased @3%/year.

\*\*\*Rounded to nearest \$1,000.

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### ***Intergovernmental Revenues***

Two grants will be used by the County to finance services that tipping fees will not fund. The County intends to receive a DOE waste coordination grant on an annual basis over the six year period. The grant will fund County-wide activities to improve solid waste handling service. The grant will total about \$259k. A smaller grant of \$20k will be provided by DOE to pay for the solid waste comprehensive plan update in 1997. Plan updates are required by the state every five years. The County's current solid waste plan is now four years old. It will be updated in 1997 and the cost of the update will be financed by a \$20k DOE solid waste planning grant.

### ***Operating Revenues***

Solid Waste Tipping Fees are assessed against solid waste haulers to help pay for planning and other services provided by the County's Solid Waste Program. They may not be used for capital projects. Most of these fees are collected from Mason County Garbage Company and Rural Garbage SVC, which have hauling contracts for the unincorporated areas of Mason County. Hauling fees will continue to play an important role in financing solid waste planning and administrative costs.

The County does collect no other operating revenues for solid waste. The program has no direct property tax support, and the County does not contribute general fund revenue to the Solid Waste Program. The county may elect to impose a separate fee on solid waste brought into Mason County from elsewhere, but, to date, they have not initiated such a fee.

### ***Municipal Buildings and Law Enforcement Facilities***

The Facilities Steering Committee and the Criminal Justice Working Team, working with a consultant, has assessed future County building needs. A report issued jointly by the Facilities Steering Committee and Criminal Justice Working Team in early January, 1996, has identified four capital facility projects. Table 10-7 lists the projects which are proposed to be constructed beginning in the year 2001. The cost of the four projects which include the North County Service Center, the Family Justice Center, the Law Enforcement Addition, and the Courthouse renovation is approximately \$19 million. These improvement costs are about \$2.4 million less than originally estimated, but the costs have been scaled back because of limited funding sources.

TABLE 10-7  
MASON COUNTY BUILDING PROGRAM

YEARS 1996-2001

| Type                                     | 1996                | 1997               | Years<br>1998      | 1999               | 2000               | 2001               | Total<br>1996-2001** |
|--|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------|
| <b>Revenues</b>                          |                     |                    |                    |                    |                    |                    |                      |
| Beginning Balance*                       | \$68,800            | \$13,184,000       | \$719,000          | \$751,000          | \$786,000          | \$822,000          |                      |
| <b>Operations</b>                        |                     |                    |                    |                    |                    |                    |                      |
| Current Expense Fund                     | \$674,218           | \$2,479,710        | \$2,765,863        | \$2,803,101        | \$2,841,456        | \$2,880,961        | \$14,445,000         |
| Rents, Leases and Concessions            | \$46,000            | \$47,380           | \$48,801           | \$50,265           | \$51,773           | \$53,327           | \$298,000            |
| Local Option Sales Tax                   |                     | \$250,000          |                    |                    |                    |                    | \$250,000            |
| subtotal                                 | \$720,218           | \$2,777,090        | \$2,814,665        | \$2,853,366        | \$2,893,229        | \$2,934,288        | \$14,993,000         |
| <b>Inter Governmental</b>                |                     |                    |                    |                    |                    |                    |                      |
| subtotal                                 |                     |                    |                    |                    |                    |                    |                      |
| <b>Other</b>                             |                     |                    |                    |                    |                    |                    |                      |
| Interest Income on GO Bond               |                     | \$655,768          | \$32,508           | \$34,414           | \$36,134           | \$37,941           | \$797,000            |
| General Obligation Bond (voter approved) | \$19,000,000        |                    |                    |                    |                    |                    | \$19,000,000         |
| subtotal                                 | \$19,000,000        | \$655,768          | \$32,508           | \$34,414           | \$36,134           | \$37,941           | \$19,797,000         |
| <b>Total Annual Revenues</b>             | <b>\$19,720,218</b> | <b>\$3,432,858</b> | <b>\$2,847,173</b> | <b>\$2,887,780</b> | <b>\$2,929,363</b> | <b>\$2,972,229</b> | <b>\$34,790,000</b>  |

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TABLE 10-7 (continued)  
MASON COUNTY BUILDING PROGRAM

YEARS 1996-2001

| Type   | 1996                | Years<br>1997       | 1998             | 1999             | 2000             | 2001             | Total<br>1996-2001** |
|--|---------------------|---------------------|------------------|------------------|------------------|------------------|----------------------|
| <b>Expenditures</b>                              |                     |                     |                  |                  |                  |                  |                      |
| Personnel & Administrative                       | \$314,638           | \$511,314           | \$526,653        | \$542,453        | \$558,726        | \$575,488        | \$3,029,000          |
| Operations and Maintenance                       | \$405,580           | \$741,167           | \$763,402        | \$786,304        | \$809,894        | \$834,190        | \$4,341,000          |
| Bond Debt Service (Assumes 5% Rate over 20 yrs.) |                     | \$1,524,609         | \$1,524,609      | \$1,524,609      | \$1,524,609      | \$1,524,609      | \$7,623,000          |
| Subtotal   | \$720,218           | \$2,777,090         | \$2,814,665      | \$2,853,366      | \$2,893,229      | \$2,934,288      | \$14,993,000         |
| Revenue Remaining for Capital Improvements       | \$19,000,000        | \$655,768           | \$32,508         | \$34,414         | \$36,134         | \$37,941         | \$19,797,000         |
| <b>Capital Improvement Projects</b>              |                     |                     |                  |                  |                  |                  |                      |
| North County Service Center                      |                     | \$911,928           |                  |                  |                  |                  | \$912,000            |
| Family Justice Center                            |                     | \$12,209,040        |                  |                  |                  |                  | \$12,209,000         |
| Law Enforcement Addition                         | \$2,818,296         |                     |                  |                  |                  |                  | \$2,818,000          |
| Courthouse Renovation                            | \$3,066,345         |                     |                  |                  |                  |                  | \$3,066,000          |
| <b>Total Improvement Expenditures</b>            | <b>\$5,884,642</b>  | <b>\$13,120,968</b> |                  |                  |                  |                  | <b>\$19,006,000</b>  |
| <b>Revenue/Expenditure Balance**</b>             |                     |                     |                  |                  |                  |                  |                      |
| Total Annual Revenues                            | \$19,720,000        | \$3,433,000         | \$2,847,000      | \$2,888,000      | \$2,929,000      | \$2,972,000      | \$34,789,000         |
| Total Annual Expenditures                        | \$720,000           | \$2,777,000         | \$2,815,000      | \$2,853,000      | \$2,893,000      | \$2,934,000      | \$14,992,000         |
| Total Annual Capital Improvements                | \$5,885,000         | \$13,121,000        |                  |                  |                  |                  | \$19,006,000         |
| <b>Revenues Remaining Year End**</b>             | <b>\$13,184,000</b> | <b>\$719,000</b>    | <b>\$751,000</b> | <b>\$786,000</b> | <b>\$822,000</b> | <b>\$860,000</b> | <b>\$791,000</b>     |

\*Includes reserved retained earnings

\*\*Rounded to nearest \$1,000.

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The new buildings and addition will increase both operation and maintenance costs as well as the personnel and administrative costs with additional staffing requirements. These costs have been incorporated into the expenditure categories in Table 10-7.

Financing for these capital improvements is displayed in Table 10-7 is to be entirely by a general obligation bond (\$19 million). The County intends to seek this funding in 1996, and use it for the two projects in 1996 and the two in 1997. If the County secures the funding for these facilities, the debt service will be paid through a combination of current expense fund; rents, leases, and concession revenues; and local option sales taxes.

### **Parks and Recreation**

The County has identified over the six year period seven park and recreation improvements. The projects include improvements to existing parks and boat launches as well as the development of new ball fields. The total cost for these improvements are expected to be approximately \$1.1 million (see Table 10-8).

Financing for these facility improvements are a combination of intergovernmental sources, activity/program fees, donations, and road funds. It is not possible, however, to finance all identified improvements with these funding sources so it is expected that the balance of funding will be secured by a small general obligation bond.

The grants include Interagency for Outdoor Recreation (\$453k), Dept. of Fish & Wildlife (\$40k) and Aquatic Lands Enhancement grant (\$67k). Organized team sports will generate revenues through the payment of activity/program fees. A small amount of the County's Road Fund (\$62.5k) is expected to be used to help finance the road improvements for the Sandhill Park/Ball fields. Direct donations have been a successful source of funding park improvements in the past and are expected to help fund the improvement costs. It is estimated donations can pay for about 15 percent of the total improvement costs.

The general obligation bond is estimated to be approximately \$400k. Annual debt service over the 20 year amortization period is expected to be approximately \$32k/year beginning in 1997. It may be possible to combine parks bond with the buildings/law enforcement bond as a way to streamline the funding process and reduce the administrative costs of preparing bond prospectuses.

***Drainage Management***

The County does not have a formal drainage program or drainage comprehensive plan. Drainage facility improvements in the County are typically related to the roadway system. Table 10-9 displays the improvement costs that are expected over the six year planning period. All improvements are related to roadway system improvements.

The cost of roadway related drainage improvements are forecast to be approximately \$462k. Roadway drainage improvements usually include bio-filtration, culverts, detention/retention, and enclosed drainage systems. The County is planning to develop a drainage master plan for the roadway system beginning in the year 2000. The cost of this plan is expected to be approximately \$100k.

Financing drainage improvements will come from a combination of road fund property taxes, timber harvest excise taxes and motor fuel taxes. The funding for drainage improvements is considered adequate for the six year period.

TABLE 10-8  
MASON COUNTY PARKS AND RECREATION

YEARS 1996-2001

| Type   | 1996             | Years<br>1997    | 1998             | 1999             | 2000             | 2001             | Total<br>1996-2001** |
|--|------------------|------------------|------------------|------------------|------------------|------------------|----------------------|
| <b>Revenues</b>                                    |                  |                  |                  |                  |                  |                  |                      |
| Beginning Balance*                                 |                  | (\$28,000)       | \$185,000        | (\$8,000)        | \$11,000         | \$32,000         |                      |
| <b>Operations</b>                                  |                  |                  |                  |                  |                  |                  |                      |
| Current Expense Fund                               | \$309,735        | \$319,027        | \$328,598        | \$338,456        | \$348,609        | \$359,068        | \$2,003,000          |
| Road Fund (20% grant match Sandhill Park improve.) |                  |                  | \$62,500         |                  |                  |                  | \$63,000             |
| Activity/Program Fees                              | \$27,415         | \$28,237         | \$29,085         | \$29,957         | \$30,856         | \$31,781         | \$177,000            |
| Subtotal   | \$337,150        | \$347,265        | \$420,182        | \$368,413        | \$379,465        | \$390,849        | \$2,243,000          |
| <b>Inter Governmental</b>                          |                  |                  |                  |                  |                  |                  |                      |
| WA-IOR - Boating Facility Grant                    |                  | \$203,000        |                  |                  |                  |                  | \$203,000            |
| WA-IOR - Community Recreation Grant                |                  |                  | \$250,000        |                  |                  |                  | \$250,000            |
| Dept. F&W - Fish Enhancement Grant                 |                  |                  | \$40,000         |                  |                  |                  | \$40,000             |
| WA-ALE Grant - Shellfish Enhancement               |                  |                  | \$67,500         |                  |                  |                  | \$68,000             |
| Subtotal   |                  | \$203,000        | \$357,500        |                  |                  |                  | \$561,000            |
| <b>Other</b>                                       |                  |                  |                  |                  |                  |                  |                      |
| Interest Income on GO Bond                         |                  | \$11,900         | \$12,495         | \$13,120         | \$13,776         | \$14,465         | \$66,000             |
| General Obligation Bond (voter approved)           |                  | \$400,000        |                  |                  |                  |                  | \$400,000            |
| Donations (15% of improvement costs)               |                  | \$30,450         | \$53,625         |                  |                  |                  | \$84,000             |
| Subtotal   |                  | \$442,350        | \$66,120         | \$13,120         | \$13,776         | \$14,465         | \$550,000            |
| <b>Total Annual Revenues</b>                       | <b>\$337,150</b> | <b>\$992,615</b> | <b>\$843,802</b> | <b>\$381,533</b> | <b>\$393,241</b> | <b>\$405,314</b> | <b>\$3,354,000</b>   |

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TABLE 10-8 (Continued)  
 MASON COUNTY PARKS AND RECREATION  
 YEARS 1996-2001

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| Type   | 1996              | Years<br>1997    | 1998             | 1999            | 2000            | 2001            | Total<br>1996-2001** |
|--|-------------------|------------------|------------------|-----------------|-----------------|-----------------|----------------------|
| <b>Expenditures</b>                              |                   |                  |                  |                 |                 |                 |                      |
| Salaries and Benefits                            | \$175,600         | \$180,868        | \$186,294        | \$191,883       | \$197,639       | \$203,569       | \$1,136,000          |
| Operations and Maintenance                       | \$106,050         | \$109,232        | \$112,508        | \$115,884       | \$119,360       | \$122,941       | \$686,000            |
| Capital Outlay                                   | \$55,500          | \$55,500         | \$55,500         | \$55,500        | \$55,500        | \$55,500        | \$333,000            |
| Bond Debt Service (Assumes 5% Rate over 20 yrs.) |                   | \$32,097         | \$32,097         | \$32,097        | \$32,097        | \$32,097        | \$160,000            |
| Subtotal   | \$337,150         | \$345,600        | \$354,302        | \$363,267       | \$372,500       | \$382,010       | \$2,155,000          |
| Revenue Remaining for Capital Improvements       |                   | \$647,015        | \$489,500        | \$18,266        | \$20,741        | \$23,304        | \$1,199,000          |
| <b>Capital Improvement Projects</b>              |                   |                  |                  |                 |                 |                 |                      |
| Sandhill Park/Ballfields                         |                   |                  | \$500,000        |                 |                 |                 | \$500,000            |
| Mason Lake Park Boat Launch Renovation           |                   | \$208,000        |                  |                 |                 |                 | \$208,000            |
| Latimer's Landing Boat Launch Renovation         |                   | \$198,000        |                  |                 |                 |                 | \$198,000            |
| Union Community Park Development                 | \$28,300          | \$28,300         |                  |                 |                 |                 | \$57,000             |
| Walker Park                                      |                   |                  | \$90,000         |                 |                 |                 | \$90,000             |
| Foothills Park Development                       |                   |                  | \$47,300         |                 |                 |                 | \$47,000             |
| Truman Glick Memorial Park                       |                   |                  | \$45,500         |                 |                 |                 | \$46,000             |
| <b>Total Improvement Expenditures</b>            | <b>\$28,300</b>   | <b>\$434,300</b> | <b>\$682,800</b> |                 |                 |                 | <b>\$1,145,000</b>   |
| <b>Revenue/Expenditure Balance**</b>             |                   |                  |                  |                 |                 |                 |                      |
| Total Annual Revenues                            | \$337,000         | \$993,000        | \$844,000        | \$382,000       | \$393,000       | \$405,000       | \$3,354,000          |
| Total Annual Expenditures                        | \$337,000         | \$346,000        | \$354,000        | \$363,000       | \$372,000       | \$382,000       | \$2,154,000          |
| Total Annual Capital Improvements                | \$28,000          | \$434,000        | \$683,000        |                 |                 |                 | \$1,145,000          |
| <b>Revenues Remaining Year End***</b>            | <b>(\$28,000)</b> | <b>\$185,000</b> | <b>(\$8,000)</b> | <b>\$11,000</b> | <b>\$32,000</b> | <b>\$55,000</b> |                      |

\*Includes reserved retained earnings

\*\*\*Rounded to nearest \$1,000.

TABLE 10-9  
 MASON COUNTY DRAINAGE MANAGEMENT PROGRAM  
 YEARS 1996-2001

| Type                                    | 1996             | Years<br>1997    | 1998             | 1999             | 2000             | 2001             | Total<br>1996-2001*** |
|---|------------------|------------------|------------------|------------------|------------------|------------------|-----------------------|
| <b>Revenues</b>                         |                  |                  |                  |                  |                  |                  |                       |
| Beginning Balance*                      |                  | \$14,000         | \$28,000         | \$43,000         | \$58,000         | \$23,000         |                       |
| <b>Operations</b>                       |                  |                  |                  |                  |                  |                  |                       |
| Road Fund Property Taxes                | \$321,962        | \$331,621        | \$341,569        | \$351,816        | \$362,371        | \$373,242        | \$2,083,000           |
| Timber Harvest Excise Tax               | \$145,794        | \$150,168        | \$154,673        | \$159,313        | \$164,092        | \$169,015        | \$943,000             |
| Motor Fuel Taxes                        | \$139,719        | \$143,911        | \$148,228        | \$152,675        | \$157,255        | \$161,973        | \$904,000             |
| subtotal                                | \$684,475        | \$702,699        | \$721,470        | \$740,804        | \$760,718        | \$781,230        | \$4,391,000           |
| <b>Inter Governmental</b>               |                  |                  |                  |                  |                  |                  |                       |
| State grants                            |                  |                  |                  |                  |                  |                  |                       |
| FEMA Grant                              |                  |                  |                  |                  |                  |                  |                       |
| subtotal                                |                  |                  |                  |                  |                  |                  |                       |
| <b>Other</b>                            |                  |                  |                  |                  |                  |                  |                       |
| Interest Income (2% return on revenues) | \$13,690         | \$14,054         | \$14,429         | \$14,816         | \$15,214         | \$15,625         | \$88,000              |
| Miscellaneous                           |                  |                  |                  |                  |                  |                  |                       |
| subtotal                                | \$13,690         | \$14,054         | \$14,429         | \$14,816         | \$15,214         | \$15,625         | \$88,000              |
| <b>Total Annual Revenues***</b>         | <b>\$698,165</b> | <b>\$716,753</b> | <b>\$735,900</b> | <b>\$755,620</b> | <b>\$775,933</b> | <b>\$796,855</b> | <b>\$4,479,000</b>    |

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TABLE 10-9 (continued)  
 MASON COUNTY DRAINAGE MANAGEMENT PROGRAM  
 YEARS 1996-2001

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| Type                                       | 1996      | Years<br>1997 | 1998      | 1999      | 2000      | 2001       | Total<br>1996-2001*** |
|--|-----------|---------------|-----------|-----------|-----------|------------|-----------------------|
| <b>Expenditures</b>                        |           |               |           |           |           |            |                       |
| Salaries & Benefits **                     | \$260,105 | \$267,908     | \$275,945 | \$284,224 | \$292,750 | \$301,533  | \$1,682,000           |
| Operations and Maintenance **              | \$62,020  | \$63,881      | \$65,797  | \$67,771  | \$69,804  | \$71,898   | \$401,000             |
| Interfund Pmts. **                         | \$285,350 | \$293,911     | \$302,728 | \$311,810 | \$321,164 | \$330,799  | \$1,846,000           |
| Subtotal                                   | \$607,475 | \$625,699     | \$644,470 | \$663,804 | \$683,718 | \$704,230  | \$3,929,397           |
| Revenue Remaining for Capital Improvements | \$90,690  | \$91,054      | \$91,429  | \$91,816  | \$92,214  | \$92,625   | \$550,000             |
| <b>Capital Improvement Projects</b>        |           |               |           |           |           |            |                       |
| Drainage Improvements (Road System)        | \$77,000  | \$77,000      | \$77,000  | \$77,000  | \$77,000  | \$77,000   | \$462,000             |
| Drainage Master Plan (Road System)         |           |               |           |           | \$50,000  | \$50,000   | \$100,000             |
| Skookomish Flood Hazard Mngt. Plan         |           |               |           |           |           |            |                       |
| <b>Total Capital Expenditures</b>          | \$77,000  | \$77,000      | \$77,000  | \$77,000  | \$127,000 | \$127,000  | \$562,000             |
| <b>Revenue/Expenditure Balance</b>         |           |               |           |           |           |            |                       |
| Total Annual Revenues***                   | \$698,000 | \$717,000     | \$736,000 | \$756,000 | \$776,000 | \$797,000  | \$4,480,000           |
| Total Annual Expenditures***               | \$607,000 | \$626,000     | \$644,000 | \$664,000 | \$684,000 | \$704,000  | \$3,929,000           |
| Total Annual Capital Improvements***       | \$77,000  | \$77,000      | \$77,000  | \$77,000  | \$127,000 | \$127,000  | \$562,000             |
| Revenues Remaining Year End***             | \$14,000  | \$28,000      | \$43,000  | \$58,000  | \$23,000  | (\$11,000) |                       |

\*Retained earnings to Road Fund from drainage program.  
 \*\*Based on estimated O&M program for roadway drainage system.  
 \*\*\*Rounded to nearest \$1,000.



# Chapter VII

## UTILITIES

### VII-1 EXISTING CONDITIONS

#### Overview

GMA requires that comprehensive plans contain a utilities element. This element should include the general location, and capacity of all existing and proposed utilities, including, but not limited to, electrical lines, telecommunications lines, and natural gas lines.

This chapter focuses on the existing conditions of public and private utilities in Mason County. Utilities that appear in this chapter include: electricity, natural gas, and telecommunications, and cellular communications. Figure VII-1 shows the utility districts, major electrical transmission lines, natural gas pipelines, and public water and sewer systems (discussed in the capital facilities element of this plan).

#### Public and Private Utilities

Most land uses require the presence of utilities, whether they be residential, commercial, industrial, or even agricultural. Utilities are categorized based on ownership of the utility, that is whether they are publicly or privately owned. Public utilities generally provide services to a specific area.

Private utilities in Washington State, such as US West Communications and Cascade Natural Gas, are regulated by the Washington State Utilities and Transportation Commission (WUTC).

The State of Washington Department of Health, as well as local Health Departments, define an approved water system serving more than one residence as "public" even though the system may be owned and operated by a private person or company.

#### Electricity

Public Utilities District No. 1 and Public Utilities District No. 3 provide electrical power to residents of Mason County. Both PUD's provide annual capital improvement programs either directly from user revenues, or from the sale of bonds which are redeemed by user revenues.

### ***Public Utility District No. 1***

The service area for Mason County Public Utility District 1 (PUD No.1) begins approximately one mile west of Twanoh State Park, on the south side of Hood Canal, and extends along the Canal to the Mason/Jefferson County line. The service area stretches along Hood Canal for approximately 50 miles. The district encompasses several river valleys including the Skokomish, Lilliwaup, Hamma Hamma, Duckabush and Dosewallips. PUD No. 1 serves the communities of Lilliwaup, Hoodspport, Potlatch, Union and the Skokomish Indian Reservation.

PUD No. 1 provides power to approximately 4,200 customers. In 1993, PUD No. 1 supplied a total of 58.7 million kilowatt hours. The district currently has a 20 year purchase agreement with the Bonneville Power Administration, which will provide for their projected power requirements through the year 2002. The district also purchases power from the Lilliwaup Falls Hydro Facility. PUD No. 1 has substations located at Potlatch, Duckabush, Hoodspport, the Skokomish river valley and Union.

PUD No. 1 provides approximately \$300,000 in capital improvement projects annually. Major facilities upgrades are planned to serve future populations.

### ***Public Utility District No. 3***

Mason County Public Utility District No. 3 (PUD No. 3) provides electrical power to all areas of Mason County except those serviced by PUD No. 1. It provides electrical power to approximately 24,400 customers. In 1993, PUD No. 3 supplied a total of 493 million kilowatt hours. PUD No. 3 has a purchase agreement with BPA that provides for their projected power requirements through the year 2001.

PUD No. 3 has substations located at Collins Lake, Union River, Belfair, Bayshore, Mason (Shelton), Dayton, Kamilche and Mountain View. There is also an additional substation under construction at Mason/Benson Lake. The PUD currently plans major upgrades in the Collins Lake, Union River and Kamilche areas over the next five years. It provides approximately \$4.5 million in capital improvement projects annually.

### ***Natural Gas***

#### ***Cascade Natural Gas***

Cascade Natural Gas Corporation provides natural gas throughout Mason County. It has offices in Shelton and Port Orchard. The Shelton office serve all of downtown Shelton, northwest along Shelton Springs Road to Sanderson Field, west to US Highway 101 and Shelton Valley Road, and south to Arcadia Road and along Deegan Road approximately 1/2 mile. The Shelton service area also includes the Oak Park and Lake Limerick areas. The Port Orchard office serves to the Belfair area.

Cascade Natural Gas serves approximately 1,450 commercial and residential customers in Mason County. It reviews potential areas for service expansion annually and bases annual capital improvement programs on expected population growth. Cascade Natural Gas also provides service and main extensions for distances greater than those provided by Cascade's extension policy on a customer cost share basis.

### ***Telecommunications***

Several companies provide local telephone service in Mason County. They include Hood Canal Telephone Company, Inland Telephone Company, and US West Communications. US West, however, serves over 90% of Mason County Residents. The following map identifies provider service area information.

#### ***Hood Canal Telephone Company***

The Hood Canal Telephone Company provides local telephone service in the Union area from Twanoh State Park to the Purdy Cut-off along SR-106. The utility serves approximately 930 residential and commercial customers. It currently has all major capital facilities in place to meet the service requirements of its customers.

#### ***Inland Telephone Company***

The Inland Telephone Company provides local telephone service in the Dewatto area. Its service area includes the east shore of Hood Canal from the Mason/Kitsap County Line south to Red Bluff. Inland Telephone provides single party service to business and residential customers.

#### ***US West Communications***

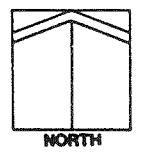
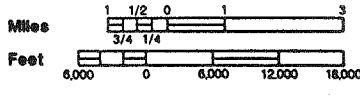
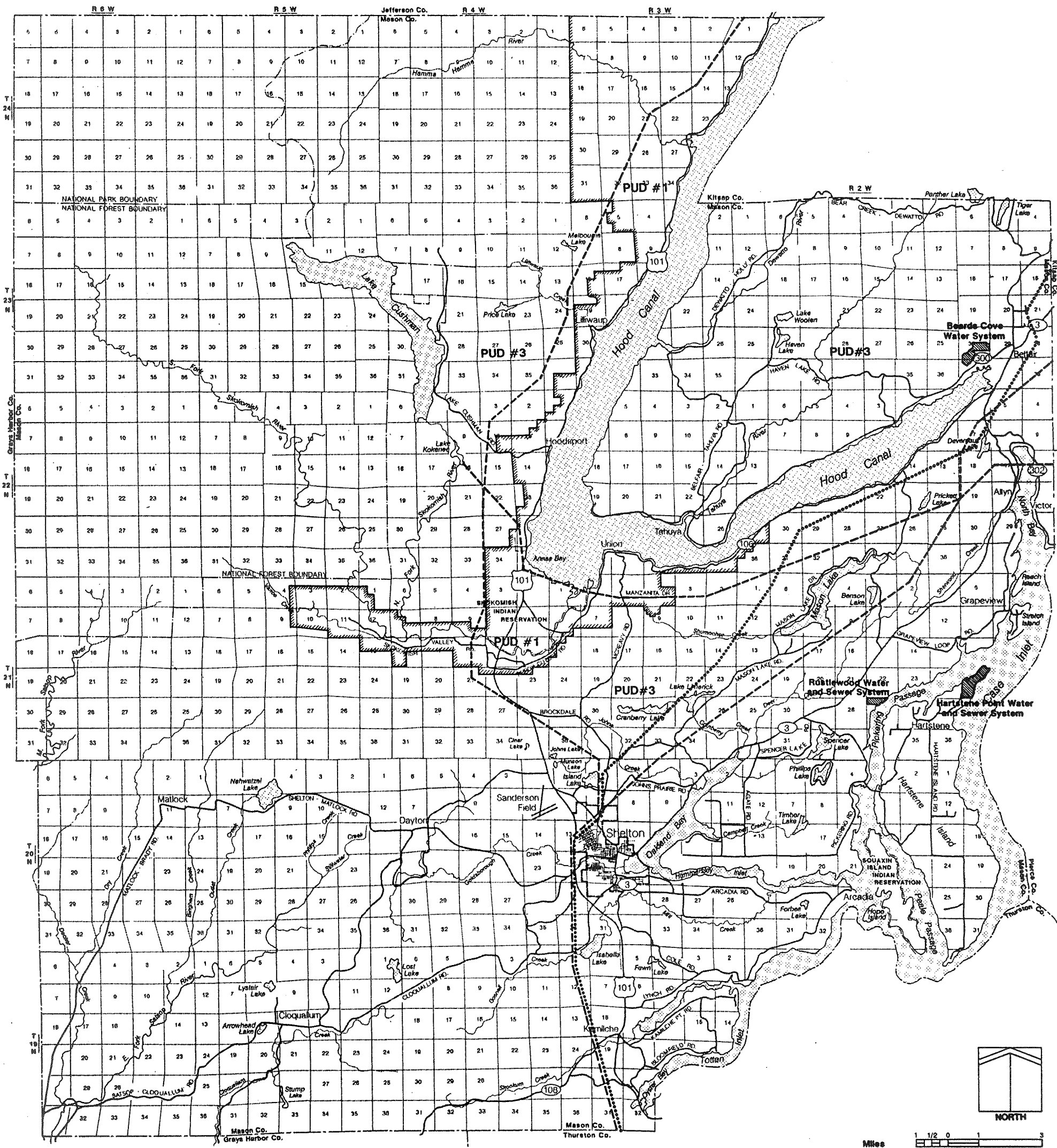
US West Communications is the largest provider of local exchange service in Mason County, with a service area that includes all areas of the county not served by the Hood Canal and Inland Telephone Companies. US West generally provides a full range of telecommunication services, however services available in specific areas depend on customer demand and the capabilities of the local central offices.

**Cellular Communications**

Cellular communications services differ from traditional telecommunications services. Cellular communications systems use phones that transmit and receive radio signals on bands reserved solely for such activity.

The cellular industry is regulated by the Federal Communications Commission (FCC). The FCC has divided the country in two broad categories, Metropolitan Statistical Areas (MSAs) and Rural Service Areas (RSAs), which serve as regional service areas. The FCC awards licenses to two cellular providers within each regional service area, one of which is usually a subsidiary of the local telephone company. Mason County is currently served by United States Cellular and US West Cellular.





- Public Water and Sewer Systems**
- Public Utility District #1 Boundary**  
Balance of County within PUD #3
- Electrical Transmission Lines**
- Natural Gas Pipeline**

Public Utilities

# Mason County Comprehensive Plan

Figure VII-1

VII-15

INSERT FIGURE VII-1 PUBLIC UTILITIES



## VII-2 Demand for Private Utilities

Private utilities, with the exception of cellular communications, are regulated by the Washington State Utilities and Transportation Commission (WUTC). The WUTC sets the levels of service that must be maintained by each of the utilities. Private utilities providers perform their own projecting and planning of needs and services. However, the comprehensive plan will be an invaluable tool for utilities providers in determining future need and locations of services.

Shelton and Belfair are be the County's only Urban Growth Areas. These areas are currently provided utilities services, and the infrastructure exists to provide additional services. Utilities providers may decide to expand their facilities if projected growth exceed the current capacity to provided services at acceptable levels.

In addition the comprehensive plan provides for the designation of a Working Rural Area (WRA). This allows for clustering of residential development at higher densities than would be allowed without clustering. This would allow for more efficient delivery of utilities and services than would be provided without clustering.

Residential densities in Rural Areas will be a function of the ability to maintain rural levels of services of capital facilities. The need for utilities in the Rural Areas will depend on whether there is existing utilities infrastructure, the capacity of existing utilities, the location of development, and the density of new development.



### ***VII-3 Utility Policies***

#### ***County-Wide Planning Policies***

In 1992, Mason County and the City of Shelton, adopted the County-Wide Planning Policies (CWPP). These policies were designed to guide each agency's GMA Planning process. The CWPPs encourage the "sharing of corridors for major utilities, trails and other transportation rights of way(s)."

#### ***Mason County Land Use Policies***

Many of the Land Use Policies that address performance districts in rural areas provide for clustering of development. This type of development allows for more efficient provision of utilities and services. Growth is also focused in the designated urban areas of Shelton and Belfair. These urban development patterns will be more cost effective to provide with utility services.

Private utilities providers in Mason County project and plan for growth. The Mason County Comprehensive Plan will be a resource for each of these providers that will assist in determining the need for service expansion and new facilities.



# Chapter VIII

## TRANSPORTATION

### VIII.1 BACKGROUND AND ANALYSIS

#### Introduction and Purpose

Mason County is primarily rural in nature, with large forest areas, major water bodies, and rolling to mountainous terrain. Approximately 80 percent of Mason County land is privately held land devoted to commercial tree farming. The only urbanized area in the County is Shelton, where 20 percent of the County's population and 50 percent of commercial activities are located. FIGURE VIII.1-1 shows the study area.

This element of the County's comprehensive plan defines existing facilities and establishes future strategies that include funding, system expansion, and management. The plan complies with laws and regulations of Mason County and coordinates with land use planning and other agencies and the public. FIGURE VIII.1-2 shows a broad outline of Mason County's transportation plan and the relationship of the existing facilities, goals and policies, system plan, and standards and management of the transportation system.

#### Inventory

A combination of surveys, records, plans, and field inspections was used to define the existing condition of the County's transportation system. Information from WSDOT and the Mason County Transportation Authority was incorporated into the inventory of existing conditions.

#### Traffic Data

Traffic counts have been taken on the majority of Mason County arterial roads at key locations. This was accomplished using recording counters to determine weekly, daily, and hourly travel patterns. The technical appendix to the transportation element contains all of this data. A summary of average daily traffic (ADT) volumes is shown in FIGURE VIII.1-3.



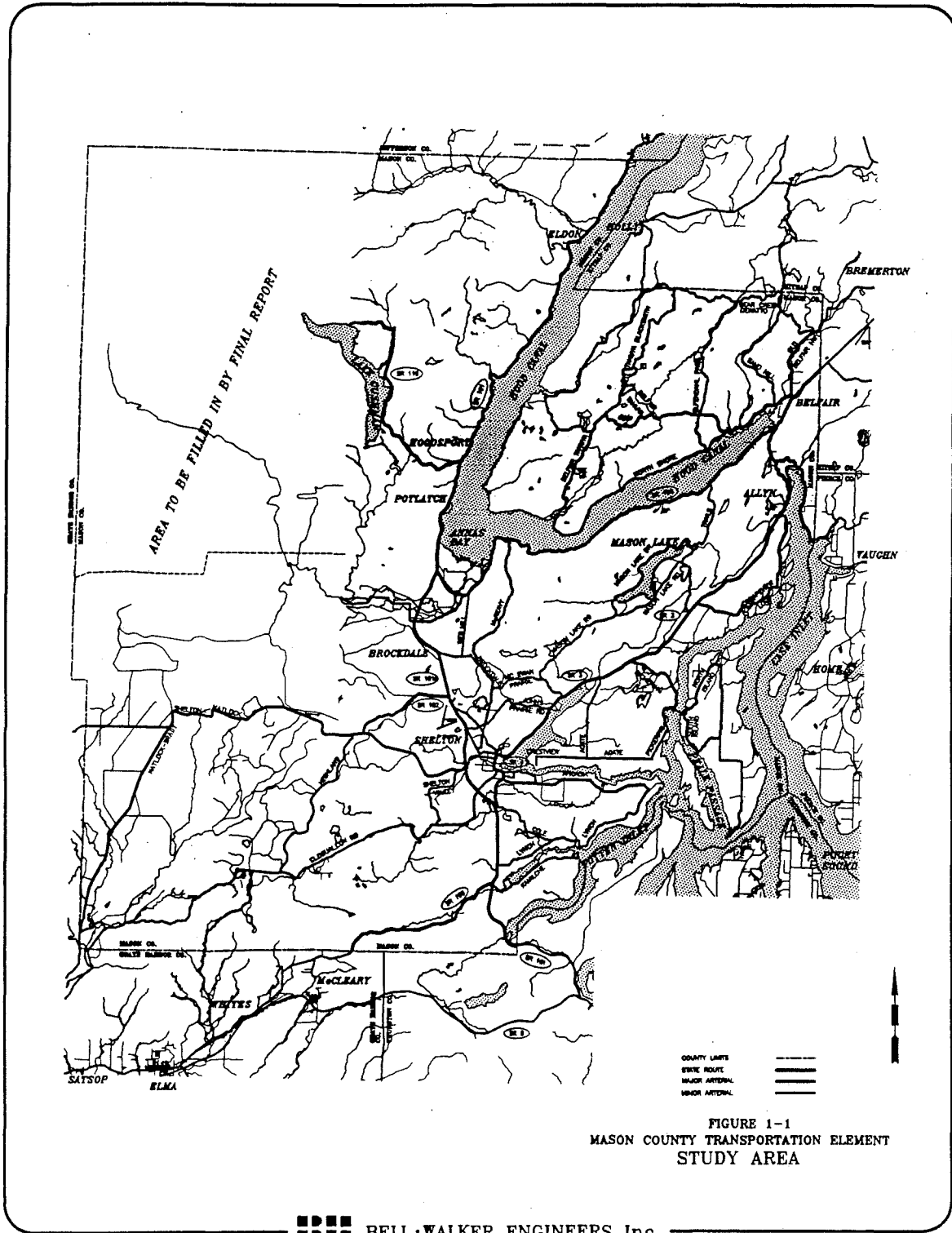



FIGURE 1-1  
MASON COUNTY TRANSPORTATION ELEMENT  
STUDY AREA

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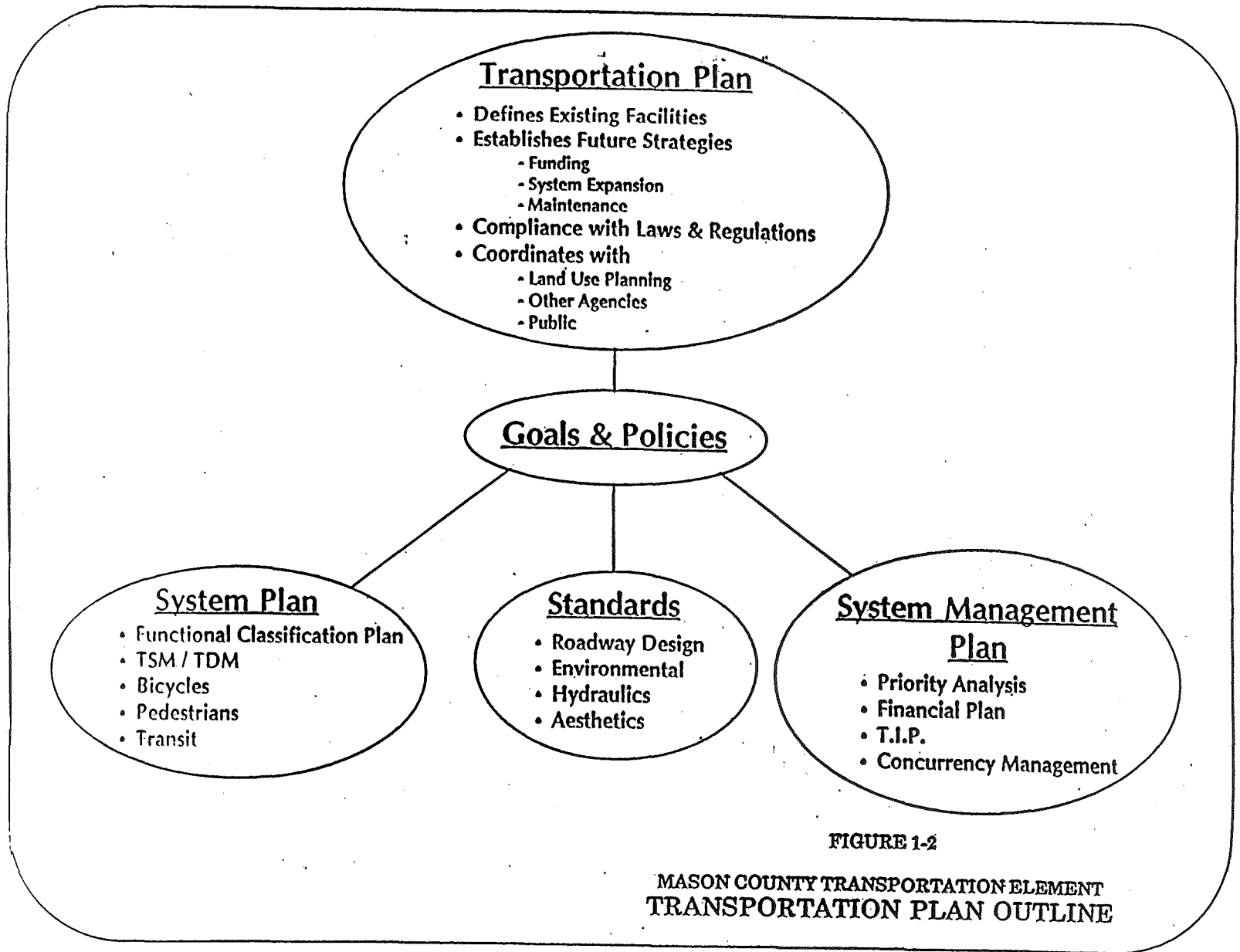
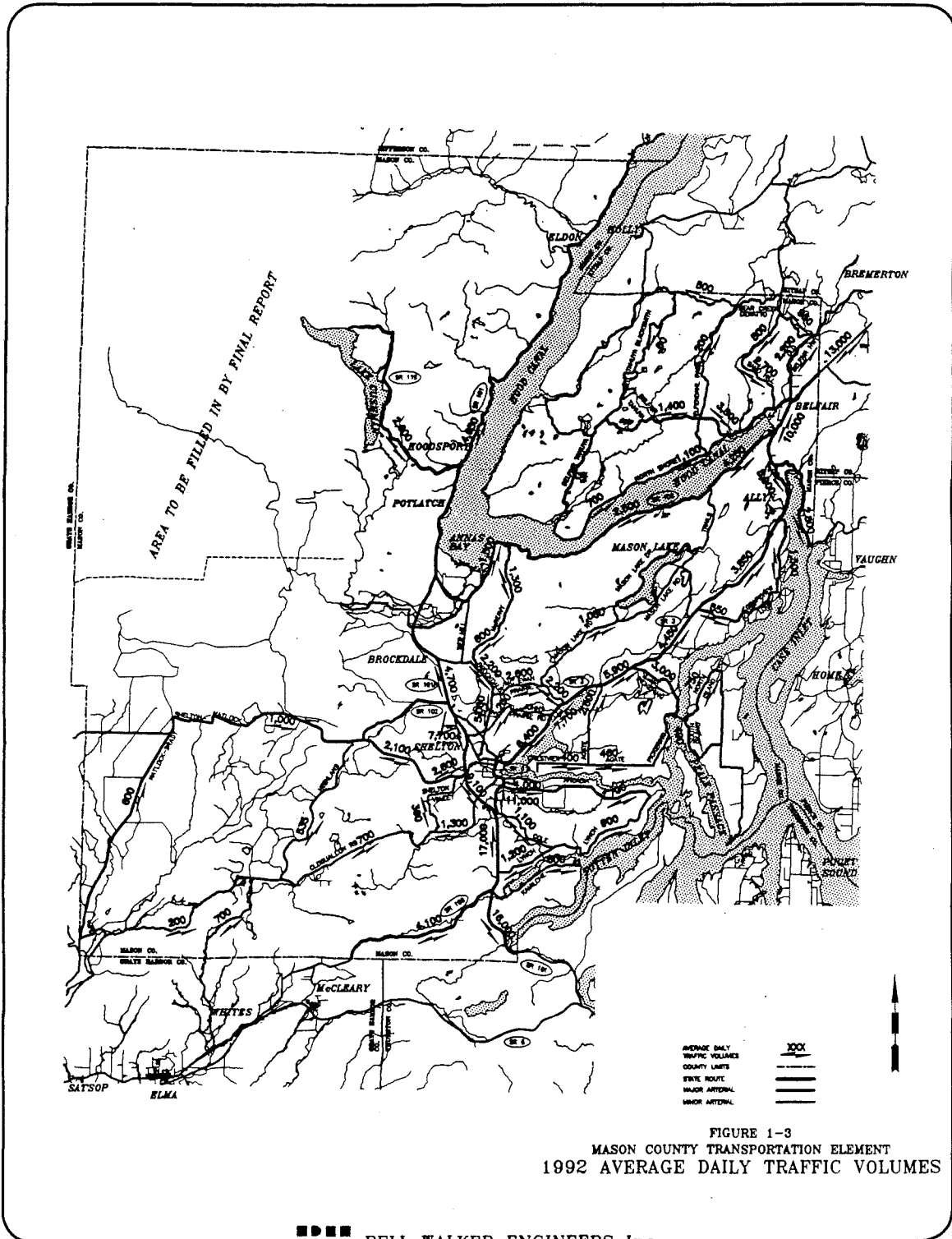


FIGURE 1-2

MASON COUNTY TRANSPORTATION ELEMENT  
TRANSPORTATION PLAN OUTLINE



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### *Origin-Destination Survey*

As part of the Mason County transportation study, two license plate origin-destination surveys were conducted to analyze existing traffic patterns. The Cloquallum Road/SR 101 survey provided information concerning the Shelton area, with particular emphasis on Cloquallum Road traffic. This study provided specific information on traffic from Cloquallum Road to SR 101. The Belfair area survey provided information on travel patterns concerning SR 3, SR 300, SR 302, and SR 106.

The purpose of an origin-destination survey is to determine amount and direction of traffic in a specific area. The survey identifies where vehicles enter and exit an area or if they stopped within the study area. A survey is performed by placing surveyors on all major roads serving an area; the surveyors record the license plate numbers and times vehicles enter or leave an area. By comparing license plate numbers using a computer-matching program, the volume of through traffic between stations can be determined. The survey determines the number of trips that pass the survey station or stay within the area. This origin-destination survey information is then used to analyze the existing road system's efficiency. The data provides the basis for forecasting future travel patterns when coupled with the anticipated economic and population growth information.

### *Origin-Destination Conclusions*

#### Belfair Area:

- The Belfair survey showed that a majority of traffic around the Belfair area had destinations in Belfair. This traffic amounted to approximately 60 percent on SR 3 and approximately 75 percent on other highways.
- Of the remaining 40 percent on SR 3, 11 percent was through traffic to Shelton, 8 percent was through traffic to SR 106
- Of the remaining 25 percent on other highways, approximately 10 to 15 percent was through traffic to Shelton and 5 percent was traffic towards SR 106
- An estimate of traffic that would use a new Belfair bypass (if constructed) connecting SR 3 north of SR 300 to SR 106 is approximately 700 - 800 vehicles in the PM peak hour and 600 - 700 vehicles in the AM peak hour. This indicates a new two-lane bypass for SR 3 around Belfair will be justified.

Cloquallum Road:

- Cloquallum Road carries nineteen (19) percent of its traffic to SR 101 in the AM peak hour and fifty-eight (58) percent in the PM peak hour traffic.
- Seventy-three (73) percent of the Cloquallum Road traffic stays in the Shelton area during the AM peak hour and twenty-two (22) percent in the PM peak hour
- Cloquallum Road carries very little traffic and only 20 vehicles exited on SR 101 during the AM peak hour and 63 vehicles in the PM peak hour
- This study indicates that Cloquallum Road traffic does not need a direct connection to SR 101 based on the small volumes currently making this connection. The need for a direct connection (interchange) cannot, however, be based solely on traffic volumes. Savings due to travel time and vehicle-miles of travel should be weighed against the cost of construction before a final decision could be reached regarding the interchange.

***Truck Traffic Patterns***

In order to determine existing transport routes and demands for trucks, a truck use survey was conducted for Mason County. Presently there are 24 trucking companies in the County which includes dump trucks, heavy haulers, and freight carriers. A total of 10 companies responded to the mail-in truck survey form. The businesses listed that 40 percent of their deliveries are made and/or received before 9:00 am; approximately 60 percent are between 9:00 am to 4:00 pm.

Primary routes include approximately 75 percent using SR 101 and 25 percent using SR 3. This shows that the trucking industry has a minor effect on the PM peak hour traffic generated on Mason County roads.

***Accident Data***

Accident data was obtained from the Mason County Department of Public Works and critical sections (i.e., sections with five or more accidents per year) were summarized. Using the Institute of Transportation Engineers' (ITE) *Traffic Engineering Handbook*, accident rates per million vehicle miles was calculated for each roadway section:

$$\text{Accident Rate} = \frac{\text{Number of Accidents over time 'T' x 106}}{\text{Total Volume during 'T' x Length of Section}}$$

TABLE VIII.1-1 summarizes the accidents on each critical roadway and their corresponding accident rate per million vehicle miles. This table shows that the highest rate occurred on the Belfair-Tahuya Road. FIGURE VIII.1-4 locates these accidents on a map.

A critical accident rate is defined by the ITE *Traffic Engineering Handbook* as an average accident rate found on a particular class of roadway. The critical accident rates for Mason County's Arterials is 3.2. Roads that exceeded critical rates were:

|                         |   |   |
|-------------------------|---|---|
| Lynch Road              | - | from SR 3 to Totten Shores Road                                   |
| Pickering Road          | - | from Harstene Bridge Road to Agate Road                           |
| Mason Lake Road         | - | from St. Andrews Drive to Limerick Road                           |
| Bear Creek Dewatto Road | - | from Tahuya Blacksmith Road to Old Belfair Highway                |
| Arcadia Road            | - | around Binns Swiger Loop and from Mill Creek Bridge to Lynch Road |
| Grapeview Loop Road     | - | from SR 3 to Treasure Island Road                                 |
| Belfair Tahuya Road     | - | Collins Lake Road to Tahuya River Bridge                          |
| Old Belfair Highway     | - | from New Kirk Road to ½ mile east                                 |

The majority of these accidents (62%) involved a fixed object off the road and were, therefore, related to inadequate pavement or shoulder width as causes. Mason County's roads were originally developed as farm-to-market roads. As volumes increased, these roads were not adequately built to design standards. This increased the probability of accident occurrence due to the deficiency standards. In Mason County, 31 percent of accidents related to nighttime driving, 45 percent of total accidents were due to excessive speed and 15 percent were due to the influence of alcohol.

### System Analysis

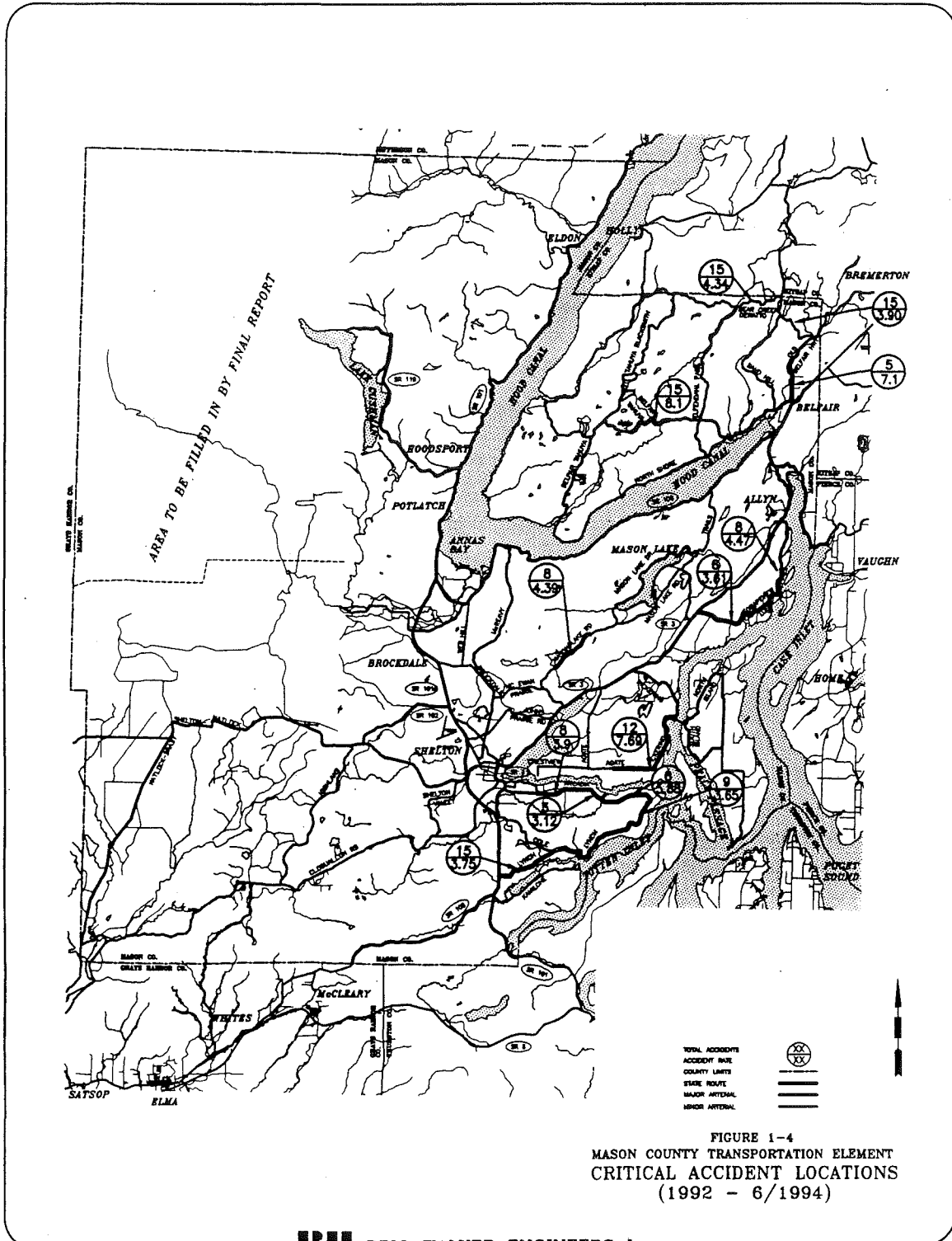
Level of service (LOS) is the primary method of analyzing the traffic capacity of roadways. Future land use scenarios and traffic projections are discussed and arterial level of service (LOS) is summarized. Criteria for determining roadway deficiencies are described at the end of the chapter.

| <b>TABLE VIII.1-1: Critical Accident Locations (1991 - June 1993)</b> |   |                         |                       |                     |  |
|---|---|-------------------------|-----------------------|---------------------|--|
| <b>Road Name</b>  | <b>Approximate Landmarks</b>            | <b>No. of Accidents</b> | <b>Length (miles)</b> | <b>Volume (ADT)</b> | <b>Accident Rate (per million vehicle miles)</b> |
| Lynch Road  | SR 3-East of Cole Road                  | 15                      | 3.61                  | 1,215               | 3.8  |
|   | East of Cole Road-Totten Shores Drive   | 9                       | 6.05                  | 447                 | 3.7  |
| Pickering Road  | Harstene Bridge Road-Agate Road         | 12                      | 3.00                  | 570                 | 7.7  |
| Mason Lake Road   | St. Andrews Drive-Limerick Road         | 8                       | 1.35                  | 1,480               | 4.3  |
| Bear Creek-Dewatto  | Tahuya Blacksmith Road-M.P. 7.63        | 15                      | 5.78                  | 655                 | 4.3  |
|   | M.P. 7.63-Old Belfair Highway           | 15                      | 2.88                  | 1,465               | 3.9  |
| Arcadia Road  | Binns Swiger Loop-Binns Swiger Loop     | 8                       | 1.05                  | 2,140               | 3.9  |
|   | Binns Swiger Loop-Mill Creek Bridge     | 5                       | 2.09                  | 840                 | 3.1  |
|   | Binns Swiger Loop-Mill Creek Bridge     | 6                       | 2.11                  | 530                 | 5.9  |
|   | Mill Creek Bridge-Lynch Road            |                         |                       |                     |  |
| Grapeview Loop Road   | SR 3-Lombard Road                       | 6                       | 3.44                  | 530                 | 3.6  |
|   | Lombard Road-Treasure Island Road       | 8                       | 1.96                  | 1,000               | 4.5  |
| Belfair-Tahuya Road   | Collins Lake Road-Tahuya River Bridge 2 | 15                      | 1.75                  | 1,160               | 8.1  |
| Old Belfair Highway   | New Kirk Road-M.P. 1.37                 | 5                       | 0.36                  | 2,126               | <u>7.1</u>                                       |
|   |   |                         |                       |                     | <b>Average Rate = 3.2</b>                        |

### *Level of Service*

Level of service (LOS) describes the quality of traffic flow on a roadway or at an intersection. The 1994 *Highway Capacity Manual* (HCM) uses three parameters to describe service quality for two-lane rural highways:

1. Average travel speed
2. Percent time delay



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### 3. Capacity utilization (volume-to-capacity ratio [v/c])

The percent time delay parameter is the primary measure of level of service (LOS) recommended by the 1985 HCM with speed and volume-to-capacity (v/c) ratio as secondary measures. Percent time delay is typically used for an extensive operational analysis and involves cumbersome computations. For planning applications, volume-to-capacity (v/c) ratio or speed are the most commonly used approaches.

Average travel speed is not a meaningful indicator of level of service (LOS) where speeds have been restricted below 60 mph by an agency through a town or village. Therefore, volume-to-capacity (v/c) ratio or capacity utilization are the more meaningful indicators for Mason County's road system.

The 1994 HCM defines six level of service (LOS) definitions:

*Level of Service A:* This level of service (LOS) A relates to average speeds approaching 60 mph and delays no more than 30 percent of the time by slow-moving vehicles. It corresponds to a volume-to-capacity (v/c) ratio below 0.05 for rolling terrain and below 0.07 for level terrain, assuming 60 percent no-passing zones.

*Level of Service B:* This characterizes speeds slightly over 55 mph on level terrain, with delays of up to 45 percent of the time. Typical volume-to-capacity (v/c) ratio assuming 60 percent no-passing zones are 0.05 and 0.17 on a rolling terrain and 0.07 and 0.19 on a level terrain. Traffic flow is stable.

*Level of Service C:* This represents average speeds exceeding 52 mph on level terrain and drivers experiencing delays 60 percent of the time. Corresponding volume-to-capacity (v/c) ratios for rolling and level terrains are 0.18 to 0.32 and 0.20 to 0.34, respectively. Traffic flow may be said to be at stable conditions until this level of service (LOS).

*Level of Service D:* At this level of service (LOS), unstable traffic flow begins to occur. Passing demand is very high, while passing capacity approaches zero. The fraction of no passing zones along the roadway has little influence on passing. Motorists are delayed up to 75 percent of time, although speeds of 50 mph can be maintained on a 60 mph design speed. For level of service (LOS) D, volume-to-capacity (v/c) ratios are between 0.33 and 0.48 on rolling terrain and 0.35 to 0.59 on level terrain.

*Level of Service E:* It is defined as flow conditions having a percent time delay greater than 75 percent and speeds dropping below 50 mph on a 60 mph design speed. Passing is virtually impossible. The volume-to-capacity (v/c) ratios are between 0.49 and 0.91 on a rolling terrain and 0.60 to 1.00 on a level terrain.

*Level of Service F:* It represents heavily congested flow with traffic demand exceeding capacity. Average speed drops below 40 mph on a 60 mph design speed and volume-to-capacity (v/c) ratios exceed 0.91 for rolling terrains and 1.00 for level terrain. The percent time delay experienced by drivers is 100 or more. TABLE VIII.1-2 shows these level of service (LOS) definitions.

| <b>TABLE VIII.1-2: Level of Service Definitions for Rural Roads</b> |                           |                                 |                        |
|---|---------------------------|---------------------------------|------------------------|
| <b>LOS</b>  | <b>Percent Time Delay</b> | <b>Volume-to-Capacity Ratio</b> |                        |
|   |                           | <b>Level Terrain</b>            | <b>Rolling Terrain</b> |
| A   | 0 - 30                    | 0 - 0.07                        | 0 - 0.05               |
| B   | 31 - 45                   | 0.08 - 0.19                     | 0.06 - 0.17            |
| C   | 46 - 60                   | 0.20 - 0.34                     | 0.18 - 0.32            |
| D   | 61 - 75                   | 0.35 - 0.59                     | 0.33 - 0.48            |
| E   | 76 - 99                   | 0.60 - 1.00                     | 0.49 - 0.91            |
| F+  | 100+                      | 1.00+                           | 0.92 +                 |

Note: Table assumes 60 percent no-passing zones

Source: 1994 Highway Capacity Manual

### Capacity Estimates for Mason County Roads

Mason County roads have varying lane and shoulder widths. These variations result in varying capacity values. Mason County's Public Works Department provided capacity for roadways having different lane and shoulder widths. TABLE VIII.1-3 shows these capacity estimates for different roadway types. This table assumes that the terrain is rolling or level in nature and passing is not possible on 60 percent of roadway sections.

| Lane Width (feet) | Capacity in Vehicles Per Hour With Shoulder Widths |         |        |         |        |         |        |         |
|-------------------|--|---------|--------|---------|--------|---------|--------|---------|
|                   | 6 Feet   |         | 4 Feet |         | 2 Feet |         | 0 Feet |         |
|                   | Level  | Rolling | Level  | Rolling | Level  | Rolling | Level  | Rolling |
| 12                | 2,405  | 1,542   | 2,333  | 1,496   | 2,237  | 1,434   | 2,117  | 1,357   |
| 11                | 2,261  | 1,450   | 2,213  | 1,419   | 2,117  | 1,357   | 1,973  | 1,265   |
| 10                | 2,093  | 1,342   | 2,045  | 1,311   | 1,948  | 1,249   | 1,804  | 1,157   |
| 9                 | 1,828  | 1,172   | 1,780  | 1,141   | 1,684  | 1,080   | 1,508  | 1,018   |

Note: Table assumes 60 percent no-passing zones

Source: Mason County Public Works Department

Based on the capacity estimates in TABLE VIII.1-3 obtained from Mason County and the level of service (LOS) definitions in TABLE VIII.1-2, a level of service (LOS) analysis was performed on all Mason County major and minor Arterials. The level of service (LOS) analysis indicated that many of the Arterials (over 90 percent) operate at either level of service (LOS) A or level of service (LOS) B. To simplify, level of service (LOS) C or a lower level of service (LOS) for Arterials are listed in TABLE VIII.1-4. Remaining Arterials operate at level of service (LOS) A or B.

### Operational Review

A review of the County's road system was performed by field inspection. Intersections where operational problems have occurred—such as sight distance or inadequate traffic control are listed in TABLE VIII.1-5.

| Arterial             | Segment                             | v/c Ratio | LOS |
|----------------------|-------------------------------------|-----------|-----|
| Pickering Road       | East of SR 3                        | 0.18      | C   |
| Shelton-Matlock Road | SR 101 to Shelton City Limits       | 0.21      | C   |
| Arcadia Road         | SR 3 to Binns Swiger Loop           | 0.18      | C   |
| Johns Prairie Road   | Shelton City Limits to SR 3         | 0.18      | C   |
| Belfair Tahuya Road  | SR 300 to Elfendahl Pass Road       | 0.25      | C   |
| Old Belfair Highway  | County Limits to SR 300             | 0.19      | C   |
| Brockdale Road       | Shelton City Limits to McReavy Road | 0.21      | C   |
| Agate Road           | South of SR 3                       | 0.19      | C   |
| Mason Lake Road      | North of McEwen Prairie Road        | 0.19      | C   |
| Sandhill Road        | North of SR 300                     | 0.25      | C   |

Note: Arterials not listed operate at level of service (LOS) B or better.

| Intersection                        | Major Operational Problems                  |
|-------------------------------------|---|
| US 101 /Lynch Road                  | Inadequate acceleration distance            |
| SR 106 /McReavy Road                | Sight distance                              |
| SR 106 /Webb Hill Road              | Sight distance                              |
| SR 3 / Johns Prairie Road           | Intersection geometrics and traffic control |
| Johns Prairie Road / Brockdale Road | Poor intersection control                   |

### **Traffic Model**

One of the most important tools of transportation planning is the development of a traffic or transportation model. A transportation model that accurately depicts the existing traffic conditions (i.e., calibrated to the traffic patterns) can often help in making better decisions about the future transportation system. Therefore, it is important to have an accurate traffic model for the planning process. The model used for Mason County is TMODEL2.

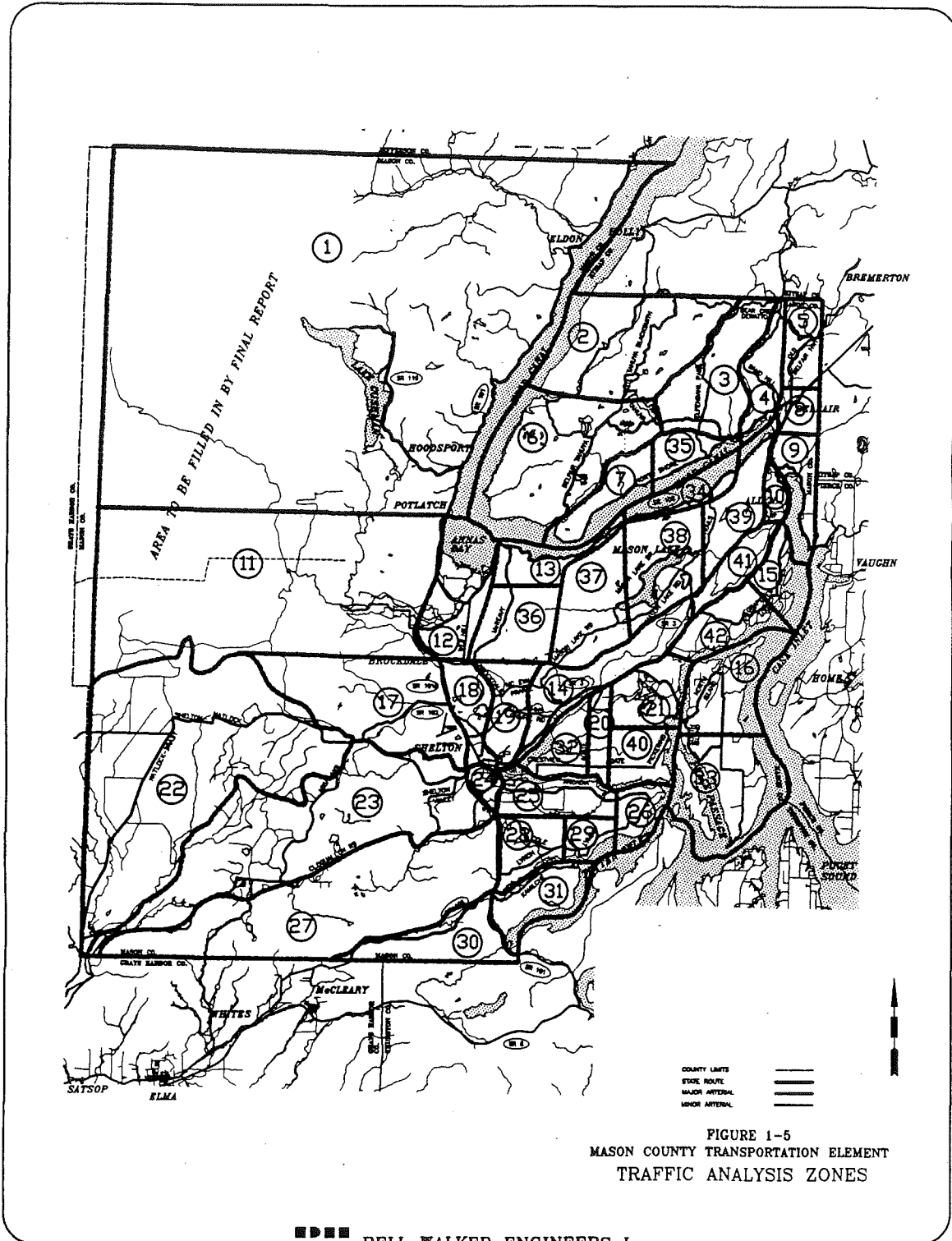
There are five basic steps in developing a traffic model:

- Establish traffic analysis zones (TAZs)
- Develop network description
- Allocate land use to the traffic analysis zones (TAZs)
- Calibrate the model to existing traffic conditions
- Forecast future traffic volumes

FIGURE VIII.1-5 shows the traffic analysis zone (TAZ) map and FIGURE VIII.1-6 shows Mason County's road network used for modeling purposes.

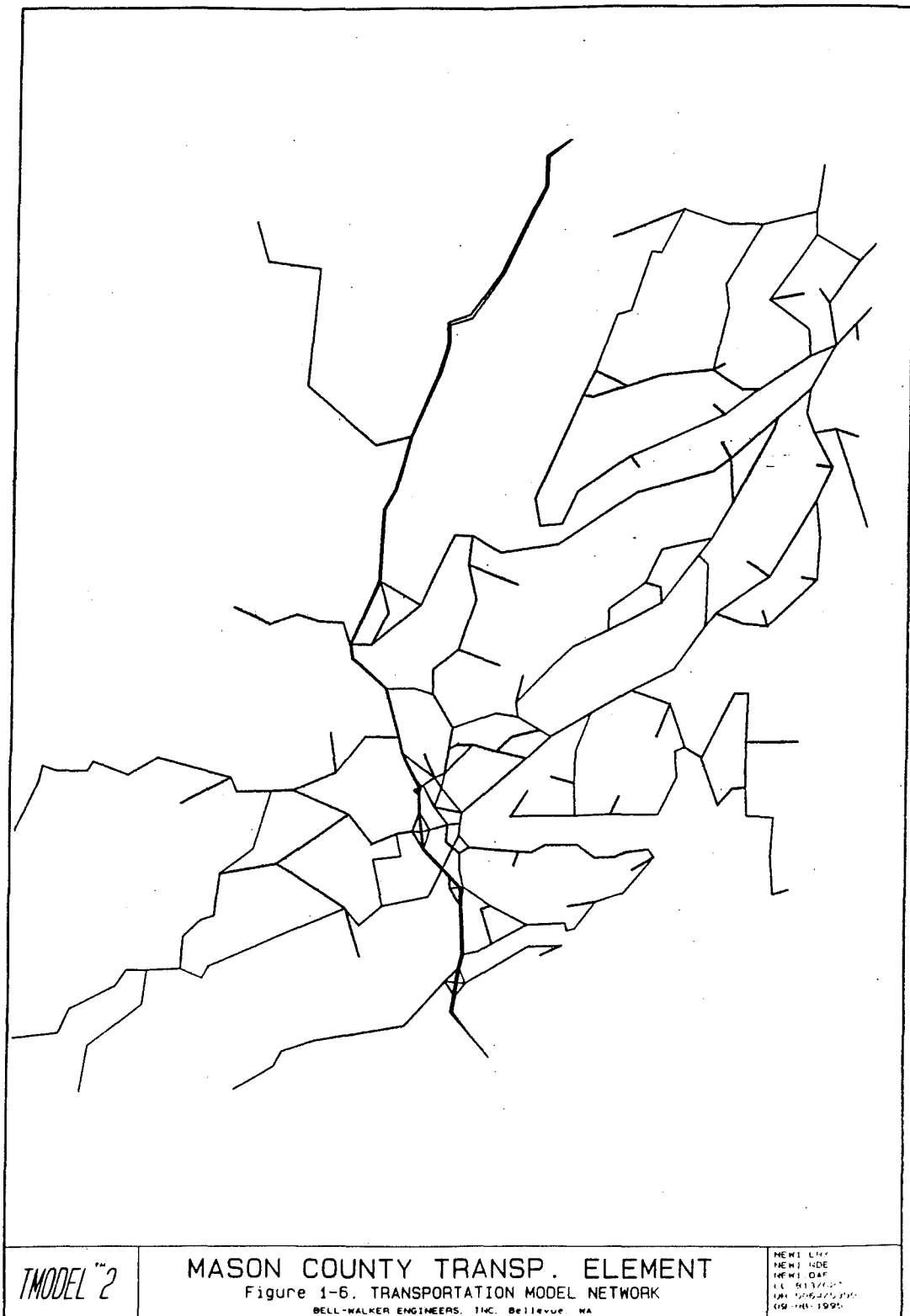
For Mason County, calibration was performed by checking model volumes with actual volumes on every link in the network. Actual traffic volume counts on County roads were obtained from 1993 Mason County road logs using a weighted average on a given segment. On State routes, traffic volumes were provided by Mason County Public Works and supplemented by the 1993 annual traffic report published by WSDOT. Whenever major discrepancies were found, WSDOT numbers were used. PM peak model volumes were converted to average daily traffic (ADT) using a k-factor of 0.09 (recommended by Mason County Public Works Department). Whenever a model street segment consisted of two or more links, the volumes were averaged over the segment in the model to determine the value.

The calibration results showed that 80 percent of all Mason County roads are within the allowable deviation. Approximately 60 percent of all roads are within 15 percent deviation, 10 percent are between 15 - 25 percent deviation, and the remaining 10 percent are between 25 - 30 percent deviation. Considering the fact that the street segments checked included almost all the roads (more than 90 percent) in the County, these deviations do represent a calibrated model.



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**Future Travel Demand**

Future travel demand was forecasted for the 20 year scenario of the comprehensive plan. The growth rates in each traffic analysis zone (TAZ) were provided by the Mason County Public Works Department.

In the 20 year analysis, overall growth was calculated to 3.3 percent per year. The traffic analysis zones (TAZs) where growth exceeded 5 percent were TAZs 3, 4, 14, 15, 16, 33, 37, 41, and 42. These traffic analysis zones were near Belfair-Tahuya, Harstene Island area, and Mason Lake. However, commercial growth was limited to traffic analysis zones (TAZs) 4, 5, 8, 9, 18, 19, 24, 25, and 28. These traffic analysis zones (TAZs) represent Belfair and Shelton UGAs.

The following is a summary of the total land use allocation for the county:

**1992 Existing:**

|                   |                       |
|-------------------|-----------------------|
| Permanent Housing | 16,168 dwelling units |
| Employment        | 8,817 employees       |
| Seasonal housing  | 6,315 dwelling units  |

**20 Year Scenario:**

|                   |                       |
|-------------------|-----------------------|
| Permanent Housing | 33,792 dwelling units |
| Employment        | 12,936 employees      |
| Seasonal housing  | 13,126 dwelling units |

**Future Trips**

Using trip generation and trip distribution created for Mason County's transportation model, future trip tables were created for the 20 year analysis. These trip tables give information on internal-internal trips, internal-external trips, external-internal trips, and external-external trips. External trips are trips which are generated outside the County's limits. These trips are shown in TABLE VIII.1-6.



| <b>Trip Category</b> | <b>1992 Existing</b> | <b>20 Year</b> |
|----------------------|----------------------|----------------|
| Internal-Internal    | 7,165                | 8,547          |
| Internal-External    | 1,280                | 2,329          |
| External-Internal    | 2,255                | 4,938          |
| External-External    | 297                  | 651            |
| <b>Total</b>         | <b>10,997</b>        | <b>16,465</b>  |

Approximately 50 to 55 percent of trips are internal-internal while only 4 percent of the trips are from external to external areas. This means that only 4 percent of Mason County traffic travels through the study area without stopping.

#### *Future Traffic Assignment*

Traffic assignment for the 20 year analysis was made using trip tables shown by TABLE VIII.1-7. Due to the growth in land use, traffic volumes nearly doubled on each County road. In spite of traffic volumes doubling, there was no route diversion because these were still well below capacity level. County roads that had traffic volumes in excess of 5,000 vehicles per day were Agate Road, Belfair Tahuya Road, Brockdale Road, Old Belfair Highway, and Shelton-Matlock Road.

The State routes also doubled in traffic volumes. However, the volume levels were low enough to be handled by the existing number of lanes on the highways.

#### *Future Volume-to-Capacity (v/c) Ratios and Level of Service Deficiencies*

Based on the capacity estimates in TABLE VIII.1-3 and level of service (LOS) definitions in TABLE VIII.1-2, a future level of service (LOS) analysis was performed on all Mason County major and minor Arterials. The future level of service (LOS) indicated that only one arterial—Belfair Tahuya Road from SR 300 to Elfendahl Pass Road—operates at level of service (LOS) D. The remaining Arterials operate at level of service (LOS) C or better. TABLE VIII.1-8 shows the arterial where level of service (LOS) is C or lower.

| <b>TABLE VIII.1-8: Future Arterial Level of Service in Mason County</b> |                                      |                            |                              |                                |            |
|---|--------------------------------------|----------------------------|------------------------------|--------------------------------|------------|
| <b>Arterial</b>   | <b>Segment</b>                       | <b>2013 PM Peak Volume</b> | <b>2013 PM Peak Capacity</b> | <b>Volume / Capacity Ratio</b> | <b>LOS</b> |
| <b><u>Major Arterials</u></b>   |                                      |                            |                              |                                |            |
| Arcadia Road*   | SR 3 - Binns Swiger Loop             | 606                        | 2,405                        | 0.25                           | C          |
| Belfair Tahuya Road   | Elfendahl Pass Road - SR 300         | 554                        | 1,450                        | 0.38                           | D          |
| Brockdale Road*   | Shelton City Limits - McReavy Road   | 450                        | 2,333                        | 0.19                           | B          |
| Grapeview Loop Road   | Stadium Beach Road                   | 220                        | 1,115                        | 0.20                           | C          |
| Grapeview Loop Road   | Eckert Road & Fire Station           |                            |                              |                                |            |
| Grapeview Loop Road   | Fire Station - Cronquist Road        | 323                        | 1,203                        | 0.27                           | C          |
| Grapeview Loop Road   | Cronquist Road - Nelson Road         | 303                        | 1,270                        | 0.24                           | C          |
| Grapeview Loop Road   | Nelson Road - SR 3                   | 297                        | 1,203                        | 0.25                           | C          |
| Harstene Bridge Road  | Bridge                               | 314                        | 1,396                        | 0.23                           | C          |
| Johns Prairie Road  | Brockdale Road - SR 3                | 236                        | 1,165                        | 0.20                           | C          |
| Old Belfair Highway*  | SR 300 - Milepost 1.4                | 740                        | 2,165                        | 0.34                           | C          |
| Old Belfair Highway*  | Milepost 1.4 - County Line           | 548                        | 1,997                        | 0.27                           | C          |
| Pickering Road*   | SR 3 - Phillips Lake Road            | 489                        | 2,405                        | 0.20                           | C          |
| Pickering Road*   | Phillips Lake Road - Harstene Bridge | 305                        | 2,405                        | 0.13                           | B          |
| Shelton-Matlock Road*   | City Limits - Deegan Road West       | 431                        | 2,405                        | 0.18                           | B          |
| Shelton-Matlock Road  | Deegan Road - Carman Road South      | 480                        | 1,474                        | 0.32                           | C          |
| Shelton-Matlock Road  | Dayton Airport - Dayton Store        | 372                        | 1,203                        | 0.31                           | C          |
| Shelton-Matlock Road  | Dayton Store - Milepost 10.76        | 342                        | 1,418                        | 0.24                           | C          |
| <b><u>Minor Arterials</u></b>   |                                      |                            |                              |                                |            |
| Agate Road  | SR 3 - Pickering Road                | 414                        | 1,311                        | 0.32                           | C          |
| Cole Road   | Shadowood Road - Craig Road          | 462                        | 1,419                        | 0.32                           | C          |
| Crestview Drive   | Agate Road - Parkway Boulevard       | 272                        | 1,122                        | 0.24                           | C          |
| Harstene Island South Road  | Island Shore Road - County Line      | 207                        | 1,029                        | 0.20                           | C          |
| Kamilche Point Road   | Old Olympic Highway - County Line    | 229                        | 1,095                        | 0.21                           | C          |
| Lynch Road  | SR 101 - Milepost 1.10               | 466                        | 1,434                        | 0.32                           | C          |
| Mason Lake Road   | SR 3 - McEwen Prairie Road           | 401                        | 1,512                        | 0.27                           | C          |
| McEwen Prairie Road   | Mason Lake Road - Brockdale Road     | 418                        | 1,512                        | 0.28                           | C          |
| Sandhill Road   | SR 300 - Transfer Station            | 360                        | 1,357                        | 0.27                           | C          |

\* Arterials where the level of service (LOS) criteria is based on level terrain

### Minimum Standards Criteria and Deficiencies

Mason County Arterials are not deficient from a volume-to-capacity (v/c) ratio or a level of service (LOS) point of view. Many of the Arterials have a low pavement width and shoulder width. These deficiencies in turn make a road segment easily susceptible to a high accident location. Some Arterials are also deficient from a vertical alignment point of view where the grades are too steep and cause unsafe traffic conditions. Minimum standards criteria is necessary to establish Mason County's road deficiencies.

Mason County's minimum standards criteria for pavement and shoulder width and horizontal and vertical alignment were determined using *A Policy on Geometric Design Highways and Streets*, 1990 edition, published by the American Association of State Highway and Transportation Officials (AASHTO). TABLE VIII.1-9 shows Mason County criteria. TABLE VIII.1-9 also shows a rating for each range of values for a given criteria. A rating of 0 indicates no deficiency or an ideal condition and a rating of 5 indicates the least desirable condition. A rating of 3 indicates average conditions of pavement and shoulder width, horizontal and vertical alignment, or accident rate.

The AASHTO book suggests that a pavement width of 10 feet and a shoulder width of 3 to 4 feet is acceptable where speeds are approximately 40 miles per hour. Therefore, these values were given a rating of 3 in TABLE VIII.1-9. For vertical alignment, a grade of 6 to 8 percent is considered acceptable by AASHTO. The rating for horizontal alignment in TABLE VIII.1-9 shows a 60 percent no passing as an average condition. This value is an average condition in Mason County and the capacity estimates were based on the assumption of 60 percent no passing. The average rating of 3.1 to 4.0 for accident

Ratings in TABLE VIII.1-9 is a 50 percentile value on Mason County Arterials. The 50th percentile value in an area is typically considered as a critical accident rate. Based on these ratings, each arterial in Mason County was evaluated for deficiencies. Note that any arterial with a rating of 4 or 5 is deficient in the respective criteria.

A number of Mason County Arterials are deficient in pavement and shoulder width. Approximately 60 percent of the high-accident locations can be attributed to a deficient shoulder width. A significant number of Arterials are deficient in horizontal alignment and a few are deficient in vertical alignment. In summary, the majority of Mason County's Arterials are deficient by minimum road standards criteria. From a capacity standpoint, Mason County's Arterials will be able to accommodate future growth.

| <b>TABLE VIII.1-9: Mason County's Minimum Standards Criteria Rating</b> |                              |                              |                             |                           |  |
|---|------------------------------|------------------------------|-----------------------------|---------------------------|--|
| <b>Criteria Rating</b>  | <b>Pavement Width (feet)</b> | <b>Shoulder Width (feet)</b> | <b>Horizontal Alignment</b> | <b>Vertical Alignment</b> | <b>Accident Rate (per million vehicle miles)</b> |
| 0   | ≥ 12                         | > 6                          | 0% no passing               | 0 - 2%                    | 0 - 1.0  |
| 1   | 11.1 - 11.9                  | 5 - 5.9                      | 20% no passing              | 2.1 - 4%                  | 1.1 - 2.0  |
| 2   | 10.1 - 11.0                  | 4 - 4.9                      | 40% no passing              | 4.1 - 6%                  | 2.1 - 3.0  |
| 3   | = 10                         | 3 - 3.9                      | 60% no passing              | 6.1 - 8%                  | 3.1 - 4.0  |
| 4   | 9.1 - 9.9                    | 1 - 2.9                      | 80% no passing              | 8.1 - 12%                 | 4.1 - 7.0  |
| 5   | ≤ 9.0                        | 0 - 0.9                      | 100% no passing             | > 12%                     | ≥ 7.1  |



## VIII.2 Goals and Policies

### Transportation System Goals

Mason County's goal is to provide adequate mobility for all people, goods, and services in an efficient and economical manner. Transportation facilities will be maintained and improved while minimizing changes to the physical and social environment so as to preserve the "rural character" of the area. The transportation system shall support economic growth and development in coordination with the County's Comprehensive Plan.

### Coordination Policies

Mason County's goal is to promote effective coordination between and among governments, private enterprise, and the community. The County will facilitate effective use of the transportation system through coordination of the transportation facilities and services for all types of motorized and non-motorized transportation. These policies address a wide range of issues which effect Mason County such as:

- Multi-agency planning and coordination
- Planning for pedestrians and non-motorized vehicles
- Consistency of transportation programs among jurisdictions
- Coordination of construction projects
- Transit service throughout Mason County

#### **1. Public Participation Policy**

Mason County encourages and welcomes public participation in the transportation planning process.

- a) This transportation element was developed with the assistance of the Growth Management Advisory Committee, established specifically to help prepare the Comprehensive Plan. Mason County will continue to use a similar committee to advise and periodically update the plan. Public participation in transportation planning is encouraged through open workshops and public hearings. Citizen groups can also provide valuable insight during the planning phase of road projects.
- b) Public hearings shall be held on the transportation improvement program (six-year plan) which is prepared by the County and updated on an annual basis. Public hearings are required by law (*RCW 36.81.121*).

- c) Prior to the initiation of major construction projects, adjacent property owners and area residents will be informed of the project and their input will be evaluated during the planning process. The intent is to provide the local people with an opportunity to incorporate their input into the project.

## **2. *Intergovernmental Coordination Policy***

The County will coordinate efforts in planning, construction, and operation of transportation facilities with other agencies' programs as appropriate. This coordination will allow County efforts to support and complement the transportation functions of the State, Peninsula Transportation Planning Organization (PRTPO), adjacent counties, Shelton and neighboring cities, Mason Transit Authority (MTA), and other entities responsible for transportation facilities and services in Mason County. Coordination will be achieved by:

- a) Participating in the activities of the PRTPO
- b) Working with other jurisdictions to plan, fund, and implement multi-jurisdictional projects necessary to meet shared transportation needs (including right-of-way preservation and acquisition).
- c) Making transportation planning decisions consistent with WSDOT, PRTPO, and neighboring jurisdictions

## **3. *Multi-Modal Coordination Policy***

The County will cooperate with Mason County Transit Authority (the MTA) to provide facilities that will enhance and encourage transit use. The MTA will be asked to provide input into the County's six-year plan and annual construction program. The County will support the MTA in:

- a) Transit service between the urban centers
- b) Encourage demand-responsive service for Mason County citizens with less transportation capability, such as elderly and handicapped
- c) Encourage demand-responsive service to the rural residential areas
- d) Transportation capability for access to essential services (i.e., medical, legal, social assistance)

#### 4. *Utility Coordination Policy*

The County recognizes the effectiveness of coordinating utility services in transportation corridors and provides standards that coordinate construction of utilities with existing and future transportation needs. These will include:

- a) Coordinate new utility construction with the County's six-year improvement plan
- b) Coordinate improvement programs being developed by utility agencies' with the County transportation system
- c) Provide standards for repair and maintenance of utilities within the transportation corridor (i.e., the County road right-of-way)
- d) Establish traffic control standards for new construction and maintenance of utilities consistent with Part 6 of the *Manual of Uniform Traffic Control Devices* (MUTCD).

#### 5. *Special Interest Coordination Policy*

The County will assist in the accommodation of special interests that require use of the transportation system. This will include but not limited to:

- a) Coordinate with the school districts to assist in providing safe and efficient school transportation. As appropriate, the County will work with the schools to enhance school bus routes, student walking routes, and crossings. Traffic signing will be provided in accordance with the MUTCD.
- b) Provide for special events such as fairs, parades, athletic events, and large meetings by making appropriate provisions for safe traffic operations with the minimum effect on the general public. The cost of such provisions will be assessed to the organizers of such events as appropriate.

#### 6. *Education/Public Information Policy*

The citizens and other users of the Mason County transportation system will be provided information to enhance the users' safety and convenience. The County will appoint a public information representative from the Public Works Department to provide coordinated information to the general public and news media. This information will be coordinated with the Sheriff's Office. Information efforts will include:



- a) Inform the public of traffic safety measures for both the road system and vehicles
- b) Directly informing area residents about road projects planned for construction in their locality
- c) Inform specific neighborhoods about maintenance projects that will affect traffic flow

### **Design and Capacity Policies**

The County's goal is to provide a safe, cost effective, comfortable, and reliable transportation system. The design and capacity policies are based on AASHTO, WSDOT, and other proven standards that define criteria for:

- Design
- Maintenance
- Safety standards
- Roadway adequacy
- Transportation system needs
- Demand management strategies

### **7. Road Adequacy Policy**

Road adequacy is broken down into two separate considerations, congestion and safety. Mason County will strive to provide a safe road network which operates at a level of service (LOS) which reflects the preference of the community.

#### *Roads*

The County will construct and maintain the road network in accordance with safety standards established by AASHTO, WSDOT, and the MUTCD. Upgrading existing deficiencies will be accomplished on a priority evaluation that considers accident occurrence, traffic volumes, and compliance to design standards.

Level of service (LOS) for the road system is based upon definitions in the current edition of the Highway Capacity Manual. The County has adopted LOS C for peak hour flow (congestion) on all rural County roadways and LOS D for roadways lying inside designated urban growth areas.

*Transit*

To be coordinated with Mason County Transit Authority policies.

*Pedestrians*

Pedestrian walking areas shall be provided, terrain permitting, on all of the County's arterial road system as these roads are improved or reconstructed. This may be accomplished through the use of shoulder area, separate walkways, or sidewalks, depending on the area needs.

*Bicycles*

Bicyclists will be accommodated in a similar manner as pedestrians. Facilities will be provided, terrain permitting, on County Arterials designated as bikeways in the Bicycle Plan as these roads are improved or reconstructed. The extent of the bicycle facilities will be dependent on the classification of the facilities as defined in the Bicycle Plan. For example, on the routes that are on the arterial road system, a minimum 4-foot shoulder should help provide an area which pedestrians and bicyclist can safely utilize.

**8. Functional Classification Policy**

Mason County classifies the road network according to Federal, regional, and local guidelines based on the following:

- a) State routes will maintain designations as mandated by *RCW 47.05.021*
- b) County roads will follow the specified functional classification system in TABLE VIII.2-1
- c) The designation for "primitive roads" (as defined by *RCW 36.75.300*) will be used when appropriate

The County supports the Port of Shelton's goals and policies, as outlined in their *Shelton Airport Master Plan* and their designation under the Federal Aviation Administration's classification system for airports.

| <b>TABLE VIII.2-1 Functional Classification Categories</b>  |
|---|
| <b>State Routes:</b> Roads owned and operated by the Washington State Department of Transportation (WSDOT). These highways provide for regional and inter-regional travel.  |
| <b>Major Arterials:</b> Roads that provide for regional and inter-regional travel, typically carrying large volumes of through traffic, with limited direct access to abutting properties.  |
| <b>Minor Arterials:</b> Roads that connect neighborhoods and commercial areas to major Arterials and State highways operated by WSDOT. They provide access to major adjacent land uses and generally carry moderate volumes of traffic.               |
| <b>Collectors:</b> Roads that collect and distribute traffic between neighborhoods, business areas, and the rest of the arterial system. They provide for easy and direct access to abutting properties and carry low to moderate volumes of traffic. |
| <b>Local Roads:</b> These facilities provide direct access to abutting property and carry traffic to the arterial system. Local roads typically carry low volumes of traffic at low speeds.   |

**8a. Airport Designations**

Mason County supports the preservation of air navigation resources and facilities in the County by:

- a) Providing compatibility with surrounding land uses
- b) Preventing encroachment by development that negatively impacts airport operations through a coordinated review process for proposed land development located within the airport influence zone
- c) Supporting adequate ground transportation to move people and goods to and from the airport

**9. Functional Design Policy**

Functional design ensures adequate and safe access to property via a system of public and private roads.

A range of design and construction standards adopted in *Mason County Title 16* shall be used for secondary roads and roads within developments. Standards for Arterials shall meet the current edition of WSDOT's *Local Agency Guidelines Manual* (LAG Manual). These standards include roadway alignment and location, roadway sections, and right-of-way. All

roadway design will be coordinated with Mason County, the City of Shelton, Washington State Department of Transportation, and the Federal Highway Administration to achieve compatible design standards. These standards will be:

- a) Linked to the level and type of land development served by the transportation facilities
- b) Consistent with the arterial road functional classification
- c) Compatible between jurisdictions
- d) In compliance with Federal (AASHTO) and State (LAG Manual) design criteria.

#### **10. *System Integration Policy***

Mason County strives to maintain an interconnected network of roads with appropriate pedestrian and bicycle facilities to serve the citizens' travel needs. This is achieved by the following:

- a) The present road system is the foundation which meets the majority of the County's current transportation needs
- b) New routes designed to serve either new development or to reduce congestion and conflicts will be established after thorough review of economic, environmental, and public interests.

#### **11. *Safety***

The goal of the County is to provide a safe roadway system maximizing the use of existing facilities and prioritizing the improvement program with special consideration of safety issues:

- a) Incorporate safety features into all facets of the transportation system; AASHTO and the LAG Manual will provide guidance in the application of these safety features.
- b) Monitor high-accident locations and evaluate these areas to provide solutions for corrective action
- c) Pursue grants for safety improvements from State and Federal sources

- d) Maintain a sign inventory and monitor sign condition for compliance with the *Manual on Uniform Traffic Control Devices*

### **12. Aesthetic Design Policy**

The design and maintenance of the roadway system will include attention to aesthetic qualities. Special consideration will be given to maintaining the natural and manmade amenities of the community:

- a) Establish cooperative programs to enhance the roadway appearance (i.e., Adopt-A-Road Program)
- b) Preserve the scenic character of road corridors with designs that follow as much of the old alignment as possible. Realignment and major changes to the original corridor will be topics specifically addressed with area residents in the planning phase of the project.
- c) Maintain standards for erosion control which encourage retention and restoration of native vegetation and naturally occurring landscaping for roadway projects.

### **13. Transportation System Management (TSM) Policy**

Promote efficient operation of the transportation system through TSM strategies which will maximize the efficient use of existing systems without major changes to the overall road configuration. Considerations will include:

- a) Access control for principal and secondary Arterials to minimize disruptions in traffic flow
- b) Geometric improvements to improve traffic flow and capacity
- c) The use of traffic signalization to control traffic flow as these systems become warranted

### **14. Pedestrian and Bicycle Policy**

Encourage and provide a safe means of travel for pedestrians and bicyclists on the County road network. Mason County will provide facilities for non-motorized travel by:

- a) Incorporating improvements for non-motorized travel into programmed road improvement projects. The most appropriate design for these facilities will be determined on a case by case basis.
- b) Exploring opportunities to provide low-cost improvements within the existing public right-of-way that improves conditions for non-motorized travel modes

Improved shoulders, off-street trails, and off-street paved corridors are examples of typical improvements which will accommodate non-motorized travel.

### 15. Maintenance Policy

The County will maintain the road network to provide safe, reliable, and effective movement of people and goods. Specific maintenance considerations will include:

- a) Emergency repairs required for public safety will receive the highest priority
- b) Provide safe and reliable roadway surfaces through pavement patching, sealing and surface treatments
- c) Maintain visibility of traffic control and safety devices
- d) Maintain drainage facilities in proper working order
- e) Maintain roadside vegetation to meet safety requirements. If possible, this will be done in a manner compatible with the natural character of the land.
- f) Provide traffic control for maintenance work in accordance with the Part 6 of the *Manual on Uniform Traffic Control Devices*

### 16. Access Policy

The County will provide (or limit) access to the road network in a manner consistent with the function and purpose of each roadway. The County will strive to consolidate access points on State highways, principal, and secondary Arterials in order to reduce interference with traffic flow on the Arterials and discourage through traffic on local access streets. To achieve this, the County:

- a) Supports the State's controlled access policy on all State highway facilities

- b) Encourages and may possibly assist landowners cooperative efforts in preparing access plans that emphasize efficient internal circulation and discourage multiple access points to major roadways. Special design features may be used to discourage excessive though traffic on local access roads such as geometrics (roadway layout), signing, traffic circles, and pavement treatment.
- c) Encourage access to private developments through a system of collectors and local access streets, thus limiting direct access onto the arterial network.
- d) Encourages consolidation of access in developing commercial and higher density residential areas through frontage roads, shared use driveways, and local access streets which intersect with Arterials at moderate to long spacing.

**17. Private Roads Policy**

The County shall permit and promote construction of safe private roads accessing private properties.

The County requires private roadways to meet the minimum design standards required by the Mason County Fire Marshal per the *Uniform Fire Code*. These standards can be found at the Public Works Department, the Building Department, and Department of Community Development. Private roads which are intended to be someday adopted into the County's road system must meet the minimum standards found in the *Mason County Title 16* per Policy 9—Functional Design Policy.

**18. Emergency Response Needs Policy**

Police, fire protection, and medical response services are critical uses of the roadway system. The County will coordinate and integrate emergency response needs into the transportation program. This will include:

- a) Coordination of maintenance and construction work with emergency response agencies

- b) Review elements of the roadway system that support emergency response services to help determine where improvements can serve to enhance emergency response capabilities

**19. *Transportation Demand Management (TDM) Policy***

The County will encourage the implementation of a TDM system through the following strategies, as mandated by Washington State law. TDM encourages alternate modes of transportation to reduce the numbers of single-occupancy vehicles. These include:

- a) Encouraging the use of high-occupancy vehicles (HOV)—bus, carpool, and vanpool programs—through both public and private programs under the direction of the MTA
- b) Encouragement and support for non-motorized travel
- c) Promoting flexible work schedules to encourage use of transit, carpools, or vanpools
- d) Encouraging employers to provide TDM measures in the work place through such programs as preferential parking for HOVs, improved access for transit vehicles, and employee incentives for using HOVs. This will coordinate with the Washington State law considering trip reduction programs for major employers.

***Land Use, Environment, and Economy Policies***

The transportation system will support development in accordance with the *Mason County Comprehensive Plan*.

**20. *Land Use Policy***

The County transportation system is a critical component of land use planning. The relationship between the transportation system and land use is based on mobility and access needs. Land use creates the transportation demand and the road network serves to provide circulation between the land use elements. Compatibility between transportation services and land uses is critical to the success of the County's comprehensive plan.



- a) Mason County will strive to maintain the rural character of the road system with designs that emphasize safe road networks and aesthetic qualities that make the County unique
- b) The existing and future land use plans shall provide the basis for access needs
- c) The transportation system shall support the County's needs resulting from population and economic growth
- d) To meet future travel needs, transportation corridors shall be preserved by obtaining sufficient right-of-way and controlling access to the road network.

### **21. Environmental Policy**

The design of transportation facilities within the County shall minimize adverse environmental impacts resulting from both their construction and operation.

- a) Environmentally sensitive areas shall be protected and, if unavoidable impacts occur, appropriate mitigation shall be implemented. Special attention will be given to wetlands, aquifer recharge areas, fish and wildlife habitat, floodplains, and geological hazard areas.
- b) The construction and maintenance of the roadway system shall strive to be compatible with the natural characteristics of the area. Erosion control, water quality, and revegetation methods will be applied where appropriate.
- c) The transportation improvement program shall coordinate with the State and Federal resource agencies to ensure compliance with regulations and the best design practices to minimize impacts on the environment.

### **22. Economic Policy**

The transportation system shall be compatible with the economic and development goals of Mason County. County emphasis will be based on:

- a) Safe and convenient service to existing business and industry which minimizes impacts to residential areas

- b) County goals for the transportation system will be consistent with economic growth and private development
- c) The County shall establish and maintain a process to assess the traffic impacts of new development

***Priorities and Financing***

The County will continue to develop a transportation system that distributes costs and benefits equitably to the citizens. The maximum return from expenditures of County funds will be accomplished through wise use of the limited resources (such as land, fuel, and money). The County has the responsibility and challenge to make the best use of the limited funds available to finance transportation projects. It is the intent of Mason County to secure funding and allocate these funds in a consistent and equitable method.

**23. *Project Priority Policy***

- a) A standardized, well documented, and objective process shall be used to establish priorities for transportation expenditures.
- b) The prioritization process shall include as a minimum the following factors:
  - Safety
  - Environmental Considerations
  - Traffic Capacity
  - Economic Feasibility
  - Cost Effectiveness
  - Technical Feasibility
  - Fund Leveraging Ability
  - Community Support
  - Transportation System Completeness
  - Land Use Compatibility
  - Impact on Economic Development
  - Structural Condition of the Road
  - System Integration
  - Encouragement of Transit/HOV

**Note:** These considerations are not listed in their order of their importance.

**24. Financing Policy**

- a) Establish a procedure that maximizes the available funding from State and Federal grant programs
- b) May require traffic impact mitigation from new development in accordance with the County's concurrency management policy
- c) Encourage the use of Local Improvement Districts (LIDs) by property owners to upgrade roads to meet County standards
- d) Maintain a capital improvement program that balances expenditures for the transportation system with available funding resources

**25. Concurrency Management Policy**

As required by the *Washington State Growth Management Act*, the transportation element of the County's comprehensive plan must contain a concurrency policy (*RCW 36.70A.070.6e*). This policy requires new development to mitigate traffic impacts which reduce the level of service (LOS) or safety below the County's adopted standards. Mitigation measures are required to be implemented concurrently with the proposed development to accommodate or offset the impacts which the proposed development may have on public facilities. If impacts cannot be properly mitigated, the new development may be denied. It is not the intent of this policy to adversely impact an individual property owner who wishes to short plat a single tract of land. However, it does recognize the need to analyze those areas which have the potential for providing dense growth due to a single subdivision and/or several consecutive subdivisions. The result of such an analysis may require contributions toward improvement costs of roads which cannot support additional traffic volume resulting from new subdivisions. Short plats established in the same locality within a six-year time frame may be considered as one contiguous development if there is a substantial cumulative impact to the area.

- a) The County may require construction or financial commitment for significant traffic impacts on County roads
- b) A Latecomers Agreement Program may be drafted and administered by the County. This type of agreement will help landowners recover some costs associated with road construction which directly benefits a future developer
- c) Improvements shall conform to County road standards

## REFERENCES

- Highway Capacity Manual**, 1985, Spec Report 209, *Highway Research Board*, Washington D.C.
- Local Agency Guidelines**, 1995, *WSDOT TransAid Service Center*, Olympia, WA
- Manual of Uniform Traffic Control Devices**, 1988, Revision 3, *American Traffic Safety Services Association*, Fredericksberg, VA
- Mason County Title 16 Plats and Subdivisions**, 1991, *Mason County Code*, Mason County Washington
- Policy on Geometric Design of Highways and Streets**, 1990, *AASHTO*, Washington D.C.
- PRTPO Comprehensive Plan**, 1995, *Clallum, Jefferson, Kitsap, and Mason Counties*
- Revised Code of Washington 35.72 and 35.91** - Latecomers Clause
- Revised Code of Washington 36.75.300** - Primitive Roads
- Revised Code of Washington 36.78** - Growth Management Act
- Revised Code of Washington 36.81.121** - 6-Year TIP
- Revised Code of Washington 47.05.021** - State Route Classification
- Revised Code of Washington 47.40** - Adopt-a-road
- Uniform Fire Code**, 1994, International Fire Code Institute, Austin, TX  
Adopted by Washington State - June, 1995  
Adopted by Mason County - March, 1996



### **VIII.3 SYSTEM PLAN**

The Mason County transportation system is comprised of the arterial roadways, local roads, transit, railroads, and bicycle/pedestrian routes. The backbone of the system is the arterial roadways that serve the majority of travel in and through the County.

#### **Functional Classification Plan**

The functional classification system is a uniform method of defining the arterial roads that is accepted by local, State, and Federal agencies. The purpose is to classify roads by their primary use in serving traffic as through trips or varying degrees of access to adjacent property. FIGURE VIII.3-1 shows the Mason County functional classification.

#### ***Major/Principal Arterials***

Principal Arterials are roads that have a primary function of carrying traffic to and from major traffic generators. Some local access is provided, but the primary function is for through trips. These Arterials typically have speed limits between 35 and 45 miles per hour (mph) and many connect to freeways.

#### ***Minor Arterials***

Minor Arterials serve as connecting roads between neighborhoods and provide some through trips with additional local access. The minor Arterials also provide access to major community-wide traffic generators (i.e. hospitals, schools). Speed limits are between 30 and 45 mph and they typically connect to principal Arterials.

The prime transportation routes through Mason County are State Highway SR 101 running north and south. The northern section of this highway is on the eastern side of the Olympic Peninsula along Hood Canal. The southern section of this highway passes through Shelton and connects with Olympia. SR 106 extends easterly from U.S. 101 at the Skokomish Indian Reservation and runs along the southern side of Hood Canal. SR 106 intersects SR 3 south of Belfair. SR 3, from Bremerton and other points on the Kitsap Peninsula, enters Mason County at the Belfair area and runs in a southwesterly direction past Mason lake to Shelton. SR 300 provides access to the southern tip of the Tahuya Peninsula from its intersection with SR 3. SR 302 branches off SR 3 toward northwest Pierce County. SR 108 south of Shelton intersects with U.S. 101 at Kamilche and continues southwesterly to McCleary (in Grays Harbor County), providing connections with Aberdeen and points along the Pacific Ocean. SR 119 (Lake Cushman Road) extends east-west from US 101 in Hoodspport.

FIGURE VIII.3-1

Please insert Map, Figure 3-1



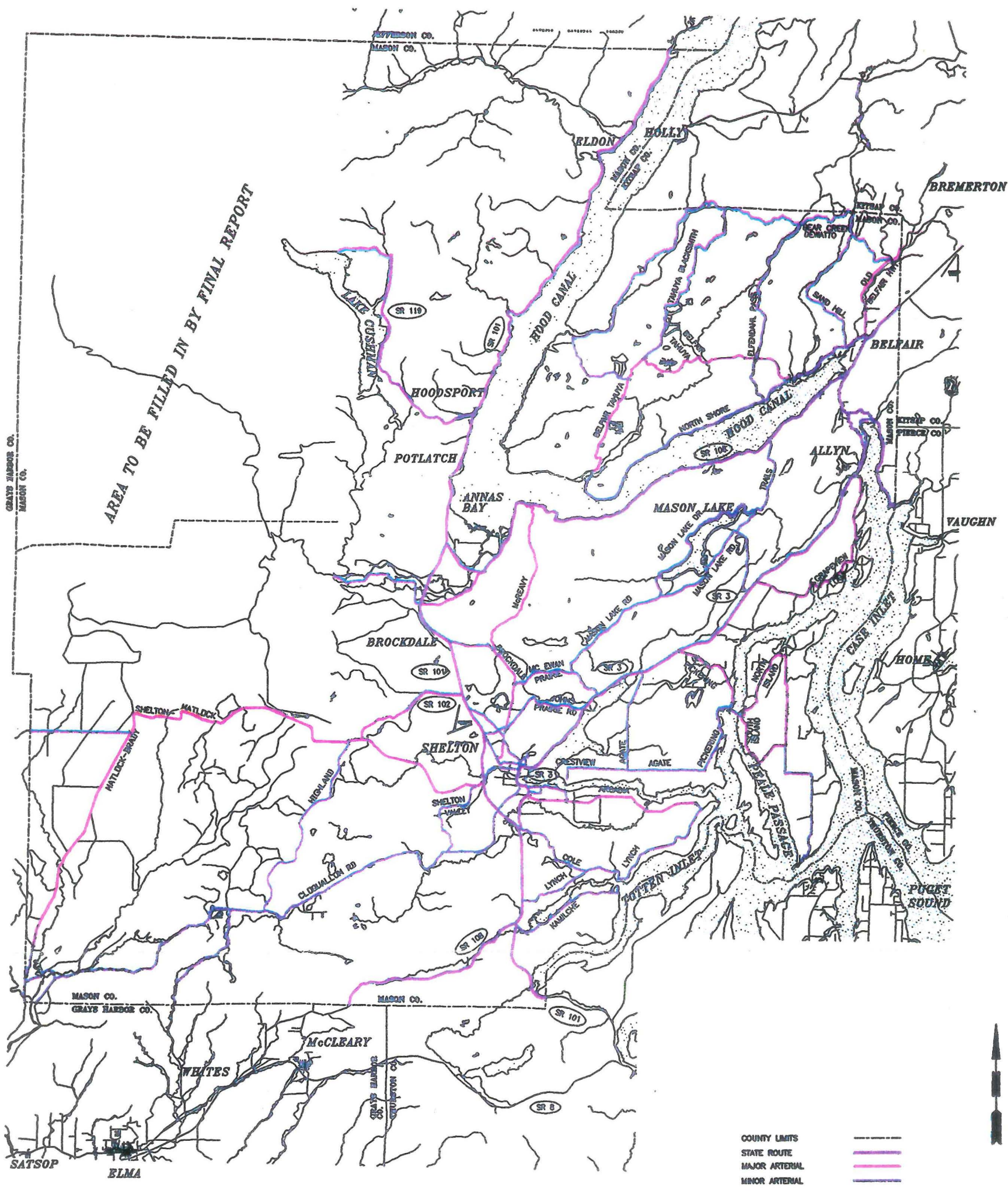


FIGURE VIII-3.1  
MASON COUNTY TRANSPORTATION ELEMENT  
FUNCTIONAL CLASSIFICATION



Mason County's road system consists of principal and minor arterial roads. Information concerning the arterial road system was provided by the Mason County Public Works Department.

As FIGURE VIII.1-3 illustrates, Pickering Road, Brockdale Road, Arcadia Road, Mason Lake, and Agate Road are some of the Arterials which have an average daily traffic (ADT) in excess of 2,000. These volumes indicate that currently County Arterials operate at a satisfactory level, with very little capacity problems.

### ***Transit System***

The Mason County Transportation Authority initiated transit service December 1, 1992 by establishing a Public Transportation Benefit Area (PTBA) Board with the following goals:

To develop a coordinated system of affordable public transportation that: operates within existing financial limitations, maximizes the use of existing transportation resources including volunteers, and is available, to some extent, in most areas of Mason County.

Current PTBA service includes dial-a-ride service and scheduled route service.

### ***Dial-a-Ride Service***

This service was started with a system of service zones designed to allocate operations based upon identified locations of population densities. Current service zones consist of four areas covering the populated areas of Mason County that can be safely accessed by bus service.

#### ***Zone 1***

Service area includes locations in north Mason County near Belfair; hours and days of service are 7:00 am to 7:00 pm Monday - Saturday.

#### ***Zone 2***

Area includes Shelton and most locations within two miles of the city limits; hours and days are 7:00 am to 7:00 pm Monday - Saturday.

*Zone 3*

Service area includes most locations within eight mile radius of Shelton including Harstene Island; hours and days are 7:30 am to 7:00 pm Monday, Wednesday, and Friday.

*Zone 4*

Service area includes all other locations within Mason County; hours and days are 7:30 am to 7:00 pm Tuesday - Thursday.

***Scheduled Route Service***

After six months of dial-a-ride service, the Mason County Transportation Authority decided to develop scheduled route service. The following routes were developed to conform with commitments in the current *Comprehensive Transit Plan of the Mason Transit System* and ridership data determined during the dial-a-ride six-month service period (service effective July 19, 1993):

*Shelton to Belfair:* Monday - Friday

*Belfair to Bremerton (Kitsap County):* Monday, Wednesday, Saturday

*Shelton to Brinnon (Jefferson County):* Tuesday and Thursday

*Shelton to Olympia (Thurston County):* Monday - Saturday

*Shelton Local Routes:* Northside A Route, Monday - Friday  
Northside B Route, Monday - Friday  
Southside Route, Monday - Friday

The following ridership information was determined from early 1994:

|                      |         |
|----------------------|---------|
| 1994 Passenger Trips | 66,151  |
| 1994 Vehicle Miles   | 345,187 |
| 1994 Vehicle Hours   | 15,712  |
| Miles per Passenger  | 5.22    |
| Passengers per Hour  | 4.21    |

Scheduled route service was started in June 1993 and consisted of connecting routes to Jefferson County, Thurston County, Kitsap County, Belfair, Shelton, and Shelton Local. The schedule of service was modified on several routes, resulting in new schedules being issued

in September and again in December 1993. By December 1993, the service schedule for route service had exceeded 1993 PTBA's *Proposed Service Objectives*. On the Kitsap, Belfair, Shelton, and Thurston routes, service met PTBA's *1994 - 1995 Proposed Service Objectives*. Current 1994 passengers per hour transported on all routes averaged 4.87. This is anticipated to increase as more people become aware of the service and schedules are adjusted to appropriate levels.

The following are the major proposed service objectives of Mason County's PTBA:

- Increase route schedule from Belfair to Bremerton to six days a week (add Tuesday and Thursday and pm service)
- Increase dial-a-ride Zone 3 to five-day service and Zone 4 to three-day service
- Increase vehicle fleet by one coach and three small buses
- Develop evening dial-a-ride service in Shelton and Belfair
- Add Saturday schedule to Shelton to Belfair service
- Add Monday, Wednesday, Friday schedule to Shelton to Brinnon
- Realign Northside A route and Southside route for Shelton local routes and remove Northside B route
- Add Shelton to Elma route as a new route with Tuesday and Thursday service
- Add Belfair local service from Monday through Friday

***Park-and-Ride Lots***

There are three designated park-and-ride lots in Mason County:

| <b>Location</b>              | <b>Capacity</b> | <b>Usage</b> | <b>Maintenance</b> |
|------------------------------|-----------------|--------------|--------------------|
| Pickering Road and Highway 3 | 30              | < 10%        | County             |
| Shelton-Matlock Interchange  | 30              | 0-10%        | State              |
| Cole Road and Highway 3      | 40              | 25-30%       | State              |

The PTBA proposes to develop park-and-ride lots in north Shelton and Belfair by 1995.

### ***Paratransit Services***

Transportation services for special populations (i.e., elderly and handicapped) are provided by a number of different social service and community-based organizations. The majority of these services operate with volunteers using their own cars or vans. Organizations that are able to provide van transportation include the Area Agency on Aging for Lewis-Mason-Thurston Counties (contracting with Intercity Transit), Skokomish Indian Reservation, and Exceptional Foresters. Organizations that operate with volunteers are Harstene Island, North Mason County Chamber of Commerce, Fiercely Independent Elders, Catholic Community Services, Senior Activities, Colony Surf, and Matthew House. The availability of volunteers can be a limiting factor in an organization's ability to provide these services.

### ***Rail Transportation***

There is no passenger rail transportation in Mason County. Rail services are used primarily by the lumber and wood products industry. The main Mason County rail line follows the same general alignment as SR 3 from Shelton through Belfair. From Belfair, the line goes north to Bremerton and Bangor. The right-of-way for this segment of the railroad is owned by the U.S. Government and operated and maintained by Burlington Northern Railroad (BNRR). The line south from Shelton is owned by BNRR and runs in a southwesterly direction to McCleary and Elma in Grays Harbor County.

The Simpson Timber Company owns and operates a line from Shelton to the Dayton/Matlock area. This line is used exclusively for the timber business. While Simpson and other timber concerns had previously used rail extensively in their operations, all but this one remaining line has been closed.

### ***Pedestrian/Bicycle Facilities***

Mason County has two designated pedestrian/bicycle trails; these are: (1) on Brockdale Road from Wallace Boulevard to Island Lake Drive and (2) on Arcadia Road from SR 3 to Binns-Swiger Road. Other informal paths off the roadway may exist within neighborhoods, but otherwise bicycle and pedestrian travel is on the roadway or roadway shoulder. Much of Highway 101 has a shoulder wide enough to accommodate bicycle travel. However, SR 106 and SR 3 generally do not have sufficient shoulder width to safely accommodate pedestrian and bicycle travel and both are heavily traveled. The County's standard asphalt road provides for at least a 5-foot shoulder. This type of roadway shoulder can be used by bicycle and pedestrian travel. The factor which may disrupt continuous shoulder paving is the contour of the land—rather steep hillsides.

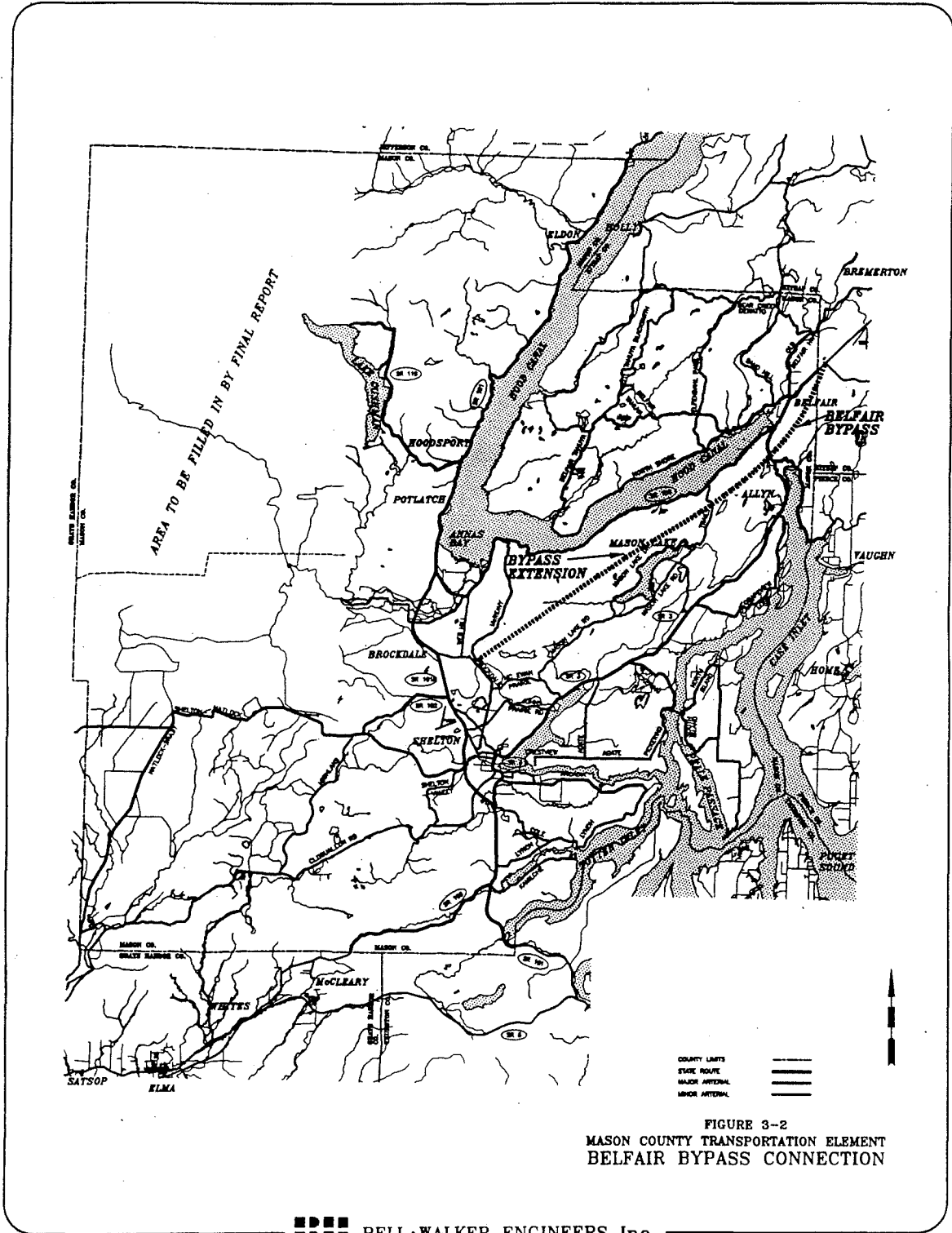
### New Arterial Routes


Mason County's Arterials are not deficient in capacity levels. However, the accessibility to the State routes from certain areas is very limited. For example, motorists traveling from Mason Lake going south on SR 101 have to go through Shelton. Similarly, motorists in Belfair traveling to SR 101 south do not have a direct route. To address these accessibility problems, new roads are proposed in the *Mason County Six-Year Transportation Improvement Program* (T.I.P.). Roads which were deemed to attract a significant amount of traffic were analyzed using the transportation model and land use Alternative 1. These new roads and the traffic they attract are discussed below:

#### ***Belfair Bypass Road***

This new road is a proposed State Route and would bypass Belfair from SR 3 just north of Belfair and connect to SR 3 south of SR 106. The Ridge Road is a concept which proposes a connection with the bypass at its southern junction and would extend westerly across the county to Brockdale Rd. and SR 101 (see Figure 5-2 on the next page). The Ridge Rd. would be constructed as a county road in stages with its first stage extending from the southern end of the bypass westerly to Trails Rd. in the Pricket Lake area. The second and possibly third stages would connect the Trails Rd. junction to the Brockdale Rd.; thus serving as an alternative route from SR 3 to SR 101. This Bypass/Ridge Rd. route would give through traffic a more direct route to connect to SR 101 and SR 3 than currently exists. FIGURE VIII.5-2 shows these connections. Further, a "Bypass Cutoff" road connecting downtown Belfair with the approximate midpoint of the Bypass would add necessary flexibility to the usage of the Belfair Bypass. The "Bypass Cutoff" would probably be maintained by Mason County.

The TMODEL2 run on Alternative 1 (20 year forecast) produced a traffic volume of 8,533 vehicles per day on the bypass itself. This means that approximately 800 vehicles will use the bypass in the PM peak hour—a significant amount. In the absence of the bypass, all these through-vehicles would have to go through intersections in Belfair (23,000+ vehicles per day). The bypass will thus serve as a through-route for SR 3 traffic. According to the model the "Bypass Cutoff" Rd. would serve up to 5177 vehicles per day. The first stage of the ridge road connecting SR 3 to Trails Road will serve the Mason Lake area and will attract approximately 3,600 vehicles per day which would be diverted from SR 106. Nearly 2,600 vehicles per day would use the second stage of the ridge road, if constructed, from Trails Road to Brockdale Road (Note: this volume would be additional to the 3,600 on first stage). These volumes show that a significant amount of traffic will use the new road connections that enhance the accessibility to SR 101. From a capacity point of view, there is no significant benefit on other roads from where traffic is diverted to the new roads.



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### ***Grapeview Loop Cutoff Road***

This new cutoff road would connect SR 3 to the middle of Grapeview Loop Road. This would provide a short, direct route to SR 3 for motorists near Grapeview Loop. The connection is shown in FIGURE VIII.3-3. The new connection would attract approximately 2,700 vehicles per day. Traffic previously using Grapeview Loop Road South would now use the cutoff road to SR 3. Some traffic (600 vehicles per day) from Grapeview Loop Road North also would be diverted to the cutoff road. As stated earlier, the connection will not appreciably benefit other roads from a capacity or level of service (LOS) standpoint.

### ***New Road from Pickering Road to Mason Lake Road***

This new road would connect Pickering Road from SR 3 to Mason Lake Road. The connection is shown in FIGURE VIII.3-3. The new road would carry approximately 1,200 vehicles per day from SR 3 to Mason Lake Rd. This short connector will provide better access to SR 3 to residents along the Mason Lake Rd in a similar fashion as the Grapeview Loop Cutoff Rd.

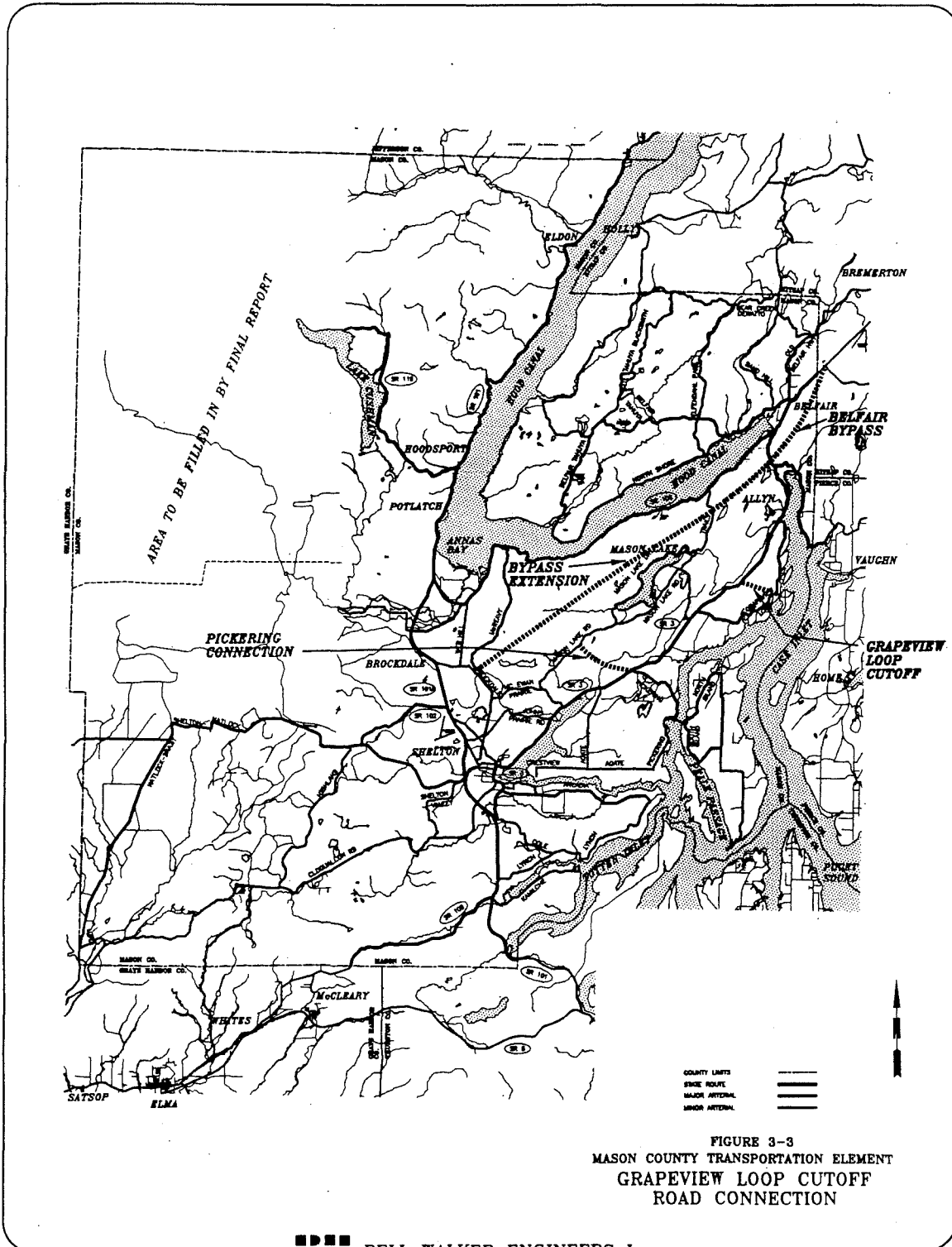
In summary, the analysis using the transportation model indicated that the three new roads would increase mobility to the main routes for Mason Lake and Belfair area traffic. These roads, therefore, would have the potential to serve the accessibility needs of Mason County.

### ***Transportation System Management/Transportation Demand Management***

Strategies for efficient utilization of existing transportation systems are called transportation demand management (TDM) strategies. These strategies do not involve new road construction, but do reduce demand for new facilities. Specific strategies for future improvements should include:

#### ***Park-and-Ride Service***

Remote parking lots should be located at transit stops to allow those users beyond the normal ¼ mile walking distance to drive to a transit stop.



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### *Shuttle Systems*

Short-distance transit services should provide reduced auto dependence (i.e., shuttle service from places of employment to restaurants and shopping areas).

### *Employment Transit Subsidies*

Employers should subsidize their employees' use of transit by giving cash subsidies for purchase of transit passes.

### *Ridesharing*

Carpooling and vanpooling offer tremendous potential for improving utilization of existing transportation facilities. Modest increases in ridesharing should produce measurable improvements.

### *Alternative Work Hours*

Promotion of staggered work hours should spread peak period demand. An example of this concept should include flex-time, giving employees personal choice to determine their work hours.

### *Parking Management*

This strategy should include limiting the supply and availability of parking, preferential parking for carpools and vanpools, or reducing the amount of free parking provided to employees.

### *Bicycle/Pedestrian Facilities*

Provision of bicycle/pedestrian facilities should be based on the type of area served and related travel needs for pedestrians and bicycles. The general types of travel by these users are recreation, school, and commuting. As part of the transportation plan route, it is important to designate pedestrian and bicycle facilities. Minimum needs to serve this type of traffic should be based on adequate, safety, and convenient service.

It is generally felt that all arterial roads should have minimum areas for bicycle/pedestrian lanes. Where appropriate, they should be separated from the road and serve the type of travel warranted for the specific area.

**Transit Service**

Mason County has a transit program underway that is providing service to the communities and connections between the activities centers. Some of the key elements that need to be considered in the transportation plan relating to transit service are:

- Ridership
- Service Areas
- Social Needs
- Cost of Service
- Special Areas
- Route Structure

The Mason County Transportation Authority is providing planning for the transit system. The Mason County Transportation Plan will coordinate with this agency's work to ensure that the two plans are compatible.

#### **VIII.4 ROAD DESIGN STANDARDS**

The adopted design standards for roads in Mason County have been developed to provide cost-effective design that is consistent with the road users' driving expectations and meets the public safety needs. The needs of motor vehicles, bicycling, and pedestrians are all elements of the transportation system.

The application of design standards creates the basic geometric configuration of the roadway. However, the philosophy of design establishes the character of the roadway by integrating sensitivity to the terrain, environment, and visual appearance. Mason County's philosophy is to design new or improved roadways in a manner that retains a natural and rural character consistent with the prudent use of resources. The use of curvilinear horizontal and vertical alignment can give a more interesting and changing visual effect while not sacrificing safety, convenience, or economy. Retaining and restoring natural vegetation to the graded areas of the roadway will enhance the visual appearance while minimizing erosion.

##### **Principles of Design Standards**

The design standards for Mason County roads incorporate:

- *City and County Design Standards*, Washington State, 1994
- *A Policy on Geometric Design of Highways and Streets*, AASHTO, 1994

These standards cannot provide for all situations. Specific conditions may require deviations from adopted standards, but must be done using professional judgement to obtain a design that is justified and considers economic, environmental, and public welfare.

The design standards are intended to achieve these following principles:

- The roadway meets the needs of safe, economic, and convenient transportation for the public
- The roadway design shall be sensitive to the environment and rural character of Mason County
- The design will balance the life cycle costs of construction, maintenance, and resources

### Arterial Road System

The Mason County arterial road system design standards will conform to the guidance and standards in the *City and County Design Standards* (Washington State, February 1994). The geometric standards of the roadway sections are shown in TABLE VIII.4-1. FIGURE VIII.4-1 shows the definition of roadway section elements.

The County desires to retain and enhance the natural environment and rural character of the arterial road system. To accomplish this, special considerations are necessary for the design and maintenance of the roadways.

### New Construction

Road construction that involves new location, significant realignment, or major widening will consider:

- Natural terrain to minimize grading requirements for cuts and fills
- Retention of natural drainage courses, water bodies, and wetlands
- Retention and enhancement of natural vegetation

### Maintenance

Roadway maintenance is to be accomplished to retain the areas adjacent to the roadway (clear zone), kept clear of fixed or non-traversable objects, and provide a surface that is safe for use by errant vehicles. This area will be maintained with low-growing vegetation that serves as erosion control as well as providing a natural appearance.

### Low-Volume Local Access Roads

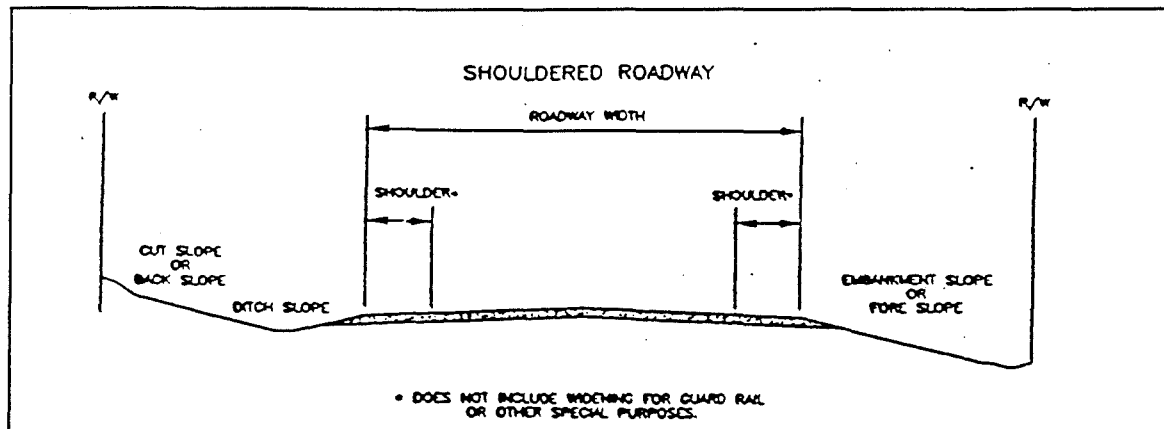
To maintain the rural character of Mason County's low-volume roads, the following principles will apply:

- Paved roadway surface will be minimized to reduce drainage requirements and lower maintenance costs
- Disturbance or removal of vegetation and trees will be minimized
- Disturbance of soil will be minimized to reduce potential scarring of hillsides and erosion

| TABLE VIII.4-1: Geometric Cross-Section for Two-Way Roads and Streets |                              |                                 |                      |                               |                  |                               |                                 |                               |                  |
|---|------------------------------|---------------------------------|----------------------|-------------------------------|------------------|-------------------------------|---------------------------------|-------------------------------|------------------|
| Minimum Design Elements   | Arterial                     |                                 |                      |                               |                  |                               |                                 |                               |                  |
|   | Principal <sup>(4)</sup>     |                                 | Minor <sup>(4)</sup> |                               |                  | Collector <sup>(4)</sup>      |                                 |                               |                  |
|   | DHV <sup>(5)</sup> Below 200 | DHV <sup>(5)</sup> 200 and over | DHV Below 100        | DHV <sup>(5)</sup> 100 to 200 | DHV 201 and Over | ADT <sup>(6)</sup> 400 to 750 | ADT <sup>(6)</sup> 751 to 1,000 | DHV <sup>(5)</sup> 100 to 200 | DHV 201 and Over |
| Right-of-Way  | 60 Feet Minimum              |                                 |                      |                               |                  |                               |                                 |                               |                  |
| Roadway Width <sup>(1) (3)</sup>                                      | 36'                          | 40'                             | 32'                  | 36'                           | 40'              | 26'                           | 28'                             | 34'                           | 40'              |
| Intersection  |                              |                                 |                      |                               |                  |                               |                                 |                               |                  |
| Lane Width:   |                              |                                 |                      |                               |                  |                               |                                 |                               |                  |
| - Exterior <sup>(1)</sup>   | 12'                          | 12'                             | 12'                  | 12'                           | 12'              | 10'                           | 10'                             | 11'                           | 12'              |
| - Interior Thru <sup>(1)</sup>  | 11'                          | 11'                             | 11'                  | 11'                           | 11'              | 10'                           | 10'                             | 11'                           | 11'              |
| - 2-Way Left Turn <sup>(1)</sup>                                      | 11'                          | 11'                             | 11'                  | 11'                           | 11'              | 10'                           | 10'                             | 11'                           | 11'              |
| - Exclusive Turn <sup>(1)</sup>                                       | 11'                          | 11'                             | 11'                  | 11'                           | 11'              | 10'                           | 10'                             | 11'                           | 11'              |
| Shoulder Width <sup>(2) (3)</sup>                                     | 6'                           | 8'                              | 4'                   | 6'                            | 8'               | 3'                            | 4'                              | 6'                            | 8'               |

**Notes:**

- <sup>(1)</sup> May be reduced to minimum allowed by AASHTO
- <sup>(2)</sup> When guardrail is necessary, provide 2 feet of widening or longer posts to ensure lateral support
- <sup>(3)</sup> For roads with traffic volumes less than 400 ADT, the low volume road and street standards may be used
- <sup>(4)</sup> Federal functional classification defined by WSDOT (TRIP Division)
- <sup>(5)</sup> Design Hourly Volume
- <sup>(6)</sup> Average Daily Traffic



**FIGURE VIII.4-1: Definition of Roadway Elements, Shouldered Roadway**  
(Does not include widening for guardrail or other special purposes)

### Low-Volume Local Access Roads (continued)

- Roadways will provide access to property at a minimal disruption to the natural environment
- Where appropriate and safe, curvilinear alignments will be used

These principles will apply on local access roads forecasted with less than 400 vehicles per day traffic volume. Accidents on these roads are less than 50 percent of the average accident rate for Mason County. The result of accidents is property damage only with limited injuries. A non-continuous street will not exceed 700 feet in length without an adequate turn around. Truck traffic will be limited to serving the local property owners only.

### *Private Road Section*

*The Uniform Fire Code* specifies that there will be 20 feet of unobstructed access to any building. A 2-foot shoulder is required for a total roadway width of 24 feet. A 2 percent cross slope must be provided to ensure removal of water from the roadway surface.

### *Geometrics*

The minimum design speed for determining horizontal and vertical curves and maximum grades will be 25 mph. This may not be the posted speed, so warning signs must be integrated into the design. Stopping sight distance will be designed for 30 mph to provide an unobstructed view of the roadway for 200 feet in front of each vehicle. Passing sight distance

and intersection sight distance will be controlled by appropriate signage and striping. No bicycle or pedestrian facilities are required unless a part of the bicycle/pedestrian plan or near school/commercial/industrial areas.

***Clear Zone***

Drainage facilities provided through borrow ditches will be a part of the clear zone. Utilities and other obstructions (i.e., culvert head walls) will be located on the outside of drainage facilities as much as possible. Tree and vegetation removal will be minimized except to remove an obvious hazard/obstruction on the outside of a curve or to provide stopping sight distance on the inside of a curve.





### **VIII.5 SYSTEM MANAGEMENT PLAN**

*The Mason County Transportation System Management Plan* provides a process to control, prioritize, and finance the transportation improvement program. FIGURE VIII.5-1 graphically shows the process for managing the County transportation system. The key elements are:

- Priority analysis
- Financial plan
- Transportation improvement plan
- Concurrency management system

This report provides an evaluation of the existing system and identifies deficiencies in pavement and shoulder width, horizontal and vertical alignment, and safety. These deficiencies have been prioritized into a six-year and twenty-year transportation improvement program (TIP).

#### **Priority Analysis**

Transportation improvements are selected for construction by the County Commissioners using the goals and policies, local knowledge, and an evaluation of physical and operational criteria. This criteria includes pavement width, shoulder width, alignment characteristics, and safety. The evaluation of physical and operational criteria provides priority analysis. This is coupled with the other selection considerations to develop the transportation improvement program.

Mason County's Arterials were rated using the physical and operational criteria established in Section VIII.1. Any arterial with a rating of 4 or 5 in a specific criterion was deficient. Using these ratings, a list of projects was developed. Several roadways that were deficient were included in Mason County's adopted six-year transportation improvement program (TIP). The Arterials that were deficient, but already included in the transportation improvement program (TIP), were given highest priority. The remaining Arterials which were deficient but were not listed in the six-year transportation improvement program (TIP) were prioritized using total scores of the criteria ratings. That is, a roadway having the highest total score was given the highest priority and roadways with lower scores were given lower priority. The list of projects was subsequently divided into six-year improvement programs (TIPs) based on current and future funding availability. The financial plan over the 20-year period is discussed in the next section.

FIGURE VIII.5-1

| <b>TABLE VIII.5-1: Mason County Revenue Forecast</b> |                                  |                    |                    |                                     |                     |
|--|----------------------------------|--------------------|--------------------|-------------------------------------|---------------------|
| <b>Revenue Source</b>                                | <b>Ave. Income<br/>1989-1993</b> | <b>Est. 1995</b>   | <b>Base 1996</b>   | <b>Est. Annual<br/>Increase (%)</b> | <b>Est. 2015</b>    |
| <b>Federal</b>                                       |                                  |                    |                    |                                     |                     |
| ISTEA (FAS)  | \$97,824                         | \$1,125,825        | \$100,000          | 0.00                                | \$100,000           |
| FFY  | \$254,277                        | \$270,000          | \$100,000          | 6.00                                | \$320,000           |
| RRP  | \$22,815                         | \$0                | \$0                | 0.00                                | \$0                 |
| BROS   | \$381,398                        | \$0                | \$0                | 0.00                                | \$0                 |
| <b>State</b>   |                                  |                    |                    |                                     |                     |
| CAPP   | \$178,850                        | \$468,800          | \$230,000          | 4.00                                | \$504,000           |
| Gas Tax  | \$1,501,490                      | \$1,690,000        | \$1,565,000        | 4.00                                | \$3,429,000         |
| RAP  | \$613,900                        | \$258,000          | \$0                | 0.00                                | \$0                 |
| PRTP0  | \$5,036                          | \$5,000            | \$0                | 0.00                                | \$0                 |
| <b>County</b>  |                                  |                    |                    |                                     |                     |
| Property Tax   | \$3,723,836                      | \$3,977,700        | \$3,801,917        | 3.50                                | \$7,565,000         |
| Forest Excise  | \$650,000                        | \$750,000          | \$700,000          | 3.50                                | \$1,393,000         |
| Local Real Estate                                    | \$50,000                         | \$60,000           | \$55,000           | 6.00                                | \$176,000           |
| Reforest. Excise Tax                                 | \$175,000                        | \$160,000          | \$150,000          | 0.00                                | \$150,000           |
| Miscellaneous  | \$19,000                         | \$30,000           | \$225,000          | 3.00                                | \$406,000           |
| <b>Total</b>   | <b>\$7,673,426</b>               | <b>\$8,795,325</b> | <b>\$6,926,917</b> |                                     | <b>\$14,043,000</b> |
| <b>Available, Constr.</b>                            | <b>\$3,683,244</b>               |                    |                    |                                     | <b>\$6,740,639</b>  |

### ***Financial Plan***

Funding a transportation system involves incorporating the resources from county, State, Federal, and private sources. The blending of these resources is dependent upon the needs of the jurisdiction, as well as the political philosophies of the responsible governmental units. The following provides a discussion of funding resources.

#### ***County Funds***

A county has the ability to utilize revenue from the following sources:

##### ***General Funds***

Tax revenues that are not dedicated to specific use can be used by a county for the transportation system.

##### ***County Road Tax***

Property tax up to \$2.25 per \$1,000 assessed valuation can be used for roads in unincorporated county areas. It is limited by the annual growth limit of 106 percent in accordance with State law.

##### ***Fuel Tax***

Tax from fuel sales is distributed by a state to counties based on population and road mileage in accordance with a standard formula.

##### ***Vehicle License Fee***

A vehicle license fee up to \$15 can be applied by a county for general transportation. This is subject to referendum. These fees are not currently used by Mason County.

##### ***Special Fuel Tax***

Based on voter approval, 10 percent fuel tax can be added for highway construction by a county. This tax is not utilized by Mason County at this time.

### ***Transportation Benefit Districts***

A special taxing district can be formed for transportation purposes to issue voter-approved general obligation bonds, revenue bonds, special property taxes, and Local Improvement Districts (LIDs). These districts can range in area from an entire region (special property taxes) to a neighborhood (LID).

### ***State and Federal Assistance***

#### *Intermodal Surface Transportation Efficiency Act (ISTEA)*

The Federal Transportation Act, 1990 provided funds that were made available to the State of Washington and local agencies from federal revenue sources. This program incorporates a number of special programs such as bridge replacement, railroad/highway crossing, and hazard elimination projects.

#### *Federal Forest Funds*

Based on the Federal forest lands within a county, funds are provided to construct and maintain roads within these Federal areas.

#### *Transportation Improvement Account (TIA)*

This is a State-funded program for local agencies to alleviate and prevent traffic congestion caused by growth. This program has been established from revenue obtained from Washington State's gas tax.

#### *Urban Arterial Trust Account (UATA)*

This is also a State-funded program for traffic improvements to alleviate congestion. It is funded by Washington State's gas tax and allocated to communities based on priority evaluation of needs.

#### *Rural Arterial Program (RAP)*

This is a State-funded program for counties to improve rural arterial roads.

#### *County Arterial Preservation Program (CAPP)*

This is a program with Washington State funding to counties to preserve existing paved county arterial roads.

*Community Economic Revitalization Board (CERB)*

This program provides low-interest loans and occasional grants to finance access roads for specific sector development.

*Public Works Trust Fund (PWTF)*

This is a low-interest loan program for public works improvements.

*Motor Vehicle Excise Tax*

This tax is provided on a formula to the counties from State sources.

*Private Sources*

Based on State and Federal legislation of *The Growth Management Act*, *The State Environmental Protection Act*, and *The National Environmental Protection Act*, mitigation for new development can be assessed based on the requirements to serve the traffic demand generated by the new development.

*Revenue Forecast*

Mason County has used a wide range of funding sources for their transportation program. Using this past history of funding and estimating how it may change in the future, a revenue forecast has been prepared. TABLE VIII.5-1 shows the analysis of future revenues. This information was developed using the average revenue the County applied to the transportation system from 1989 to 1993 and the estimated amounts for 1995. This was then used to create a 1996 base year amount for each funding source. the base year was then expanded using estimated percentage annual increases considering the growth of the County, changes anticipated in funding sources, and economic conditions. The total revenue was then prorated between routine maintenance, administration, and operations and the construction funds. This was based on historical ratios.

This revenue forecast indicates that funds will be approximately twice the present amounts by 2015. It is important to note that the revenues and construction costs have not been adjusted for inflation. The changes are only the result of growth.

Please insert Figure 5-2,  
Map - "Recommended Plan"



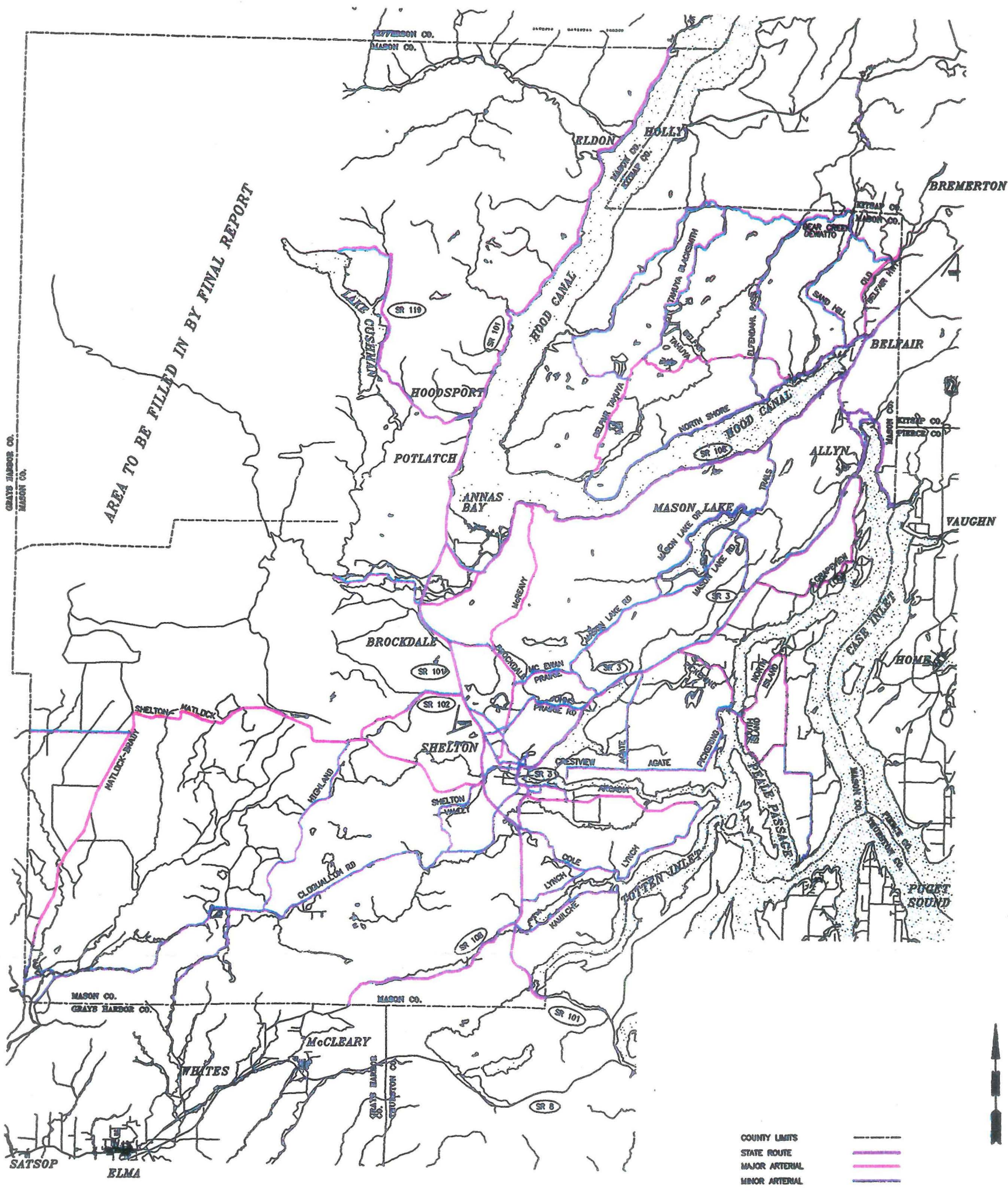


FIGURE VIII-3.1  
MASON COUNTY TRANSPORTATION ELEMENT  
FUNCTIONAL CLASSIFICATION

### Transportation Improvement Program

A transportation improvement program (TIP) for the 20-year period was developed for Mason County utilizing the priority analysis and financial plan as previously discussed. The recommended plan for the arterial road system is shown in FIGURE VIII.5-2. TABLE VIII.5-2 shows the list of projects over the 20-year period. Projects that can be funded in each six-year transportation improvement program (TIP) over the 20-year period are separated and shown. All the new road construction occurs in the final six-year transportation improvement program (TIP) when full development occurs. The exception to this is the Belfair Bypass which occurs in the first six-year transportation improvement program (TIP) which is the adopted six-year transportation improvement program (TIP) for Mason County.

### Concurrency Management System

The *Washington State Growth Management Act* (GMA) specifies that a transportation element of a city or county comprehensive plan must incorporate a concurrency management system (CMS) into their plan. A concurrency management system (CMS) is a policy designed to enable the city or county to determine whether adequate public facilities are available to serve new developments. This process is shown in FIGURE VIII.5-3.

The transportation element section of the *Washington State Growth Management Act* (GMA) defines a concurrency management system (CMS) as follows:

“Local jurisdictions must adopt and enforce ordinances which prohibit development approval if the development causes the level of service (LOS) on a transportation facility to decline below the standard adopted in the transportation element of the comprehensive plan, unless transportation improvements or strategies to accommodate the impacts of development are made concurrent with the development.”

“Concurrent with development implies that public infrastructure improvements and strategies that are required to service land development be in place, or financially planned for, within six years of development use.”

### Principal Components

The concurrency management system (CMS) for Mason County includes the following components:



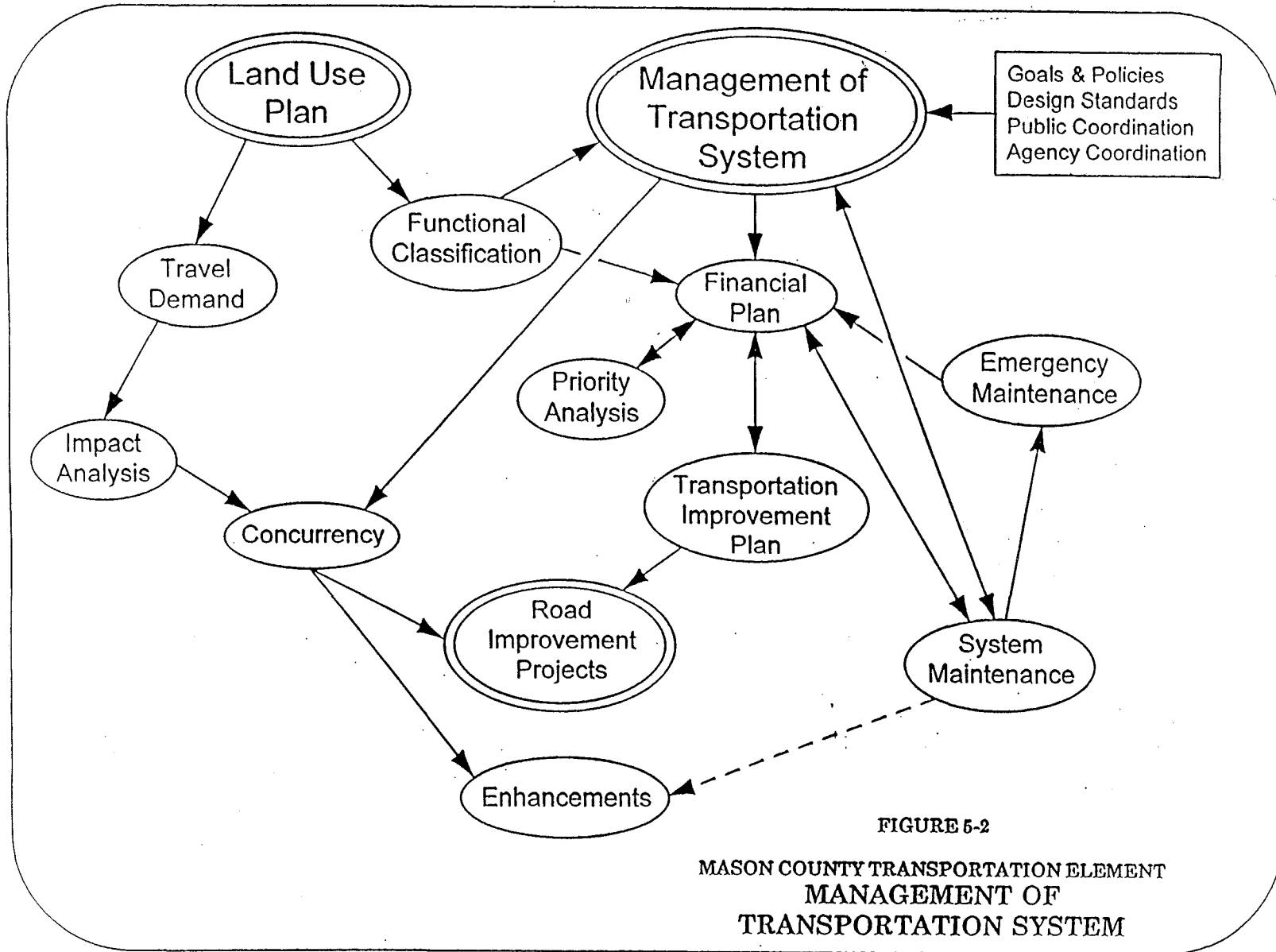


FIGURE 5-2  
MASON COUNTY TRANSPORTATION ELEMENT  
MANAGEMENT OF  
TRANSPORTATION SYSTEM

| TABLE VIII.5-2: Transportation Improvement Program (County Arterials Only)   |             |                                       |                                      |               |
|--|-------------|---------------------------------------|--------------------------------------|---------------|
| Project I.D.   | Milepost    | Beginning Milepost Location           | Recommended Improvement              | Cost (\$1000) |
| <b>Recommended Twenty-Year T.I.P. (1996-2001) - Adopted Six-Year T.I.P.:</b> |             |                                       |                                      |               |
| Johns Prairie Road - 3   | 2.72-2.74   | Railroad Crossing                     | Crossing Improvement                 | 43            |
| McEwan Prairie Road  | 0.81-0.83   | Railroad Crossing                     | Crossing Improvement                 | 43            |
| Lynch Road - 3   | 4.95-8.85   | 0.3 mi. North of Bay East             | Realign and Regrade                  | 597           |
| Lynch Road - 4   | 8.85-8.85   | at Totten Shores                      | Realign and Regrade                  | 628           |
| Sandhill Road - 1  | 0.33-2.66   | 0.33 mi. North of SR 300              | Realign and Regrade                  | 645           |
| Bear Creek-Dewatto Road - 1  | 6.67-7.45   | 0.07 mi. East of Panther Lake         | Realign and Regrade                  | 300           |
| Cloquallum Road - 2  | 14.09-15.60 | at Satsop-Cloquallum Road             | Realign and Regrade                  | 610           |
| Herman's Old Schoolhouse Bridge  | 14.80-14.84 | at Bridge                             | Replacement of Bridge and Approaches | 236           |
| Herman's Cloquallum Creek Bridge   | 15.58-15.62 | at Bridge                             | Replacement of Bridge and Approaches | 236           |
| Grapeview Loop Road - 6  | 6.93-7.98   | at Nelson Road                        | Realign and Regrade                  | 299           |
| Cloquallum Road - 1  | 11.75-12.47 | at Rock Bluff Curve                   | Realign (Relax Curve)                | 398           |
| Pickering Road - 3   | 3.41-4.51   | at Harstene Bridge Road               | Realign and Regrade                  | 365           |
| Belfair-Tahuya Road - 1  | 0.00-1.85   | at North Shore Road                   | Horizontal & Vertical Alignment      | 1,034         |
| North Island Drive - 1   | 0.31-1.31   | 0.04 mi. Northeast of Ferry Loop Road | Realign and Regrade                  | 333           |
| Bear Creek-Dewatto Road - 2  | 7.45-8.45   | 0.16 mi. East of Gold Creek Road      | Realign and Regrade                  | 333           |
| New Road: Grapeview Loop to SR 3   | N/A         | approximately Cronquist Road          | New Construction                     | 400           |
| Johns Prairie Road/SR 3  | 3.8-3.9     | Intersection with SR 3                | Install Traffic Signal               | 156           |
| Crosvie Drive  | 0.00-2.02   | at Agate Store                        | Realign and Regrade                  | 668           |
| Bear Creek-Dewatto Road - 3  | 8.45-9.60   | 0.37 mi. West of Tiger Mission        | Realign and Regrade                  | 384           |
| McLane Cove Bridge   | 2.35-2.55   | at Bridge                             | Replacement of Bridge and Approaches | 531           |
| Sandhill Road - 2  | 2.66-3.94   | at Transfer Station                   | Realign and Regrade                  | 380           |
| North Island Drive - 2   | 1.31-3.09   | 0.44 mi. North of Fox Lane            | Realign and Regrade                  | 593           |
| Rock Creek Bridge  | 5.83-5.87   | at Bridge                             | Replacement of Bridge and Approaches | 103           |
| Trails Road - 2  | 0.8-1.59    | 0.8 mi. South of SR 106               | Realign and Regrade                  | 345           |
| Grapeview Loop Road - 3  | 3.5-4.43    | at Lombard Road                       | Realign and Regrade                  | 319           |
| Grapeview Loop Road - 4  | 4.43-5.9    | at Grapeview Store                    | Realign and Regrade                  | 481           |
| Pickering Road - 4   | 4.51-5.35   | at Scenic View Road                   | Realign and Regrade                  | 277           |
| New Road : Rasor Road  | N/A         | approximately Trails End Drive        | New Construction                     | 1,600         |
| Grapeview Loop Road - 5  | 6.1-6.93    | at Cronquist Road                     | Realign and Regrade                  | 254           |

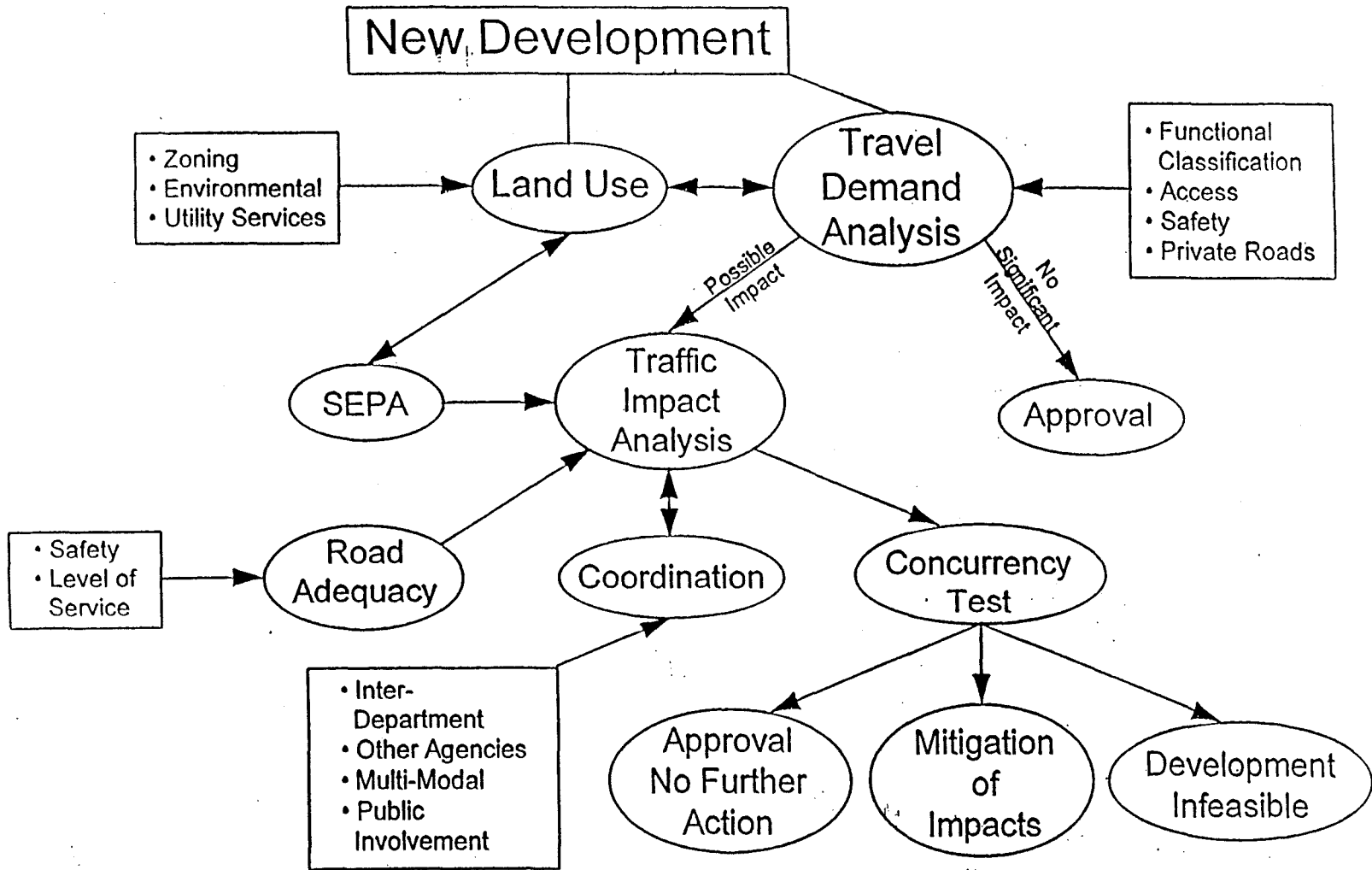
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| TABLE VIII.5-2: Transportation Improvement Program (County Arterials Only) |             |   |                                    |               |
|--|-------------|---|------------------------------------|---------------|
| Project I.D.   | Milepost    | Beginning Milepost Location               | Recommended Improvement            | Cost (\$1000) |
| Pickering Road - 6   | 5.35-6.24   | at Schnelder Road                         | Realign and Regrade                | 315           |
| North Shore Road   | 9.63-10.63  | 0.68 mi. South of Pokes Road              | Realign and Regrade                | 333           |
| Bear Creek-Dewatto Road - 4  | 9.75-10.68  | 0.69 mi W. of Bear Creek Community Hall   | Realign and Regrade                | 309           |
| Elfendahl Pass Road - 1  | 0.00-1.85   | at North Shore Road                       | Realign and Regrade                | 616           |
| Sandhill Road - 3  | 3.94-6.82   | at Delmore Road                           | Realign and Regrade                | 624           |
| Shelton Matlock Road   | 0.91-1.38   | at City Limits                            | Realign and Regrade                | 792           |
| New Frontage Roads Re:Belfair Bypass                                       | approx 3 mi | Vicinity of Belfair Bypass                | New Construction                   | 300           |
| Recommended Twenty-Year T.I.P. (2002-2005):                                |             |   | Total (1st T.I.P. - 1996-2001) =   | 15,880        |
| Johns Prairie Road - 2   | 3.42-3.90   | at Capitol Hill Road                      | New Construction for New Alignment | 441           |
| Grapeview Loop Road - 2  | 2.78-3.5    | at Murray Road South                      | Realign and Regrade                | 315           |
| Grapeview Loop Road - 1  | 1.62-2.78   | at Stadium Beach Road                     | Realign and Regrade                | 386           |
| Bear Creek-Dewatto Road - 7  | 6.63-7.45   | 105 ft East of Public Access Area         | Horl.&Vert. Align., Widen Shoulder | 369           |
| Shelton-Valley Road - 2  | 2-3.85      | .67 mi North of Deogan Road West          | Realign and Widen Shoulder         | 832.5         |
| Shelton-Valley Road - 1  | 0-2         | at Shelton-Matlock Road                   | Realign and Widen Shoulder         | 900           |
| Elfendahl Pass Road - 1  | 0-1.85      | at North Shore Road                       | Realign, Widen Shoulder&Pavt.      | 832.5         |
| Belfair-Tahuya Road - 1  | 1.85-4.61   | .25 mi South of Lakeshore Drive South     | Realign, Widen Shoulder & Pavt.    | 1,242         |
| Belfair-Tahuya Road - 2  | 6.44-8.19   | 210 ft East of Collins Lake Road          | Realign, Widen Shoulder & Pavt.    | 787.5         |
| Bear Creek-Dowatto Road - 8  | 9.6-9.75    | .78 mi East of Tigor Mission Road         | Horl.&Vert. Align., Widen Pavt.    | 67.5          |
| Bear Creek-Dowatto Road - 4  | 1.68-3      | at 45 Degree Curve Left                   | Realign and Widen Shoulder         | 594           |
| Bear Creek-Dewatto Road - 5  | 3-5.09      | .97 mi Southeast of 40 Degree Curve Right | Realign and Widen Shoulder         | 940.5         |
| Cloquallum Road - 3  | 4.6-5.85    | at Shelton Valley Road                    | Widen Shoulder and Pavement        | 562.5         |
| Elfendahl Pass Road - 3  | 3.5-7.9     | 1.03 mi S. of Pvt. Rd. (Goat Ranch Rd.)   | Realign, Widen Shoulder&Pavt.      | 1,980         |
| Kamilche-Point Road - 1  | 0-2.8       | at Old Olympic Hwy                        | Widen Pavement and Shoulder        | 1,260         |
| Satsop-Cloquallum Road   | 0-1.68      | at Cloquallum Road                        | Realign, Widen Pavt.&Shoulder      | 756           |
| Tahuya Blacksmith Road - 1   | 0-2.5       | at Bear Creek-Dewatto Road                | Realign, Widen Pavt.&Shoulder      | 1,125         |
| Tahuya Blacksmith Road - 3   | 5.64-7.22   | 0.1 mi North of Grant Way                 | Realign, Widen Pavt.&Shoulder      | 711           |
| Shelton-Matlock Road - 2   | 7.2-7.5     | at Little Egypt Road                      | Widen Shoulder and Pavement        | 135           |
| Bear Creek-Dewatto Road - 6  | 5.09-6.63   | at Elfendahl Pass Road                    | Horizontal and Vertical Alignment  | 693           |
| Cloquallum Road - 4  | 5.85-7.98   | at Rock Bridge #1                         | Widen Shoulder and Pavement        | 958.5         |
| Crestview Drive  | 2.02-3.16   | at Hillcrest Drive                        | Widen Pavement                     | 513           |

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| TABLE VIII.5-2: Transportation Improvement Program (County Arterials Only) |             |  |   |               |
|--|-------------|--|---|---------------|
| Project I.D.   | Milepost    | Beginning Milepost Location                  | Recommended Improvement                   | Cost (\$1000) |
| Elfondahl Pass Road - 2  | 1.85-3.5    | at Belfair-Tahuya Road                       | Realign, Widen Shoulder&Pavt.             | 742.5         |
| Shelton-Matlock Road - 7   | 16.86-20.91 | at Matlock-Deckerville Road                  | Widen Pavement                            | 1,822.5       |
| Shelton-Matlock Road - 8   | 20.91-23.22 | at Ford Loop Road                            | Widen Pavement                            | 1,039.5       |
| Shelton-Matlock Road - 9   | 23.22-26.38 | 210 ft Northeast of Ever's Bridge            | Widen Pavement                            | 1,422         |
| <b>Recommended Twenty-Year T.I.P. (2006-2015):</b>                         |             |  | <b>Total (2nd T.I.P. - 2002-2005) =</b>   | <b>21,428</b> |
| Shelton-Matlock Road - 10  | 26.38-27.81 | 55 ft West of Boundary Road                  | Widen Pavement                            | 643.5         |
| Cloquallum Road - 5  | 12.4-14.09  | 0.5 mi East to Highland Road                 | Widen Shoulder and Pavement               | 760.5         |
| Highland Road - 1  | 0-2.43      | at Shelton-Matlock Road                      | Realign, Widen Shoulder                   | 1,093.5       |
| Kamilcho-Point Road - 2  | 2.8-4.2     | at Bloomfield Road                           | Widen Pavement and Shoulder               | 630           |
| Tahuya Blacksmith Road - 2   | 2.5-5.64    | 0.98 mi South of 4-H Camp                    | Realign, Widen Pavement                   | 1,413         |
| Arcadia Road - 1   | 4.98-6.33   | 0.24 mi East of Mill Creek Bridge            | Widen Shoulder                            | 616.5         |
| Arcadia Road - 2   | 6.33-7.07   | 0.74 mi Northwest of Lynch Road              | Widen Shoulder and Pavement               | 333           |
| Shelton-Matlock Road - 6   | 15.66-16.86 | at Bingham Creek Bridge                      | Widen Shoulder and Pavement               | 585           |
| Highland Road - 3  | 4.43-6.43   | 0.5 mi South of Panhandle Lake               | Widen Pavement and Shoulder               | 900           |
| Trails Road - 3  | 3.35-4.6    | at Mason Lake Drive West                     | Vertical Alignment                        | 562.5         |
| Shelton-Matlock Road - 1   | 1.85-3.12   | at Power Lines                               | Realign&Regrade,Widen Shou.               | 571.5         |
| Shelton-Matlock Road - 6   | 14.22-15.56 | 0.93 mi West of Lake Nahwatzel Drive         | Widen Shoulder                            | 603           |
| Shelton-Matlock Road - 3   | 9.1-10.76   | 210 ft North of 90 Degree Curve Right        | Widen Shoulder                            | 747           |
| Shelton-Matlock Road - 4   | 11.89-14.22 | 0.36 mi East of Nahwatzel Beach Drive        | Widen Shoulder                            | 1,048.5       |
| Highland Road - 2  | 2.43-4.43   | 1.39 mi. Southwest of Highland Road "Y"      | Realign, Widen Shoulder                   | 900           |
| Highland Road - 4  | 6.43-7.93   | 1.5 mi. North of Cloquallum Road             | Widen Pavement and Shoulder               | 675           |
| Lynch Road   | 0-1.1       | at SR 101                                    | Widen Shoulder                            | 495           |
| New Road   | N/A         | outh Island Drive - Harstene Island North Ro | New Construction                          | 630           |
| New Road   | N/A         | SR 101 - Brockdale Road                      | New Construction                          | 744           |
| New Road   | N/A         | Johns Prairie Road - Mason Lake Road         | New Construction                          | 442           |
| New Road   | N/A         | Mason Lake Road - SR 3                       | New Construction                          | 744           |
| New Road   | N/A         | McReavy Road - Mason Lake Road               | New Construction                          | 1,664         |
|  |             |  | <b>Total (Final T.I.P. - 2006-2015) =</b> | <b>16,802</b> |

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Legend

Action   
 Information   
 Information Flow 

FIGURE 5-3

MASON COUNTY TRANSPORTATION ELEMENT  
 TRANSPORTATION REVIEW PROCESS  
 FOR NEW DEVELOPMENT

- Identification and definition of facilities and services to be monitored
- Establishment of level of service (LOS) standards
- Identification of when, in the development approval process, the concurrency test is applied
- Responsibilities of the applicant and Mason County defined for determining capacity

### ***Transportation Facilities to Meet Concurrency***

The arterial road system (as defined in Section VIII.3) that serves Mason County will be monitored to determine impact of new development on the established level of service (LOS) standards.

The County arterial system is anticipated to meet the traffic capacity standard of level of service (LOS) C through the 20-year planning period. The design standards for the arterial road system, which related to the physical features of the road (i.e., width of lanes, shoulders, etc.), will be addressed in the 20-year transportation improvement program (TIP). However, localized improvements may be required to ensure safe traffic operations of the new development facilities.

The State Highway System is an integral part of the County's arterial road system and will be monitored to determine conformance with the level of service (LOS) standards established by the County. Capacity and design standards will be applied to new development that impact the State Highway System and localized improvements may be required as part of the development approval. Although the State system generally will meet capacity standards, there are areas that will not meet minimum design standards. The County will work closely with WSDOT to encourage timely completion of needed highway improvements to bring the system up to the County's design standards.

### ***Level of Service Standards***

Level of service (LOS) standards apply to all new development projects that generate ten or more peak hour vehicle trips during an average weekday on any segment of an arterial road or intersection. If the proposed development generates less than ten vehicle trips per hour, minimum design standards will be met, as described below.

Level of service (LOS) will be determined based on the assumption that the existing arterial road system improvements that are included in the County's current six-year transportation improvement plan (TIP) are in place. Existing deficiencies that are corrected by the six-year

transportation improvement program (TIP) will not be considered a deficiency for the new improvement.

Two levels of service (LOS) standards will be the basis of compliance with concurrency requirements: traffic capacity and design standards.

### ***Traffic Capacity***

The arterial road system will meet the level of service (LOS) C. Capacity level of service (LOS) is defined in the *1994 Highway Capacity Manual* and is based on peak hour traffic during the most critical or highest volume times of the day.

### ***Design Standards***

The arterial road system will meet the geometric and road section standards for the arterial classification defined in Section VIII.4—Road Design Standards. Water and sanitary sewer services will be coordinated with other project requirements.

Minimum design standards for projects that generate more than twenty vehicle trips per hour shall include:

1. A minimum 26-foot-wide street section with sufficient traffic capacity to serve the existing and project-generated traffic. The road will connect from the proposed development to the closest fully constructed arterial street.
2. A paved pedestrian path that connects from the development to either an equivalent path or sidewalk on the Arterials serving the development where appropriate.

### ***Existing Deficiencies***

As per the analysis in Section VIII.2, Mason County does not presently have any existing level of service (LOS) or traffic capacity deficiencies on the road system. Furthermore, only one road segment in the County is expected to fall below level of service (LOS) D, albeit just barely, for the preferred land use alternative in the 20-year time frame. Suffice it to say that, Mason County has very few capacity concerns.

Growth has caused traffic volumes to increase to a point that several roads in the County have fallen below the design standards (Section VIII.4) needed to support those volumes. Some of those roads are County Arterials and are scheduled for reconstruction in the six-year transportation improvement program (TIP). These projects correct the majority of existing deficiencies on the system.

### ***Growth Deficiencies***

Growth may cause some localized capacity concerns not anticipated in the transportation model. Overall, the County road system will provide a level of service (LOS) C or better for the next 20 years.

New development may be required to mitigate impacts to the system if the proposed project will require a higher design standard to properly service the additional traffic.

Note: Mitigation will only be required if the affected road does not meet current standards.

### ***Traffic Impact Fees and Development Review***

Because of the absence of significant capacity concerns, the County sees no need for a traffic impact fee system at the present time. It has been shown that the County can financially support the needed improvements over the next 20 years.

The County may require a traffic analysis through the SEPA review process to determine whether significant, localized impacts could be expected from a new development. Any need for mitigation from the developer will be dealt with at that time (i.e., access issues, impact to design standard thresholds, etc.). If it is found that a development will cause significant impacts to the surrounding road system which cannot be mitigated, the development may be denied.

### ***Arterial Road System Compliance***

The arterial road system and project funding that has been prepared for the County transportation system will provide facilities to meet capacity and design standards. The transportation improvement program has been based on prioritization of the projects and will be accomplished based on the anticipated financial resources. If development occurs that is compatible with the improvement program, there may be localized development improvements required to the arterial system. At specific locations, the concentration of traffic by new development may cause a need for road or intersection improvements to provide adequate capacity or operational feature.



***Responsibilities of Applicant***

The project applicant will provide the following information for concurrency review:

1. Traffic Impacts to be Performed by a Qualified Traffic Engineer
2. Recommended off-site traffic improvements
3. Development site traffic plan to include street sections, traffic control plan, and signing

The traffic impact studies will be prepared in accordance with the County's adopted requirements.