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 identifies the proposed distribution of land uses and addresses 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 addresses rural lands in the county that are not specially designated for urban growth or natural resource use. Because of the interconnection of the two elements, 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 2025 to meet projected growth, 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 categories is described below.

Urban Growth Areas
An urban growth area is an area where more intensive development is planned, along with the infrastructure needed to service this growth. All cities, including the City of Shelton, are defined as urban growth areas. In addition, other unincorporated areas may be designated for urban growth when additional land is needed to accommodate the expected population increases and job growth. 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 communities of Allyn and Belfair. These communities currently support a mix of residential, commercial, industrial, civic, and public uses.

Within Shelton, Allyn 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 may 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:

Limited Areas of More Intensive Rural Development (LAMIRD)
- Rural Activity Centers (RAC)
- Hamlets
- Rural Commercial/Industrial Areas
- Rural Tourist/Recreational Areas

Fully Contained Community (FCC)

Master Planned Resort (MPR)

Rural Area (RA)

The Rural Activity Centers (RACs) include Hoodsport, Taylor Town and Union. Hamlets include Bayshore, Dayton, Deer Creek, Eldon, Grapeview, Lake Cushman, Lilliwaup, Matlock, Potlatch, Spencer Lake, and Tahuya. The Rural Area is divided into several different areas shown on the Future Land Use Map, page 4. These areas reflect different allowed residential densities of one dwelling per 2.5 acres, one dwelling per five acres, one dwelling per ten acres and one dwelling per twenty acres. Also among the rural lands are Rural Tourist/Recreational Areas and Commercial/Industrial Areas that are also mapped.

In addition, the ability to designate new fully contained communities has been created in this plan. The fully contained communities are new urban growth areas that can be designated through a comprehensive plan amendment on land that was previously designated as rural land. Urban population growth may be allocated to the new communities when they are created. Criteria are established in the plan for evaluating proposals for new fully contained communities when such changes are considered.

The rural lands are described in more detail in the rural lands section of the Land Use chapter, section IV-8. Policies for rural lands are located in the Planning Policies chapter, section III-3.

Resource Lands
Resource Lands are those areas in the county that have been identified as especially important for the long-term commercial production of timber and agricultural goods or for the extraction of mineral resources. As such, they receive special protection to discourage their conversion to other uses. Mason County has designated and protected three types of resource lands. These are Long-Term Commercial Forest Lands, Agricultural Resource Lands, and Mineral Resource Lands of long-term commercial significance. The county also designated forest Inholding Lands that are subject to special restrictions to protect adjacent Long-Term Commercial Forest Lands. In addition to designating these resource lands, the county has adopted protections for agricultural and forest land uses elsewhere in the county.

More information on the resource lands can be found in the Land Use chapter, section IV-5. Policies regarding these lands are in the Planning Policies chapter, section III-4.
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. Drainage patterns determine the boundaries of watersheds.

Watershed management plans or action plans have been adopted for three watersheds: Totten-Little Skookum, Oakland Bay, and Lower Hood Canal. Sub-area plans were developed for North Mason County (the Lower Hood Canal), South-East Mason County (the Totten-Little Skookum), and Harstine Island (part of the Totten-Little Skookum). The watershed plans were developed in cooperation with adjoining counties that shared the watershed, the Indian Tribes, state agencies and the public, under the guidance of the Puget Sound Water Quality Authority. Information from these plans and goals and policies developed for them have been used in developing the Comprehensive Plan, its policies, and its implementing regulations.

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 landowners 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 Mason County Comprehensive Plan was developed based on both historical trends and future projections of Mason County’s population. Using this information, future development demands and appropriate ways to manage land use in the county were developed. The projections used were prepared by the state Office of Financial Management in January 2002. It was estimated in the Office of Financial Management Medium Series projection that the total population for Mason County would be 64,007 by the year 2015 and 75,088 by 2025. This would mean an increase in the total population of the county of 21,299 people, or 28.4% over the 20-year period from 2005 to 2025. (Please see TABLE IV.2-5 for population projections.) While an increase in population this large sounds remarkable, the historic population growth in Mason County in the 20 years from 1970 to 1990 was 83%. In the last thirteen years, from 1990 to 2003, the population grew an additional 31%.

Population Growth: Historical Trends
In 1960 Mason County’s population was 16,251, only slightly more than one third of the County’s population in 2000. During the decade of 1960 to 1970, the statewide population grew by 19.6 percent, or 1.8 percent annually. At the same time, Mason County’s population grew by 22.3% (an average rate of two percent annually) to reach a 1970 population of 20,918 (see TABLES IV.2-1 and IV.2-2).

<table>
<thead>
<tr>
<th>TABLE IV.2-1: Population by Decade - Washington State and Mason County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
</tr>
<tr>
<td>Washington State</td>
</tr>
<tr>
<td>Mason County</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>TABLE IV.2-2. Population Growth by Decade - Washington State and Mason County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Change</td>
</tr>
<tr>
<td>50-60</td>
</tr>
<tr>
<td>Washington State</td>
</tr>
<tr>
<td>Mason County</td>
</tr>
</tbody>
</table>

The 1960's marked the start of a period of rapid County-wide 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.

Between 1990 and 2000, the county’s growth rate took a slight upward turn with a 28.9% population increase. In addition, the number of people in Mason County increased by more than 11,000 in the past decade, the highest increase in more than 50 years.

Population Growth: 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. In 1993, the previously mentioned counties accounted for only 35 percent of the State’s growth. However, by 2004, these same counties accounted for more than 52% 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 the 1990s, Mason County's population grew 28.9 percent (total of 11,064) from 38,341 to 49,405.
This represents an increase average of 2.6 percent annually in that period, about 30 percent higher than the state rate. By 2000, Mason County ranked eleventh in the State in population growth rate.

**Population Growth: Projections for Future Growth**

The Comprehensive Plan was based on the Medium Series population projection prepared by the state Office of Financial Management (OFM). The OFM prepared a reasonable range of population projections, with a Middle Series projection as that office’s estimate of the most likely outcome. The decision to use the medium series projection for planning purposes was based on a recent slowing of growth rates in the county that trends toward the medium series. Growth in Mason County is still expected to be strong based on the assumptions given below:

1. 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 have a limited impact on the County’s growth trends, and Mason County’s population will continue to grow at a rate faster than the statewide average.

2. 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.

3. Given that Mason County is a popular destination for retirees, the County is expected to experience a higher rate of population growth as baby-boomers continue to retire, and a higher conversion rate of seasonal residence to year round occupancy.

<table>
<thead>
<tr>
<th>TABLE IV.2-6. Countywide Growth by Incorporated/Unincorporated Status 2001-2004</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population</strong></td>
</tr>
<tr>
<td>Incorporated/Shelton</td>
</tr>
<tr>
<td>Unincorporated/Allyn*</td>
</tr>
<tr>
<td>Belfair*</td>
</tr>
<tr>
<td>Shelton*</td>
</tr>
</tbody>
</table>

*Estimated populations based on 2004 Assessor’s data for residential parcels located in the UGA’s.

Total number of residential parcels (with an improved value of more than $20,000) was multiplied by an estimated 2.5 persons per household.

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. This table illustrates that the City of Shelton had been growing at a much slower rate than the unincorporated areas of the County, which were experiencing moderate growth rates. Each of these growth rates increased in 2004 and the city of Shelton now has a more rapid growth rate than the unincorporated areas of the County.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Annual Rate of Population Increase</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Incorporated (City of Shelton)</td>
</tr>
<tr>
<td>Unincorporated</td>
</tr>
<tr>
<td>County</td>
</tr>
</tbody>
</table>


**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.

**Factors Affecting Growth: 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 were 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 2000, net migration accounted for 93.2 percent of all growth in the county.
TABLE IV.2-9: Components of Change - Washington State and Mason County

<table>
<thead>
<tr>
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<tbody>
<tr>
<td></td>
<td>Natural</td>
<td>Net</td>
<td>Natural</td>
<td>Net</td>
<td>Natural</td>
</tr>
<tr>
<td></td>
<td>Increase</td>
<td>Migratio</td>
<td>Increase</td>
<td>Migratio</td>
<td>Increase</td>
</tr>
<tr>
<td>Washington State</td>
<td>384,069</td>
<td>90,182</td>
<td>305,528</td>
<td>254,502</td>
<td>245,504</td>
</tr>
<tr>
<td>Percent of</td>
<td>81</td>
<td>19</td>
<td>54.6</td>
<td>45.4</td>
<td>34.1</td>
</tr>
<tr>
<td>Total Change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mason County</td>
<td>2,179</td>
<td>950</td>
<td>1,239</td>
<td>3,428</td>
<td>1,292</td>
</tr>
<tr>
<td>Percent of</td>
<td>177.3</td>
<td>-77.3</td>
<td>26.5</td>
<td>73.5</td>
<td>12.6</td>
</tr>
<tr>
<td>Total Change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


TABLE IV.2-10 provides greater insight into Mason County’s population growth.\(^1\) 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. 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, between 1990 and 1995, natural increase in the county was higher than it has been over the past ten years. This table also reflects that more than 90% of Mason County’s growth since 1990 has been due to net migration - people moving here as opposed to being born here.

TABLE IV.2-10: Components of Change 1990-2005

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Migration</td>
<td>6,024</td>
<td>4,256</td>
<td>4,110</td>
</tr>
<tr>
<td>From Out of State/Country</td>
<td>4,037</td>
<td>4,033</td>
<td>1,971</td>
</tr>
<tr>
<td>Natural Increase</td>
<td>537</td>
<td>247</td>
<td>274</td>
</tr>
<tr>
<td>Total Growth</td>
<td>6,561</td>
<td>4,503</td>
<td>4,384</td>
</tr>
<tr>
<td>Percent Net Migration</td>
<td>91.82</td>
<td>94.51</td>
<td>93.75</td>
</tr>
<tr>
<td>Percent Natural Increase</td>
<td>8.18</td>
<td>5.49</td>
<td>6.25</td>
</tr>
</tbody>
</table>

Source: Washington State Office of Financial Management and Washington State Department of Licensing. Total growth represents net migration plus natural increase. The numbers reflected in “From out of

\(^1\) Minor discrepancies between data sets exist due to variations in sources and collections dates. These discrepancies are not substantial in nature and do not affect the context of this or any other section of this element.
Factors Affecting Growth: 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 a 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 to 35 percent of County utilities customers are seasonal. Using this as an indication of seasonal population, the County's population increases accordingly during the summer months. This seasonal population tends to be concentrated along the County's waterfront. Thus, in 2004, the population increased from 50,800 people in the off season, to approximately 66,040 during the height of the season.

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 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 has three Urban Growth Areas (UGAs), three Rural Activity Centers, and several Hamlets. The UGAs include the City of Shelton and the communities of Allyn and Belfair. The Rural Activity Centers include Union, Hoodsport and Taylor Town. The Hamlets include Bayshore, Dayton, Deer Creek, Grapeview, Lilliwaup, Matlock, Potlatch, Spencer Lake, and Tahuya.

In addition to those districts designated in the Comprehensive Plan, the county has also adopted the approach created in the Growth Management Act of reserving a share of projected population growth for future urban growth in Fully Contained Communities. These Fully Contained Communities are not designated and will not be allowed to develop until after they are approved by a comprehensive plan amendment. When specific proposals are identified and approved, population from the Fully Contained Community reserve will be allocated to that proposal. This approach is discussed in greater detail in other sections of the Comprehensive Plan.

The county has estimated how the future growth in population will be distributed among the different districts created in the Comprehensive Plan. 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 2025.
### TABLE IV.2-15: Area Growth Projections for Mason County 2005 - 2025

<table>
<thead>
<tr>
<th>Area</th>
<th>Share of Growth</th>
<th>Additional Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shelton Urban Growth Area</td>
<td>33%</td>
<td>10,500</td>
</tr>
<tr>
<td>Belfair Urban Growth Area</td>
<td>18%</td>
<td>5,600</td>
</tr>
<tr>
<td>Allyn Urban Growth Area</td>
<td>7%</td>
<td>2,250</td>
</tr>
<tr>
<td>Fully Contained Community Reserve</td>
<td>3%</td>
<td>1,000</td>
</tr>
<tr>
<td>RAC - LAMIRDS</td>
<td>1.5%</td>
<td>469</td>
</tr>
<tr>
<td>Rural Lands</td>
<td>37%</td>
<td>11,480</td>
</tr>
<tr>
<td>Total County</td>
<td>100%</td>
<td>31,299</td>
</tr>
</tbody>
</table>

**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 25% 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 Urban Growth Area level. Data presented in this section was compiled from the Mason County Tax Assessor’s database.

**Definitions of Land Use Categories**

**Residential**

This category includes properties that 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 that have a building (other than a dwelling unit) with 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, tidelands, fisheries, and aquaculture related land classes.

**Forestry**

This category includes all properties in open space forest 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 620,067 acres of land, about 972 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 3,900 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 56.8 percent of the land within Mason County.

The Mason County Assessor maintains land use data under many narrowly defined land uses. For planning purposes, these uses were grouped into eleven broad categories. Those categories include Residential, 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 199,590 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.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Total Acreage</th>
<th>Percent of County Total</th>
<th>Percent of Total Acreage</th>
<th>Improved</th>
<th>Unimproved</th>
<th>Partially Improved</th>
<th>Timber</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>33,137</td>
<td>5.34%</td>
<td>64.74%</td>
<td>0.79%</td>
<td>34.44%</td>
<td>0.03%</td>
<td></td>
</tr>
<tr>
<td>Vacant</td>
<td>52,656</td>
<td>8.49%</td>
<td>15.33%</td>
<td>73.07%</td>
<td>11.20%</td>
<td>0.4%</td>
<td></td>
</tr>
<tr>
<td>Commercial*</td>
<td>3,538</td>
<td>0.57%</td>
<td>35.65%</td>
<td>19.41%</td>
<td>43.92%</td>
<td>0.56%</td>
<td></td>
</tr>
<tr>
<td>Industrial*</td>
<td>544</td>
<td>0.09%</td>
<td>89.28%</td>
<td>1.24%</td>
<td>9.52%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Agri/Aquaculture</td>
<td>9,845</td>
<td>1.59%</td>
<td>86.94%</td>
<td>5.73%</td>
<td>7.32%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Forestry</td>
<td>139,556</td>
<td>22.51%</td>
<td>0.03%</td>
<td>6.17%</td>
<td>7.61%</td>
<td>87.63%</td>
<td></td>
</tr>
<tr>
<td>LTCF</td>
<td>199,590</td>
<td>32.19%</td>
<td>0.36%</td>
<td>23.29%</td>
<td>0%</td>
<td>76.35%</td>
<td></td>
</tr>
<tr>
<td>Mineral Extraction</td>
<td>152</td>
<td>0.02%</td>
<td>63.79%</td>
<td>12.76%</td>
<td>23.68%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>2,368</td>
<td>0.38%</td>
<td>88.38%</td>
<td>11.23%</td>
<td>0.4%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>2,079</td>
<td>0.33%</td>
<td>10.97%</td>
<td>84.84%</td>
<td>4.21%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Tax Exempt</td>
<td>10,429</td>
<td>1.68%</td>
<td>28.81%</td>
<td>67.67%</td>
<td>3.49%</td>
<td>0.03%</td>
<td></td>
</tr>
<tr>
<td>Olympic National Forest</td>
<td>154,086</td>
<td>24.85%</td>
<td>10.14%</td>
<td>22.96%</td>
<td>6.78%</td>
<td>60.57%</td>
<td></td>
</tr>
<tr>
<td>City of Shelton</td>
<td>3,900</td>
<td>0.63%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tribal Lands</td>
<td>8,187</td>
<td>1.32%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>620,067</strong></td>
<td><strong>100%</strong></td>
<td><strong>10.14%</strong></td>
<td><strong>22.96%</strong></td>
<td><strong>6.78%</strong></td>
<td><strong>60.57%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Mason County Assessor’s Office, 2004, and Mason County Department of Community Development

*Assessor’s data only reflects primary use of land and does not identify secondary uses like home-based businesses.

2 Parcels are classified by the Assessor’s office as improved, unimproved, timber, or a combination of all three. Partially improved parcels contain improved acres as well as unimproved and/or timber acres.
TABLE IV.3-2 shows the number of parcels and acreage that are improved, unimproved, partially improved, or timbered within each land use category.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Improved Parcels</th>
<th>Improved Acres</th>
<th>Unimproved Parcels</th>
<th>Unimproved Acres</th>
<th>Partially Improved Acres</th>
<th>Timber Parcels</th>
<th>Timber Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>19,564</td>
<td>21,454</td>
<td>100</td>
<td>262</td>
<td>8,091</td>
<td>3,288</td>
<td>33</td>
</tr>
<tr>
<td>Vacant</td>
<td>4,400</td>
<td>8,072</td>
<td>16,297</td>
<td>38,478</td>
<td>1,608</td>
<td>4,252</td>
<td>36</td>
</tr>
<tr>
<td>Commercial</td>
<td>509</td>
<td>1,277</td>
<td>25</td>
<td>686</td>
<td>325</td>
<td>1,228</td>
<td>1</td>
</tr>
<tr>
<td>Industrial</td>
<td>40</td>
<td>486</td>
<td>2</td>
<td>7</td>
<td>20</td>
<td>31</td>
<td>0</td>
</tr>
<tr>
<td>Agriculture</td>
<td>617</td>
<td>8,560</td>
<td>244</td>
<td>564</td>
<td>405</td>
<td>102</td>
<td>213</td>
</tr>
<tr>
<td>Forestry</td>
<td>3</td>
<td>39</td>
<td>245</td>
<td>8,605</td>
<td>1,883</td>
<td>357</td>
<td>8,382</td>
</tr>
<tr>
<td>LTCF</td>
<td>12</td>
<td>710</td>
<td>174</td>
<td>46,507</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mineral Extraction</td>
<td>6</td>
<td>97</td>
<td>2</td>
<td>19</td>
<td>6</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>Transportation</td>
<td>417</td>
<td>2,093</td>
<td>61</td>
<td>266</td>
<td>4</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Utilities</td>
<td>204</td>
<td>228</td>
<td>69</td>
<td>1,764</td>
<td>12</td>
<td>73</td>
<td>3</td>
</tr>
<tr>
<td>Tax Exempt</td>
<td>625</td>
<td>3,005</td>
<td>247</td>
<td>7,057</td>
<td>151</td>
<td>212</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>26,397</td>
<td>46,021</td>
<td>17,466</td>
<td>104,215</td>
<td>12,505</td>
<td>9,578</td>
<td>8,669</td>
</tr>
</tbody>
</table>

Source: Mason County Assessor’s Office, 2004, and Mason County Department of Community Development

Total acreage for Allyn may vary from other sources due to different calculation methods. This total was obtained using assessor parcel data and may not accurately reflect acreage totals obtained from other sources or by other methods.

Urban and Rural Land Use Patterns
Mason County includes three Urban Growth Areas outside the City of Shelton. These include the Belfair, Allyn, and Shelton Urban Growth Areas (UGA). The Belfair UGA is located in the northeastern corner of Mason County and covers approximately 2,200 acres. Just south of Belfair along the western shoreline of Case Inlet of the Allyn UGA consisting of approximately 1,400 acres. In the southeastern region of Mason County is the Shelton UGA, encompassing 5,500 acres that surround the Shelton city limits. The remaining rural portions of the County, excluding the UGA’s and the city of Shelton, is approximately 610,900 acres.

Mason County has chosen to undertake its GMA planning efforts based on information for the UGA and the County rural areas. The following paragraphs provide a detailed breakdown of land uses by urban and rural areas. To locate Mason County’s UGA’s, see FIGURE IV.3-1.
Mason County
Urban Growth Areas

Legend
- Allyn UGA
- Belfair UGA
- Shelton UGA

Mason County Roads
Road Ownership
- County Roads
- State Highways
- US Highways
- Mason County Boundary

Figure IV.3-1
**Belfair Urban Growth Area**

Unincorporated Belfair is the primary commercial center in the Northeast corner of North Mason County. Mason County recently identified Belfair as an Urban Growth Area (UGA) of approximately 2,200 acres. The current population within the UGA is approximately 900. However, Belfair serves residents within a larger rural geographic area with a population of approximately 23,000 as well as tourists visiting the Hood Canal and unique Theler Wetlands.

While new development is on the rise in Belfair, the town is in the midst of trying to develop a particular character or ‘theme’ based around the Theler Wetlands as the town’s anchor. Belfair is also home to over 150 businesses located mostly along State Route 3. With the anticipated addition of pedestrian facilities, the continued development of a consistent town theme, an improved local economy, and the completion of the Pacific Northwest Salmon Center, Belfair will be served as a destination well into the foreseeable future.

Forestry represents the primary land use within the Belfair UGA encompassing more than 877 acres, and accounting for 40% of the area’s total land.

TABLE IV.3-4 details the distribution of land uses within the Belfair UGA based on the Assessor’s database.

<table>
<thead>
<tr>
<th>Total Acres</th>
<th>Improved</th>
<th>Unimproved</th>
<th>Timber</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>375</td>
<td>27</td>
<td>1</td>
<td>403</td>
</tr>
<tr>
<td>Vacant</td>
<td>183</td>
<td>300</td>
<td>0</td>
<td>483</td>
</tr>
<tr>
<td>Commercial</td>
<td>166</td>
<td>17</td>
<td>0</td>
<td>183</td>
</tr>
<tr>
<td>Industrial</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Agri/Aquaculture</td>
<td>25</td>
<td>7</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>Forestry</td>
<td>41</td>
<td>0</td>
<td>836</td>
<td>877</td>
</tr>
<tr>
<td>Mineral Extraction</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Transportation</td>
<td>6</td>
<td>46</td>
<td>0</td>
<td>52</td>
</tr>
<tr>
<td>Utilities</td>
<td>14</td>
<td>41</td>
<td>2</td>
<td>57</td>
</tr>
<tr>
<td>Tax Exempt</td>
<td>55</td>
<td>1</td>
<td>0</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td>868</td>
<td>451</td>
<td>839</td>
<td>2,158</td>
</tr>
</tbody>
</table>

Source: Mason County Assessor’s Office, 2004, and Mason County Department of Community Development
TABLE IV3.4A summarizes the land supply and population data for the Belfair UGA.

### Table IV3-4A Land Supply Summary

<table>
<thead>
<tr>
<th>Zone</th>
<th>Gross Acre Available</th>
<th>Percent Unsuitable</th>
<th>Net Suitable Acres</th>
<th>Less 20% for roads</th>
<th>Less 25% for Market</th>
<th>Times Dwelling Unit/Acre</th>
<th>Times 2.5 persons/unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Term Agriculture (LTA)</td>
<td>9</td>
<td>0%</td>
<td>9</td>
<td>7.2</td>
<td>5.4</td>
<td>16.2</td>
<td>41</td>
</tr>
<tr>
<td>Festival Retail (FR)</td>
<td>0</td>
<td>56%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>General Commercial (GC)</td>
<td>90</td>
<td>56%</td>
<td>39.6</td>
<td>31.68</td>
<td>23.76</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mixed Use (MU)</td>
<td>44</td>
<td>56%</td>
<td>19.36</td>
<td>15.488</td>
<td>11.616</td>
<td>116.16</td>
<td>290</td>
</tr>
<tr>
<td>Business Industrial (B-I)</td>
<td>78</td>
<td>56%</td>
<td>34.32</td>
<td>27.456</td>
<td>20.0592</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Multi Family Residential (R-10)</td>
<td>71</td>
<td>32%</td>
<td>48.28</td>
<td>38.624</td>
<td>28.968</td>
<td>289.68</td>
<td>724</td>
</tr>
<tr>
<td>Med. Density Residential (R-5)</td>
<td>674</td>
<td>24%</td>
<td>512.24</td>
<td>409.792</td>
<td>307.344</td>
<td>1536.72</td>
<td>3842</td>
</tr>
<tr>
<td>Single Family Residential (R-3)</td>
<td>302</td>
<td>47%</td>
<td>160.06</td>
<td>128.048</td>
<td>96.036</td>
<td>288.108</td>
<td>720</td>
</tr>
<tr>
<td>GC-BI</td>
<td>58</td>
<td>56%</td>
<td>25.52</td>
<td>20.416</td>
<td>15.312</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Population</strong></td>
<td><strong>1326</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>5617</strong></td>
</tr>
</tbody>
</table>

### Allyn Urban Growth Area

Allyn UGA lies along the upper, western shoreline of the Case Inlet in eastern Mason County. Lower Allyn makes up the original community first platted in 1889. It has a mix of residences and commercial business covering 385 acres. Lakeland Village, a planned residential development, makes up the largest land area and population base.

State Route 3 connects Allyn to several major regional cities. Shelton is 18 ½ miles to the south and Bremerton, in Kitsap County, is 16 miles to the north. The Belfair Urban Growth Area is just 4 ½ miles north.
TABLE IV.3-5 details the distribution of land uses within the Allyn UGA based on the Assessor’s database.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Total Acres</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Improved</td>
<td>Unimproved</td>
<td>Timber</td>
<td>Total</td>
</tr>
<tr>
<td>Residential</td>
<td>461</td>
<td>18</td>
<td>0</td>
<td>479</td>
</tr>
<tr>
<td>Vacant</td>
<td>71</td>
<td>298</td>
<td>0</td>
<td>369</td>
</tr>
<tr>
<td>Commercial</td>
<td>84</td>
<td>63</td>
<td>0</td>
<td>167</td>
</tr>
<tr>
<td>Industrial</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Agri/Aquiculture</td>
<td>153</td>
<td>0</td>
<td>0</td>
<td>153</td>
</tr>
<tr>
<td>Forestry</td>
<td>1</td>
<td>17</td>
<td>119</td>
<td>137</td>
</tr>
<tr>
<td>Mineral Extraction</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Transportation</td>
<td>47</td>
<td>19</td>
<td>0</td>
<td>66</td>
</tr>
<tr>
<td>Utilities</td>
<td>25</td>
<td>4</td>
<td>0</td>
<td>29</td>
</tr>
<tr>
<td>Tax Exempt</td>
<td>14</td>
<td>2</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>857</strong></td>
<td><strong>421</strong></td>
<td><strong>119</strong></td>
<td><strong>1,417</strong></td>
</tr>
</tbody>
</table>

Source: Mason County Assessor’s Office, 2004; Mason County Department of Community Development.
TABLE IV.3-5A summarizes the land supply and population data for the Allyn UGA.

Table IV3-5A Land Use Analysis for Allyn

<table>
<thead>
<tr>
<th>Zone</th>
<th>Available Acres</th>
<th>Acres less 20% Right of Way</th>
<th>Acres less 25% Market Factor</th>
<th>Dwelling Units (DU)</th>
<th>DU less 20% right of way</th>
<th>DU less 25% Market Factor</th>
<th>Population Total*</th>
<th>Population Total**</th>
<th>Total 2002 to 2005 Adjust**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential 1 (R-1)</td>
<td>60</td>
<td>48</td>
<td>36</td>
<td>213</td>
<td>170</td>
<td>128</td>
<td>320</td>
<td>320</td>
<td></td>
</tr>
<tr>
<td>Residential 1 Platted (R-1P)</td>
<td>179</td>
<td>143</td>
<td>107</td>
<td>371</td>
<td>297</td>
<td>223</td>
<td>557</td>
<td>696</td>
<td></td>
</tr>
<tr>
<td>Residential 2 R-2)</td>
<td>13</td>
<td>10</td>
<td>8</td>
<td>119</td>
<td>95</td>
<td>71</td>
<td>179</td>
<td>179</td>
<td></td>
</tr>
<tr>
<td>Residential 3 (R-3)</td>
<td>21</td>
<td>17</td>
<td>12</td>
<td>382</td>
<td>306</td>
<td>229</td>
<td>573</td>
<td>573</td>
<td></td>
</tr>
<tr>
<td>Village Commercial (VC)</td>
<td>23</td>
<td>18</td>
<td>14</td>
<td>95</td>
<td>76</td>
<td>57</td>
<td>143</td>
<td>143</td>
<td></td>
</tr>
<tr>
<td>Village Residential</td>
<td>14</td>
<td>11</td>
<td>8</td>
<td>120</td>
<td>96</td>
<td>72</td>
<td>180</td>
<td>180</td>
<td></td>
</tr>
<tr>
<td>Residential 1 Recreational (R-1R)</td>
<td>140</td>
<td>112</td>
<td>84</td>
<td>469</td>
<td>375</td>
<td>281</td>
<td>704</td>
<td>704</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>450</td>
<td>360</td>
<td>270</td>
<td>1789</td>
<td>1415</td>
<td>1061</td>
<td>2654</td>
<td>2793</td>
<td>2243</td>
</tr>
</tbody>
</table>

*Total capacity for allocation of population (2002 parcel data)
**Total capacity for allocation of population with no Right of Way adjustment for Lakeland Village small lots.

Shelton Urban Growth Area

The Shelton UGA includes 5,500 acres and contains parcels that currently bisect its boundary. The existing land use patterns within the Shelton UGA can generally be described as containing a mix of land uses including residential, industrial, recreational areas, resource lands and undeveloped areas. Existing residential development is the predominant land use in the UGA, encompassing approximately 32% of the total land area. Resource lands equal approximately 25% of the total area, transportation related uses account for 12%, and other uses such as manufacturing, trade and services, and cultural/entertainment/recreation represent 15% of the land uses. Undeveloped land account for approximately 16% of the land use in the Shelton UGA.
TABLE IV.3-6 details the distribution of land uses within the Shelton UGA based on the Assessor’s database.

<table>
<thead>
<tr>
<th>TABLE IV.3-6: Shelton UGA Land Use</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Acres</strong></td>
</tr>
<tr>
<td>Residential</td>
</tr>
<tr>
<td>Vacant</td>
</tr>
<tr>
<td>Commercial</td>
</tr>
<tr>
<td>Industrial</td>
</tr>
<tr>
<td>Aqui/Agriculture</td>
</tr>
<tr>
<td>Forestry</td>
</tr>
<tr>
<td>Mineral Extraction</td>
</tr>
<tr>
<td>Transportation</td>
</tr>
<tr>
<td>Utilities</td>
</tr>
<tr>
<td>Tax Exempt</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Table IV.3-6A summarizes the land supply and population data for the Shelton UGA.

<table>
<thead>
<tr>
<th>Table IV.3-6A Population Projection Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Commercial/Industrial Designated Lands</strong></td>
</tr>
<tr>
<td>Total Vacant Lands (VL)</td>
</tr>
<tr>
<td>Redevelopable/Underdeveloped Lands (RUL)¹</td>
</tr>
<tr>
<td>Critical Areas Discount Factor²</td>
</tr>
<tr>
<td>VL</td>
</tr>
<tr>
<td>RUL</td>
</tr>
<tr>
<td>Roads/Public Lands³</td>
</tr>
<tr>
<td>VL</td>
</tr>
<tr>
<td>RUL</td>
</tr>
<tr>
<td>Market Factor⁴</td>
</tr>
<tr>
<td>VL</td>
</tr>
<tr>
<td>RUL</td>
</tr>
<tr>
<td>Total Developable Area</td>
</tr>
<tr>
<td>Estimated Number of Residential Units</td>
</tr>
<tr>
<td>Estimated Population (2.5 persons per household)</td>
</tr>
</tbody>
</table>

1 All parcels where improvement value/land value <0.5
2 2% of land in UGA associated with creeks, rivers, wetlands, lakes, and geologically hazardous areas
3 25% Discount factor
4 25% for vacant lands; 50% for redevelopable lands
Mason County Rural Areas

The rural areas of Mason County include all those lands not within the City of Shelton or the Allyn, Belfair, and Shelton UGAs. TABLE IV.3-7 details the distribution of land uses within Mason County’s rural areas based on the Assessor’s data of December 2004.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Total Acres</th>
<th>Improved</th>
<th>Unimproved</th>
<th>Timber</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>31,110</td>
<td>27,700</td>
<td>3,410</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Vacant</td>
<td>50,969</td>
<td>9,200</td>
<td>41,524</td>
<td>245</td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>2,965</td>
<td>1,144</td>
<td>1,801</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Industrial</td>
<td>140</td>
<td>121</td>
<td>19</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Agri/Aquaculture</td>
<td>9,376</td>
<td>8,716</td>
<td>660</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Forestry</td>
<td>139,147</td>
<td>1,870</td>
<td>8,931</td>
<td>128,346</td>
<td></td>
</tr>
<tr>
<td>Long Term Commercial</td>
<td>199,590</td>
<td>710</td>
<td>46,507</td>
<td>152,373</td>
<td></td>
</tr>
<tr>
<td>Forest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mineral Extraction</td>
<td>133</td>
<td>103</td>
<td>30</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>1,585</td>
<td>1,385</td>
<td>200</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>1,935</td>
<td>161</td>
<td>1,773</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Tax Exempt</td>
<td>10,004</td>
<td>2,893</td>
<td>7,107</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>446,954</td>
<td>54,003</td>
<td>71,962</td>
<td>280,989</td>
<td></td>
</tr>
</tbody>
</table>

Source: Mason County Assessor’s Office, 2004, and Mason County Department of Community Development.

Land Capacity (Build Out) Analysis

Introduction

An analysis of land use in the rural areas was conducted using individual parcel data for various rural districts and zones. These included: Hoodsport, Union, Taylor Town, the Hamlets, Independent Commercial/Industrial Areas, Long Term Commercial Forest Lands, Agricultural Resource Lands, Inholding Lands, and the remaining county rural land not falling into any of these classifications. Parcel data was obtained for the County from the Mason County’s Assessor’s office in December of 2004. From this complete list of County parcels, parcel data for the Allyn, Belfair, and Shelton UGAs were separated out and analyzed by different methods and discussed other sections of this Chapter. The remaining County parcels were broken down into the above districts and zones. Once divided, each category was individually analyzed to determine the approximate population potential should each parcel be developed to its fullest residential capacity. This was done in the following manner.

Methodology

Parcel data was first organized by current land use in accordance with the codes as provided by the Assessor’s office. The Assessor’s office uses several thousand land use codes to describe the specific land use of each parcel. In order to determine the number of parcels and amount of acreage in each area that is currently devoted to various land uses, land use codes were
grouped into broader land use categories (i.e. Residential, Commercial, Transportation, etc.)
Once divided by existing land use, the zoning classification of each parcel was determined.
This illustrated what the land was currently being used for and what its potential residential
use was according to its zoning district. For example, a parcel with an existing land use code
of vacant located within a Rural Commercial zoning district has a one dwelling unit per acre
potential, according to the Development Regulations for that zone. Therefore, this vacant
parcel could have at least one dwelling unit constructed on it thereby adding at least 2.54
new residents per dwelling unit to the area. By analyzing the existing land use of each parcel
with respect to its zoning district, it is possible to estimate the number of additional residents
to the rural areas should a each parcel be developed to its full residential potential. This type
of calculation and analysis was conducted for each of the districts and zones mentioned above
and are summarized in Table IV.3-7A.

### TABLE IV.3-7A - Rural Land Capacity Summary

<table>
<thead>
<tr>
<th>Land Use</th>
<th># Of Parcels</th>
<th># of Existing Dwelling Units (DU)</th>
<th># of Additional DU*</th>
<th>Total DU (existing DU + additional DU)¹</th>
<th># of Additional Residents (2.5 people per DU)</th>
<th>Total Estimated Population (2.5 people x total DU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential*</td>
<td>18,809</td>
<td>18,787</td>
<td>543</td>
<td>19,340</td>
<td>1,358</td>
<td>48,350</td>
</tr>
<tr>
<td>Industrial</td>
<td>20</td>
<td>0</td>
<td>7</td>
<td>7</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Transportation</td>
<td>391</td>
<td>0</td>
<td>460</td>
<td>460</td>
<td>1,151</td>
<td>1,151</td>
</tr>
<tr>
<td>Utilities</td>
<td>219</td>
<td>0</td>
<td>358</td>
<td>358</td>
<td>895</td>
<td>895</td>
</tr>
<tr>
<td>Commercial</td>
<td>356</td>
<td>0</td>
<td>481</td>
<td>481</td>
<td>1,203</td>
<td>1,203</td>
</tr>
<tr>
<td>Aqua/Agriculture</td>
<td>905</td>
<td>0</td>
<td>2,523</td>
<td>2,523</td>
<td>6,308</td>
<td>6,308</td>
</tr>
<tr>
<td>Mineral Extraction</td>
<td>8</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Forestry</td>
<td>2,395</td>
<td>0</td>
<td>9,964</td>
<td>9,964</td>
<td>24,910</td>
<td>24,910</td>
</tr>
<tr>
<td>Vacant</td>
<td>18,932</td>
<td>0</td>
<td>20,789</td>
<td>20,789</td>
<td>51,973</td>
<td>51,973</td>
</tr>
<tr>
<td>Totals</td>
<td>42,035</td>
<td>18,797</td>
<td>35,128</td>
<td>53,925</td>
<td>87,823</td>
<td>134,815</td>
</tr>
<tr>
<td>Totals w/Clustering**</td>
<td>37,176</td>
<td>55,973</td>
<td>92,943</td>
<td>139,935</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Parcels qualifying as residential have been given a residential land use code by the Assessor’s office and have an improved value of more than $20,000 according to the Assessor’s data dated December 2004. Parcels with a residential land use code but an improved value of less than $20,000 are classified as vacant.

**Clustering allows certain land uses to increase the number of potential residences located on one parcel providing the parcel meeting specific criteria (See Development Standards and Critical Areas Ordinance). Clustering is only permitted in Inholding, Long Term Commercial Forest, and Agricultural Resource land uses.*Dwelling units can only be constructed on parcels at least .29 acres in size due to septic requirements. Any parcel smaller than a .29 acre was not considered for additional dwelling units.

¹The total number of additional dwelling units is an approximation as many parcels are not suitable for residential development even though they may be classified as such.

4 2.5 is a standardized approximate number of people that may occupy a dwelling unit as specified by the U.S. Census.
Analysis
The calculations illustrated in Table IV.3-7A reflect an estimated increase of 53,925 dwelling units to the rural areas should the land be developed to its fullest residential use. This type of “build out” development could increase the population in the rural areas, not including the City of Shelton or the UGAs, by as many as 92,943 people for a total estimated rural population of 139,935.

The Future Land Use Plan
The Future Land Use Plan Map includes designated areas for the National Park and Forest, Long-Term Commercial Forest Lands and their inholding lands, Agricultural Resource Lands, Urban Growth Areas (UGAs), Rural Activity Centers, and Rural Areas. Mineral Resource Lands are also designated, but that designation is an overlay on other districts, primarily the Forest Lands or the Rural Areas. The Plan also provides for a population reserve for possible Fully Contained Communities. Creation of a Fully Contained Community requires its designation as a new urban area on the Future Land Use Map as well as other approvals.

The Urban Growth Areas include the City of Shelton and the un-incorporated communities of Belfair and Allyn. Rural Activity Centers include Union, Taylor Town, and Hoodsport. Land analysis for each urban area is shown in detail in tables earlier in this chapter. The total land that will be developed to accommodate the 20 years growth in the urban areas is estimated to be approximately 2,800 acres. This is the total “gross” acres and is different than the “net” acre total that is used for the land capacity analysis shown in Table IV.3-18. The demand for land for the Fully Contained Communities is estimated to be 140 “gross” acres for an allocation of 1,000 people. This is based on the assumption that the Fully Contained Community is primarily for residential use and would be higher for projects that had large non-residential land requirements. The land needed for the rural area growth is difficult to estimate because of the great variety of lot sizes that might be developed. Under current zoning, residential lots at build-out would still range from under one-third acre to almost 40 acres. The population expected to move to the rural area would absorb about 23% of its capacity. Based on the assumption that the long-term commercial forest lands and agricultural resource lands are not developed, and the assumption that development happens proportionally across various lot sizes, then about 25% of the rural area would be developed. This is roughly 50,000 acres for 4,600 units or about one dwelling unit per 10 acres. It would be reasonable to assume instead that the smaller lots would be preferentially developed. If that were the case, then the area of the developed lots would be far lower than 50,000 acres. Also, it should be noted, that this rural development actually uses far less land that the total of the acreage of all the lots. The estimate for the impervious surface created for amount of development is only about 1,100 acres. In contrast, the 2,800 acres of urban development is estimated to create some 750 acres of new impervious surface.

Taken together, the total estimated area of land developed to accommodate the projected growth is 53,000 acres, although it could be significantly less. The urban growth would be about 0.5% of the area of the county to accommodate 61.5% of the growth. The low density-large lot development of the rural area growth could be as much as 8% of the area of the county to accommodate 38.5% of the growth. It should also be noted here that if the
incentives for rural clustered development are fully utilized, then tens of thousands of acres could be preserved as open space in the “developed” area.

TABLE IV.3-18 Land Capacity Summary -- Urban Lands (acres)

<table>
<thead>
<tr>
<th>Area (all acres are net acres)**</th>
<th>Residential Land Demand</th>
<th>Non-Residential Land Demand*</th>
<th>Total Land Demand</th>
<th>Land Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Growth Areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Shelton</td>
<td>930</td>
<td>489</td>
<td>1419</td>
<td>1419</td>
</tr>
<tr>
<td>- Belfair</td>
<td>449</td>
<td>60</td>
<td>509</td>
<td>509</td>
</tr>
<tr>
<td>- Allyn</td>
<td>233</td>
<td>21</td>
<td>254</td>
<td>254</td>
</tr>
<tr>
<td>Totals</td>
<td>1612</td>
<td>570</td>
<td>2182</td>
<td>2182</td>
</tr>
</tbody>
</table>

* Exclusively non-residential
** Net acres excludes unavailable lands, unsuitable lands; 20% roads & 25% market factor

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 that 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.

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.


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 25%
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.

31. In developing the annual transportation improvement program, the County is responsible for reviewing the basic transportation network that serves the entire community.

32. Mason County, the City of Shelton and the identified UGA area should develop and adopt concurrent “Engineering and Development Design Standards” to regulate growth and transportation development in the UGA 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;

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*. 
All structures in Mason County are subject to the engineering and design requirements of the Uniform Building Code for earthquakes. Seismic hazards requirements focus on effects to buildings and other facilities from intense ground shaking and/or liquefaction. Attention to 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. 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 38.5 percent of the County’s population growth to Urban Areas (including new Fully Contained Communities). 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 that 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-evaluate 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 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, 4, or 5 waters as established in WAC 222-16-030, pages 19 through 24, including all naturally occurring lakes and ponds not considered wetlands and not under the jurisdiction of the Mason County Shoreline Master Program.

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 that 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. (See Mason County Resource Ordinance, page 56)
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*, *Dictyoneuropsis reticulata*, *Dictyoneurum californicum*, *Lessioniopsis littoralis*, *Macrocystis integrifolia*, *Nereocystis (luteaena*, and *Postelsia palmaeformis*) and all eel grass 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 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,
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.

**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 in December 2004.

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.
### TABLE IV-4.1
Priority Habitats and Species and Special Non-Game Species in Mason County

<table>
<thead>
<tr>
<th>MOLLUSCS</th>
<th>CRUSTACEANS</th>
<th>BUTTERFLIES</th>
<th>AMPHIBIANS</th>
<th>BIRDS</th>
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<tbody>
<tr>
<td>Newcomb’s littorine snail</td>
<td>Dungeness crab</td>
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<td>Pinto abalone</td>
<td>Pandalid shrimp</td>
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<td>Goeduck clam</td>
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<td>Hardshell clams</td>
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<td>Johnson’s hairstreak</td>
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<td>Olympia oyster</td>
<td>Mardon skipper</td>
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<tr>
<td>Pacific oyster</td>
<td>Makah copper</td>
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<tr>
<td>Razor clams</td>
<td>Oregon silverspot</td>
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<tr>
<td>ECHINODERMS</td>
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<tr>
<td>Red urchin</td>
<td>Valley silverspot</td>
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<td>FISH</td>
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<tr>
<td>River lamprey</td>
<td>Whulge checkerspot</td>
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<td>Green sturgeon</td>
<td>Oregon spotted frog</td>
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<td>White sturgeon</td>
<td>Western toad</td>
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<tr>
<td>Pacific herring</td>
<td>Cascades torrent salamander</td>
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<td>Olympic Mudminnow</td>
<td>Columbia torrent salamander</td>
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<td>Channel catfish</td>
<td>Dunn’s salamander</td>
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<td>Eulachon (smelt)</td>
<td>Van Dyke’s salamander</td>
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<td>Longfin smelt</td>
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<td>Surflsmelt</td>
<td>Brandt’s cormorant</td>
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<tr>
<td>Bull trout/Dolly Varden</td>
<td>Brown pelican</td>
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<tr>
<td>Chinook salmon</td>
<td>Cassin’s auklet</td>
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<td>Chum salmon</td>
<td>Common loon</td>
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<td>Coastal resident/Searun cutthroat</td>
<td>Common murre</td>
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<td>Coho salmon</td>
<td>Marbled murrelet</td>
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<td>Kokanee</td>
<td>Short-tailed albatross</td>
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<td>Pink salmon</td>
<td>Tufted puffin</td>
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<tr>
<td>Pygmy whitefish</td>
<td>Nonbreeding concentrations of: loons, grebes, cormorants, fulmar shearwaters, storm-petrels, and alcids</td>
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<tr>
<td>Rainbow trout/Steelhead</td>
<td>Breeding concentrations of: cormorants, storm-petrels, terns, alcids</td>
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<td>Sockeye salmon</td>
<td>Black-crowned night heron</td>
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<td>Westslope cutthroat</td>
<td>Great blue heron</td>
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<td>Pacific cod</td>
<td>Aleutian Canada goose</td>
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<td>Pacific hake</td>
<td>Brants</td>
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<tr>
<td>Walleye pollock</td>
<td>Cavity nesting ducks</td>
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<tr>
<td>Black rockfish</td>
<td>Nonbreeding concentrations of: Barrow’s goldeneye, common goldeneye, bufflehead</td>
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<tr>
<td>Bocaccio rockfish</td>
<td>Harlequin duck</td>
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</table>
### 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 December, 2004.
In addition to monitoring rare plants, DNR also maintains a database 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 61.5% percent of the County’s population growth and associated development to Urban Areas. The development in Urban Area will, however, account for about 0.5 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 there are concerns. These basins have been closed to new surface water appropriations. (WAC 173-514).

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 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 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 that 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
MASON COUNTY
COMPREHENSIVE PLAN
CRITICAL AREAS
AQUIFER RECHARGE AREAS

LEGEND
- HOURLY CRITICAL
- EXTREMELY CRITICAL
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, 1990, and 2003. 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.
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.

Forest Products
Without question, timber is the foundation upon which Mason County’s economy is built. Forest Products 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.

Long Term Commercial Forest lands and Forest Products 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.
**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;
3. Lot size and development policies for designated forest lands; and
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 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. There are 320 farms currently in operation in the County covering approximately 21,641 acres. This represents nearly 3.5% of Mason County’s land area.

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 rural areas, outside the UGA’s.

In order to better conserve agricultural lands of long-term commercial significance, Mason County designated Agricultural Resource Lands in its interim resource ordinance. A total of 5,947 acres were designated and implementing regulations were adopted in January of 2000. The amendments also provided for continuing protections for lands in agricultural use, but not qualified as lands of long-term commercial significance.

The comprehensive plan also directs up to 61.5% of the County’s growth into Urban Areas. Further, the plan provides options for development, which grant incentives to preserve open space and limit the developed area to only a part of the site. This approach is called “clustering.” Both techniques reduce the amount of land disturbed by development and make more land available for agricultural use, while maintaining overall rural densities and rural character.

**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.

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 18 operating surface mines at the present time. The Mason County Resource Ordinance designates approximately 2,519 acres as mineral resources lands and protects the future use of these areas for mineral resource extraction. The Washington Department of Natural Resources recommends that a 50 year supply of mineral resources be protected. For the lands designated by Mason County, it is estimated that the Winter Creek site alone has 14 times a 50 year supply of gravel and sand at population projections for the year 2020.

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.
IV.6 OPEN SPACE

There are three kinds of open space\(^5\) 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 that 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.

\(^5\) The designation of Open Space shall in no way violate or void any private property ownership rights and does not imply or create access to Open Space property.
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 61.5% of the County’s growth into Urban Areas. The land demanded for this growth is about 0.5% of the area of the county. Also, the comprehensive plan provides for incentives to cluster development, as well as requiring the preservation of open space in some situations. It should be noted that if the incentives for rural clustered development are fully utilized, then tens of thousands of acres could be preserved as open space in the “developed” area. Both techniques reduce the amount of land disturbed by development.

Open space that will generally be preserved under the plan include: Long-Term Commercial Forest lands, Agricultural Resource Lands, local parks, state parks and other state lands, the Olympic Nation Park and the Olympic National Forest, landslide hazard areas and their associated buffers, flood ways, streams and their associated vegetation area, wetlands and their associated buffer areas, lands preserved as part of a clustered development plan, lands preserved as part of the designation of a fully contained community or a master planned resort, and major utility corridors.

FIGURE IV-6.2, the “Future Land Use Map - Open Space” shows some of the lands protected in the comprehensive plan. These include: Long-Term Commercial Forest lands, Agricultural Resource Lands, local parks, state parks and other state lands, the Olympic National Park and the Olympic National Forest, steep slopes, wetlands, streams, and major utility corridors. The map, however, cannot show all of the open space areas because some, such as the open space required to establish a fully contained community, are of no fixed location or have not been determined at this time. These areas are considerable. The plan projects that the area of land developed to accommodate the growth expected by 2025 is 53,000 acres, although it could be significantly less if rural development preferentially uses smaller lots for residential development and if the cluster incentives are utilized. Cluster incentives could result in tens of thousands of acres preserved as open space in the “developed” area. The map also does not show other open space that will exist as undeveloped land, non-designated forest lands and non-designated agricultural lands at the end of the planning period. These lands will remain open space because most of such lands are not needed for development and can be expected to be left in these productive uses.
**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 that 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 that specifically address the protection of open space.
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.

Mason County has done a significant amount of planning to address issues of stormwater management and water quality. As discussed in section IV-1 of this chapter, the county has cooperated with the adjoining counties, tribes and the state to develop specific watershed action plans or management plans. The county has implemented water quality protections in several ways. For example, the county has created a clean water district and stronger on-site septic system controls including an operations and management ordinance. In the North Bay - Case Inlet area, the county is in the design and construction phase of a sewer system intended to eliminate water quality problems in that area. The county also adopted the “Skokomish River Comprehensive Flood Hazard Plan” to identify means of managing flooding problems.

Mason County’s management of stormwater is primarily regulatory. In December of 1997, the county adopted a stormwater management ordinance, which was one of the actions proposed in the county’s watershed action and management plans. It is also one of the goals of the state 1994 Puget Sound Water Quality Management Plan. The stormwater management ordinance supplemented the existing stormwater management requirements contained in the county’s subdivision ordinance, interim resource ordinance, and other county ordinances. This ordinance addresses many of the stormwater concerns by requiring appropriate design and best management practices for new development or redevelopment for both water quantity and quality.

Other county management of stormwater is in the form of conveyance in road side ditches, culverts, bridges and such, which are part of the county roadway system. As discussed in the Capital Facilities Chapter, section VI-10, the six year capital facilities plan anticipates $9.5 million in drainage improvements.
The City of Shelton has provisions for stormwater management in its 2004 Comprehensive Plan and city ordinances. The Capital Facilities Element and Utilities Element of the city plan discuss existing provisions and the need for continued joint planning between the city and the county to coordinate stormwater management in the urban growth area.

New development almost always results in the clearing of vegetative areas and increases in impervious surfaces. The purpose of the plans and ordinances discussed above is to remove or minimize the impacts that can be caused by development. If not appropriately designed, urban development often results in the impacts of increased soil erosion and sedimentation during and after clearing (see EROSION HAZARDS); encroachment into streams and wetlands; alteration of stream courses; and loss of critical habitat. Urban development can result in nonpoint pollution of surface waters. Increased runoff from development may also increase the incidence of downstream flooding and erosion.

Pavement, roofs, and other impervious surfaces may 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 may also increase 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.

These impacts are also 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 open space design provides additional protection to wetlands, floodways and streams.

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.

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
- Hamlets
- 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
- Small areas of more intense developments such as small scale commercial and
  industrial development, tourist related businesses, and small groups of residences on
  smaller lots.
- Resource-related industries such as quarries, timber and wood processing facilities.
- A Majority of businesses in Mason County are located outside of the Urban Growth
  Boundaries including many small home-based businesses.

Rural areas also include well-separated small communities located along major arterials and
state highways that 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 that 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:

Limited Areas of More Intensive Rural Development (LAMIRD)
- Rural Activity Centers (RAC)
- Hamlets
- Rural Commercial/Industrial Areas
- Rural Tourist/Recreational Areas

Fully Contained Community (FCC)
Master Planned Resort (MPR)
Rural Area (RA) with residential densities of 1 unit per 5, 10, or 20 acres

**Limited Areas of More Intensive Rural Development (LAMIRD)**

**Rural Activity Centers**
Rural Activity Centers (RAC) include existing communities with an established settlement pattern. These communities include a mix of uses, typically on small lots. 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 served by urban levels of facilities and services. Residential areas include small lot, single-family neighborhoods and some small-scale and low-rise multifamily housing. Businesses typically are found near or on the highway that runs through the community. In Hoodsport the commercial development is primarily concentrated into a small “downtown” area. Union has fewer businesses and more scattered commercial activity. Taylor Town has small clusters of commercial development near some of the road intersections and a larger number of businesses scattered over the area of the RAC. Existing 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 limited growth over the next 20 years. Average residential densities will increase as much of the land has already been platted into small lots, many of which are conforming and buildable. Business uses will likely grow somewhat. 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. Because of their past pattern of development and location next to water bodies, some RACs may require some means of collective wastewater treatment to protect water quality. However, these systems are not envisioned to be urban level sewer systems. A feasibility study was recently completed for the Union area, and the water quality problems of Hoodsport are being examined. Stormwater treatment may also be needed to address the existing development. These areas are expected to have small amounts of additional commercial and industrial development but to concentrate the growth in a way that protects the surrounding rural area and resource lands from sprawling patterns of development. Under the state Growth Management Act, these areas of more intensive rural development are allowed to fill in with
small scale commercial or industrial development and lower density residential development. This growth is contained within the boundaries of the rural activity center and kept to a smaller scale and intensity in tune with the rural character of the community. Conflicts with resource lands are minimized by encouraging growth in these more compact areas, generally well removed from the resource lands. Families seeking a rural lifestyle will not need to buy oversized lots. This makes the housing more affordable and expands the variety of housing choices. They also need not be isolated in remote locations so that limited services such as transit, fire protection, and police protection can be provided more efficiently or quickly at a rural level of service.

**Hamlets**

Hamlets 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. Hamlets 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 or RAC’s as employment centers or commercial centers. Residential development at these centers is allowed, as infill but only with Rural Area standards. The designated area of the Hamlets will be kept small. The designated area will not necessarily include all of the businesses or services that may be identified with the community center in conformance with RCW 36.70A. 5(d).

**Isolated Areas of Commercial/Industrial Use**

Isolated Areas of Commercial/Industrial Use presently exist in Mason County. They are small enclaves of businesses, which serve the surrounding rural residents, and or industrial uses, which manufacture and export a product. These areas are intended to remain and to have the ability to expand slightly, keeping within the rural character of the county. These businesses do not require urban services and will not be afforded urban services in the future. These areas will have a delineated boundary based on the built environment as July 1990, and respecting the existing neighborhood identity of the area, and reflecting roads and natural features. Boundaries will attempt to avoid irregularity. Uses will meet the standards set out in the Rural Area Performance Standards.

**Isolated Areas of Tourist/Recreational Use**

Isolated Areas of Tourist/Recreational Use reflect existing areas in Mason County and their slight expansion, and allow for the development of new areas. There areas consist of recreation/tourism businesses with no permanent residences, except for those of the owners or caretakers. Such areas may include uses such as small scale resorts, recreational vehicle parks, golf courses, and small stores serving such uses. These areas must be served by appropriate rural services to the area only and cannot contribute to urban sprawl or the extension of urban services.

**Rural Areas**

Rural Areas (RAs) within Mason County are those areas that 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, aquaculture, and mining are protected. Residential uses are allowed, provided that they are rural in character. Industrial and commercial uses are allowed if they are resource dependent or are cottage industries operated by residents of the property. Small-scale recreational and tourist uses consistent with a rural nature may be allowed. Larger-scale recreational and tourist projects may be allowed under the provisions for Master Planned Resorts. 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. The comprehensive plan has reserved population to allow the creation of new Fully Contained Community. Fully Contained Communities can be created in the Rural Lands; however, the approval of a Fully Contained Community requires a comprehensive plan amendment. When a specific location and plan for a Fully Contained Community is approved, then population will be allocated to that project. In order to receive approval, the proposal must meet a number of criteria, which are established in the Planning Policies Chapter of the Plan.

**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.
IV.10 MASTER DEVELOPMENT PLANNING AND FULLY CONTAINED COMMUNITIES

Purpose: Master Development Planning in Mason County is intended to facilitate long range, predictable and innovative development possibilities on large tracts of land. A Master Development Plan allows larger properties with unique characteristics or circumstances benefit from more detailed and thorough planning of future development to accomplish desired land development over a multiple year and phased term. A Master Development Plan provides a common and interrelated development theme within the boundaries of the Master Development Plan, while ensuring its integration and compatibility with the surrounding community and land uses.

A Master Development Plan requires the implementation of additional design and performance standards for all aspects associated with development of the site, including protection of the environment and natural features, construction of utilities and roadways, and site construction. Low Impact Development (LID) techniques shall be incorporated into all Master Development Plans. LID is a land use development strategy that emphasizes protection and use of on-site natural features, integrated with engineered, small-scale hydrologic controls at the parcel and subdivision scale to manage stormwater and more closely mimic pre-development watershed hydrologic functions.

The intent of a Master Development Plan is to: preserve unique, fragile, and environmentally critical areas; provide efficient use of the land and infrastructure; implement low impact development techniques; promote innovative, quality design; and provide for the inclusion of on-site amenities such as open spaces, community facilities, enhanced landscaping, and recreational opportunities. Uses allowed within the Master Development Plan should be consistent overall with those uses allowed within the base land use districts, provided that a Master Development Plan may allow for more flexibility in density, the location of uses and development standards in a manner consistent with the intent of the base land use district. A Master Development Plan allows for a mixture of residential and non-residential land use development types, such as clustering of single-family residential dwellings, attached residential units, zero lot line development, public facilities, and commercial and office uses. A Master Development Plan shall be applied through the Mason County Development Regulations and be accompanied by a Development Agreement.

Separate provisions are necessary that address unique conditions when locating a Master Development Plan within an Urban Growth Area, or within lands designated rural. A Master Development Plan could also be appropriate for areas adjacent to but outside existing Urban Growth Boundaries. When a specific location is identified for a Fully Contained Community within Mason County, a Master Development Plan will be required to demonstrate consistency with the Comprehensive Plan and RCW 36.70A.35.
Figure IV.10.1
Potential Master Development Plan Area Within An Urban Growth Boundary

Potential Master Development Plan Area within an Urban Growth Area

Legend
- Potential MDP area
- State Highways
- Roadway / LID
- Parcels
- B.I. Zoning Code
- Lakes

Approximately 700 Acres

Mason County, WA
Department of Community Development
Shelton, WA
November 7, 2005

0 2,500 5,000 10,000 Feet
Figure IV.10.2
Potential Master Development Plan Area Within Designated Rural Lands

Legend
- Potential NDOT Area
- Slide Slope
- Transmission Line
- Zoning Code
- Parcel
- Lake
- Rural Activity Center

Approximately 650 Acres
Master Development Plan Policies

Land Use

MDP 1. Adopt regulations to guide the location and sitting of Master Development Plans within rural and urban areas, consistent with policy direction contained throughout the Comprehensive Plan. These regulations shall:

MDP 1.1. Clarify that a Master Development Plan is appropriate for large contiguous areas of land under common ownership or control, with common characteristics and connectivity. Include criteria for when and where a Development Master Plan may be appropriate within rural lands and within urban growth areas.

MDP 1.2. Require a Master Development Plan for any Fully Contained Community established pursuant to RCW 36.70A.350.

MDP 1.3. Require that adequate road, water, drainage, sewer and/or septic capacity exist or is planned to meet the demands of the proposed development within the Master Development Plan. Consider alternative standards for utilities and roads that address rural and urban character and utilized low impact development techniques in harmony with the unique environmental characteristics of the area.

MDP 1.4. Provide transportation circulation that addresses public service and emergency response requirements and the needs of pedestrians and bicyclists.

MDP 1.5. Encourage flexibility in design to promote a variety of housing types, densities, and affordability. Accommodate a mix of commercial, retail and residential uses, as well as opportunities for social and cultural expression while preserving the area's natural features. Individual lot sizes should vary in a Master Development Plan to promote a range of housing options and the preservation of unique and fragile environmental features and critical areas.

MDP 1.6. Provide levels of service compatible with the project’s location, development intensity and the surrounding land uses. Proposed Master Development Plans in rural areas shall not require urban services.

MDP 1.7. Allow for increased density and/or a reduction in dimensional standards within the Master Development Plan when enhanced on-site amenities are incorporated into the overall development, such as open spaces, community facilities, landscaping and
buffers, recreational opportunities, and other similar amenities that benefit the community and the environment and exceed the existing minimum requirements.

**MDP 1.8.** Include a process to allow phased development within the Master Development Plan in an orderly, coordinated, and thoughtful manner. The phasing plan for the development shall demonstrate that the various segments of the development are served by adequate public facilities and services.

**MDP 1.9.** Promote the incorporation of LID techniques in the development and management of the area within the Master Development Plan.

**MDP 1.10.** Include technical guidance on the use of LID techniques in public and private developments within the Master Development Plan. These techniques shall:

i. Preserve the site characteristics, including natural terrain, drainage patterns, soil structure and native vegetation;

ii. Preserve the natural hydrologic cycle, including vegetative rainfall interception and evapotranspiration, and groundwater infiltration and percolation to the extent the subsurface conditions permit;

iii. Mimic natural rainfall capture capacity in areas of site disturbance, and ensure the protection of property and public safety in the design of overflow capacity, and

iv. Incorporate measures to manage stormwater within the Master Development Plan that will enhance water quality downstream.

**MDP 1.11.** Require all Master Development Plans to include specific design guidelines and development standards to ensure that the proposed development promotes community identity, has a consistent theme, and is integrated and compatible with its surroundings.

**Water & Sewer Utilities**

**MPP 2.** Water and sewer utility infrastructure in master development plans shall be designed with quality components, and to be operated and maintained efficiently.

**MPP 3.** Potable water service shall be consistent with coordinated water supply plans for urban growth areas (UGAs), and provide through community-based systems.
for planned developments in rural areas. Such rural systems should preferably be operated and maintained by a public entity with authority to operate in the proposed area.

**MPP 4.** To the extent available, Master Development Plans should utilize reclaimed water supplies in addressing non-potable water demands.

**MPP 5.** Development within a UGA shall plan for wastewater service consistent with sewer service plans for the UGA and current development standards and the costs for capacity borne by the development.

**MPP 6.** Clustered development is encouraged to maximize the efficiency of wastewater service provisions, taking into account the proximity to connection outside the development.

**MPP 7.** Development in future phases of a Master Development Plan that will be served by wastewater collection and treatment shall be planned to facilitate future connection to a public system with attention to the location of those lines in public rights of ways or easements that will ultimately be the responsibility of the sewer service provider.

**MPP 8.** Development in areas not planned for future public sewer service shall provide community-based collection and treatment systems, preferably maintained by a public entity, consistent with the best available knowledge of hydrogeologic connectivity and the potential impacts to surface and groundwater resources.

**MPP 9.** Development shall address the storage location and collection of solid waste and recyclable materials. In UGAs, developments shall facilitate curbside collection of solid waste and recyclable materials.

**Parks & Recreational Facilities**

**MPP 10.** Improvements and phasing in a Master Development Plan shall address adequate passive and active parks and open spaces consistent with the standards in the County-Wide Parks Plan (to be updated in 2006).

**MDP 10.1.** Parks and other recreational or trail facilities shall be designed and developed consistent with industry standards for quality of materials, safety and efficient operations and maintenance.

**MPP 11.** Master Development Plans shall include connections to future or existing open space corridors and trail connections, with internal community circulation. Master Development Plans with access to surface water amenities shall incorporate access for residents and visitors outside the proposed development.