

City of Sumas Comprehensive Plan

November 2004 Revision

Table of Contents

1. Introduction.....	1-1
Authority.....	1-1
Scope and Purpose.....	1-1
Public Participation Process.....	1-2
Plan Amendment Process.....	1-3
2. Background.....	2-1
History.....	2-1
Prior Planning.....	2-1
Summary of Planning Pursuant to the GMA.....	2-2
Community Survey.....	2-3
Community Vision and Goals.....	2-4
Population Projection.....	2-5
Shoreline Goals and Policies.....	2-7
3. Land Use Element.....	3-1
Geography and Environment.....	3-1
Critical Areas and Resource Lands.....	3-4
Natural System Protection Areas.....	3-6
Areas of Historical Significance.....	3-8
Current Land Use.....	3-9
Buildable land supply.....	3-9
Future Needs.....	3-11
Sizes and locations of proposed zones.....	3-13
Neighborhood-specific discussion of zoning.....	3-13
Long-Range Land Use Plan.....	3-17
Essential Public Facilities.....	3-18
4. Capital Facilities Element.....	4-1
Goals and Policies.....	4-1
Sewer System.....	4-2
Water System.....	4-4
Storm Sewer System.....	4-4
Streets and Sidewalks.....	4-6
Schools.....	4-6
Parks and Recreation.....	4-8
Six-Year Financial Analysis.....	4-17
5. Housing Element.....	5-1
Planning Assumptions.....	5-1
Existing Conditions.....	5-1
1990 Census data.....	5-1
Building permits.....	5-4
Subsidized housing.....	5-5
Summary.....	5-5
Projected Housing Needs.....	5-6

Goals and Policies.....	5-7
6. Transportation Element.....	6-1
Goals and Policies.....	6-1
GMA Requirements.....	6-3
Existing Conditions.....	6-9
Future Conditions.....	6-15
7. Utilities Element.....	7-1
Natural Gas.....	7-1
Electricity.....	7-2
Telecommunications.....	7-4
Appendix I: Glossary.....	AI-1
Appendix II: Acronyms.....	AII-1
Appendix III: Community Survey.....	AIII-1
Appendix IV: SEPA Documents.....	AIV-1
Appendix V: County-Wide Planning Policies.....	AV-1

1. Introduction

Authority

This document is the comprehensive plan for the city of Sumas. A comprehensive plan is a legally recognized document that provides a framework for making land-use and other planning decisions. Development of this plan is authorized by RCW 35A.63 ("Planning and Zoning in Code Cities").

Development of this plan is also required by RCW 36.70A, commonly known as the Growth Management Act (GMA). Enacted by the 1990 Washington state legislature, the GMA requires cities in fast-growing counties to coordinate with neighboring jurisdictions in order to plan for future growth while conserving important natural resources and protecting critical areas. Whatcom county qualifies as a fast-growing county according to the criteria in the GMA, so Sumas (as well as all other cities in Whatcom county) must complete the comprehensive planning process.

Scope and Purpose

This plan contains five mandatory elements as specified in the GMA (RCW 36.70A.070):

- Land-use element. This element designates the proposed general distribution, location, and extent of lands for housing, commerce, industry, recreation and open space, and public facilities and utilities.
- Capital facilities element. This element contains an inventory of existing capital facilities owned by public entities. The element also shows the proposed locations and capacities of forecasted improvements and presents a six-year plan demonstrating how those improvements can be financed.
- Housing element. This element contains an inventory and analysis of existing and projected housing needs.
- Transportation element. This element contains an inventory of transportation facilities and services along with an analysis of future transportation needs. The element also presents a six-year financial plan for transportation improvements.
- Utilities element. This element describes the general location and capacity of existing and proposed utilities, including natural gas, electric, and telephone utilities.

Generally, each element first documents existing conditions and then discusses future scenarios that seem both desirable (in light of community preferences) and attainable (in light of community resources and constraints). Aside from these major elements, the plan also includes background information, community survey results, a vision statement, a number of goals and objectives, and various other supporting information.

A plan written in compliance with the GMA must address in general terms the twenty year period following plan adoption, but must also include a detailed financial analysis pertaining to the first six years of that period.

Although adopted by ordinance, the plan is fundamentally a policy document. Implementation of the plan will usually depend upon other regulatory tools such as the zoning and subdivision ordinances. The GMA requires that such tools be made consistent with the plan within one year following plan adoption.

The plan is written for several audiences, including: local decision-makers (i.e., planning commissioners, councilmembers, mayor), residents, developers, and state and county officials. The plan seeks to notify people of the city's future direction and to establish a clear intent that can be used to develop and interpret municipal regulations. The plan should also help the city secure outside funding for development projects; eligibility for most state infrastructure funding programs is dependent upon completion of the plan.

Public Participation Process

The GMA requires that Sumas establish procedures providing for early and continuous public participation in the planning process (RCW 36.70A.140). The following procedures constitute the public-participation process in the city of Sumas. The procedures shall be followed whenever the city proposes to amend or adopt any part of the comprehensive plan or the development regulations implementing the plan.

- Communication programs and information services. At least sixty days prior to formal action on a proposal, the city shall inform the public about the proposal in the following ways: (1) a press release summarizing the proposal will be sent to the city's paper of legal record; (2) a summary of the proposal shall be read at a regular meeting of the city council. In addition, an article concerning the proposal will be included in a timely issue of the city newsletter, if the newsletter is currently in publication.

When a proposal might affect another jurisdiction, a summary of the proposal shall be mailed to the chief executive of that jurisdiction at least sixty days prior to formal action on the proposal.

- Dissemination of proposals. At least sixty days prior to formal action on a proposal, copies of the full text of the proposal shall be made available to the public at city hall and at the Sumas branch of the Whatcom County Library System. Availability of these copies shall be mentioned in the summaries and articles described in the prior paragraphs.

As required by RCW 36.70A.106, the city shall mail copies of the full text of the proposal to appropriate state agencies at least sixty days prior to formal action on the proposal.

- Written comments. The city shall accept written comments concerning a proposal during a sixty-day period ending on a specified date, and formal action on the proposal shall not occur

before the close of the comment period. The process for submission of written comment (i.e., the address for submission and the ending date) shall be described in the summaries, articles, and mailings described in the prior paragraphs.

Written comments shall be considered by the city at open public meetings. Each comment shall be distributed to every member of the governing body convening the meeting. Discussion and disposition of the comments shall then take place. Although discussion at a public meeting shall be the only required response to a written comment, the city may additionally acknowledge or respond to a comment by another means.

- Public meetings. Governing bodies shall consider and take action upon proposals only at meetings convened in compliance with the Open Public Meetings Act of 1971.

During the sixty-day period for acceptance of written comments, the governing body shall hold at least one meeting at which the public is encouraged to provide verbal comments upon the proposal. If many people intend to comment, the governing body may limit the length of each person's comments. The time and place of this meeting, along with an invitation to make comments, shall be included in the summaries, articles, and mailings described in prior paragraphs. Subsequent discussion (if any) in reaction to a verbal comment shall be the only required response to that comment.

The foregoing is a minimum set of procedures that shall be followed for every eligible proposal. As described in the following section, the city will occasionally undertake major re-examinations of the comprehensive plan. During such events, a more extensive process for solicitation of the public's viewpoints will be used. The process might make use of: a special-purpose citizen's advisory committee; a survey; well-advertised workshops at which alternative proposals are developed or discussed; other outreach tools. Chapter 2 contains a record of the participation process used during the original creation of this plan from 1990 through 1995.

Plan Amendment Process

The GMA requires that Sumas establish procedures regulating the frequency of amendments to the comprehensive plan (RCW 36.70A.130). The following procedures constitute the plan-amendment process in the city of Sumas.

- Minor amendments. The comprehensive plan shall be amended no more than once within a calendar year, except that additional amendments shall be allowed whenever an emergency exists. During the amendment process, all pending amendment proposals shall be considered concurrently so that the cumulative effect of the various proposals can be ascertained.
- Major amendments. The city shall occasionally undertake a major scrutiny of the comprehensive plan, including a reexamination of each element and a reconsideration of the adequacy of the land supply within the UGA. This process may lead to adoption of a revised UGA. Such a process shall take place no later than ten years after the previous major amendment process.

2. Background

History

The name Sumas is derived from a Native-American phrase "sm-mess" which means "land without trees." The original word comes from the Cowichan Tribe and refers to a natural prairie at the approximate site of the modern city of Sumas.

Settlers of European extraction arrived in the Sumas River basin in the 1870s. Records show a homestead by R. A. Johnson in 1872. Early settlers were drawn by the timber resources in the area, and a mill was soon constructed. During the 1880s gold rush, Sumas became a major outfitting center for prospectors seeking gold in the Fraser River basin. The city boomed to over 2,500 people. A weekly newspaper, *The Sumas Advocate-News*, was first published in 1889. Growth was further encouraged by the arrival in 1889 of the Northern Pacific Railroad and the Chicago, Milwaukee, and St. Paul Railroad, providing a rail link with the Canadian Pacific Railroad. The link with Canadian transportation facilities, including US Customs and Immigration Services, remains an important economic resource today.

The city of Sumas was incorporated in 1891, and the first school was built in 1892. While the early growth of the city was supported by the timber and mining industries, a gradual shift toward an agricultural base took place during the first decades of the 20th century. Dairy farming, poultry farming, and fruit raising became major contributors to the city's economy. A 1921 publication titled "The Show Window: Publication of the Chamber of Commerce, Bellingham, Whatcom County, Washington" identifies Sumas as "a desirable residence town" with "splendid schools, both grade and high, paved business streets, electric lights, good water supply, public library, telephone service, and other city conveniences."

Between 1900 and 1940, Sumas dwindled in size as a result of the shift away from timber and mining. By 1940 there were less than 700 residents in town. The size and economic base of Sumas then changed very little through 1990: the city continued to rely on border-related commerce and the surrounding agricultural base. Recent trends are discussed in a later section.

Prior Planning

Sumas developed a draft comprehensive plan in 1969, with the assistance of Urban Planning and Research Associates, a Seattle-based consulting firm. The plan included an inventory of existing land uses, a set of development and land use goals, a map recommending land-use zones, and a discussion of traffic circulation. Although an official zoning map was adopted after publication of the draft plan, the plan itself was never completed or adopted by the city council. As mentioned earlier, the GMA now requires that the city develop a more extensive plan.

Summary of Planning Pursuant to the GMA

Sumas began the process of complying with the GMA late in 1990. The first steps taken were to identify and protect critical areas including wetlands, frequently flooded areas, fish and wildlife habitat, geologically hazardous areas, and critical aquifer recharge areas. By March of 1992 an interim critical areas ordinance was in place.

Development of the comprehensive plan got underway in the summer of 1992. A consultant was charged with development of the plan, under the supervision of the planning commission. A citizen survey was distributed in July of 1992 and the results of the survey were distributed to city officials soon thereafter. In March of 1993 a town meeting was held to present the results of the survey and initiate a goal-setting process. In April of 1993 the county and the cities adopted county-wide planning policies. A draft set of local goals was developed in the summer of 1993 and presented at a second town meeting in September. The focus then shifted to establishment of an interim UGA, as required by a 1993 amendment to the GMA. After public hearings before the county planning commission and county council, an interim UGA encompassing 772 acres was adopted by the county council in May of 1994. Work on the comprehensive plan resumed in the spring of 1994 and continued until adoption of the first GMA-compliant plan in mid 1995.

In mid-1997 a plan update was begun as an outgrowth of a flood-planning process. Flood planning had revealed the need for different land uses in certain flood-prone areas, and also revealed that other areas were suitable for development. Other minor plan amendment requests had also been docketed. The planning commission began reviewing proposed amendments in the fall of 1997. In early 1998, the city council decided to simultaneously tackle an update of the Shoreline Master Program, which had not been revised since 1988 and which contained some problematic provisions. Wildlife and fish habitat consultants worked in the spring of 1998 to develop science-based data, and a coordinated proposed update of the SMP and the comprehensive plan was published in June, 1998.

The 2001 plan update was undertaken in order to develop and integrate a detailed parks and recreation element and to incorporate the results of a *Water System Comprehensive Plan* that was finalized in the fall of 2000. The planning commission began reviewing proposed amendments in the fall of 2000, and a draft plan revision was produced in spring 2001.

In 2002 the state legislature mandated that Sumas, together with other jurisdictions in Whatcom County, revise its comprehensive land-use plan prior to December 1, 2004. The review was to also include a review of all development regulations (i.e., zoning, subdivision, critical areas) to ensure consistency with the current goals and requirements of the Growth Management Act. The planning commission began the revision process in the fall of 2003 and produced a revised draft in the spring of 2004.

Community Survey

In July of 1992 a survey was conducted to learn the feelings of the community. A copy of the actual survey document is included in Appendix III, along with the complete set of comments made by residents. The following is a brief summary of the survey showing the five major questions followed by the responses in priority order.

- Q. What do you like about Sumas?
- Character
 - Sewer and water service
 - Open spaces and natural beauty
 - Air quality
 - Police and fire services
- Q. What are the issues or problems facing Sumas?
- Defining land-use classifications
 - Striking balance between property rights and restrictions
 - Promoting job/business growth
 - Protecting and enhancing environmental quality
- Q. What actions should the city take to improve quality of life?
- Improve flood control
 - Protect water supply
 - Improve and add roads
 - Assist job/business growth
 - Limit commercial strip pattern
 - Maximize property rights
- Q. In which direction should the city grow?
- South
 - West
 - East
- Q. What is the best way to pay for public facilities built to accommodate growth?
- Combination of revenues
 - Property taxes
 - User fees
 - Bonds

People's handwritten comments revealed a sharp division between those interested in promoting further commercial growth and those dismayed by the growth of the preceding 15 years. Each viewpoint was held by about the same number of people. Following are some verbatim comments that reveal the division.

Get rid of the service stations and bars and stop catering to the needs of business only.

I think the city is more concerned with the Canadian business owners than with its own citizens.

I preferred the old character of Sumas, businesses closed on Sunday and not all Canadian owned businesses -- I feel the average resident is worse off now than 15 years ago, with traffic pollution, and noise.

Fewer gas stations.

Don't let grocery stores and gas stations go beyond Cherry Street.

Try to think of Sumas and its residents, not just money and Canadians.

Sumas has been taken over by a foreign country and no longer exists as a small town. Small town services, businesses, etc., are gone. It no longer is a desirable place to live and raise a family. Pride in home maintenance is gone as more and more homes have absentee landlords. The Canadian dollar has not improved the average resident's life -- it has made it worse -- only the businessman profits! Zoning means nothing! HUD housing brings in more non-contributing residents.

Most of the favorable features or characteristics are gone -- sold to the highest bidder.

It's big enough now -- any more growth there will be no trees - or farmlands left. The animals won't have any homes -- our air would be ruined. Also cut down on Canadian traffic.

City revenue dollars -- long-term businesses create better paying jobs which in turn offer the opportunity for local youth to stay and work and prosper in their own hometown. Right now you have to look outside Sumas for good job opportunities.

As far as I see it, Sumas is right now nothing more than a gate. We have this huge fenced back yard with nothing in it to play with. If the city continues to restrict business growth, you may as well start making out a rent check to Lynden. There must be thousands of lost dollars going through Sumas to Lynden, Everson and Bellingham every day. Until this city decides to get off its hand and make a positive step towards business growth it will remain nothing more than a passageway to other points that can offer people what they need.

Let's not miss the opportunity for growth. We have many commercial opportunities we should take advantage of, and then allow residential growth to follow. We should take advantage of people passing through to better our community further.

Would like to see a wider variety of businesses. I would rather spend money in my own community and support it rather than supporting another which I must do more than 50 percent of the time I need something.

Serious considerations towards a mall complex of some sort with a variety of shops, etc., so tax dollars can stay in Sumas and not head to Everson or Lynden.

Keep the natural beauty, but please allow some space for commercial development. I feel that the city is not actively interested in a strong, broad tax base and future.

Community Vision and Goals

Based upon the results of the community survey, the input of the planning commission, and citizen feedback at public meetings, the following vision has been identified:

Sumas should be a small rural town that offers a vibrant commercial district, spacious residential neighborhoods, a variety of outdoor recreational opportunities, and an industrial base that provides decent jobs. The community should exhibit self-reliance and the citizens should have pride in their town.

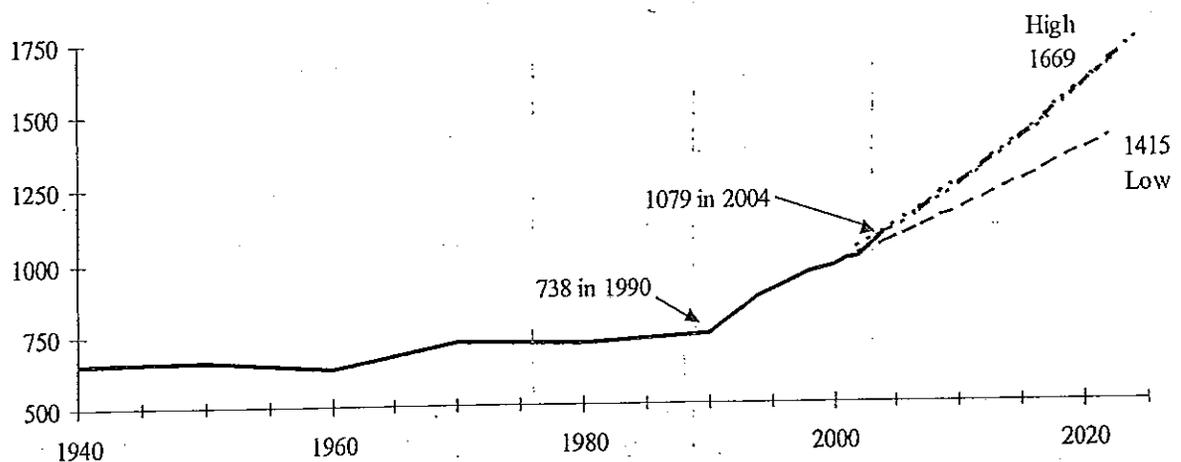
Several goals have been identified to help the city attain this vision.

- Sumas should protect the natural elements -- the clean air, pure water, and beautiful open space -- that create the pastoral environment enjoyed by residents.
- Sumas should protect the residential character that is the essence of a rural town: residents should have "room to breathe", yet should still be able to walk anywhere in town.
- Sumas should encourage commercial development that provides a benefit to local residents. Sumas should capitalize upon the large number of "passers-through" in order to support desirable businesses that would otherwise not survive in such a small town.
- Commercial development should be contained within compact, well-defined areas, both to minimize the impact on surrounding neighborhoods and to serve patrons conveniently.
- Sumas should encourage "clean" industrial development in areas separate from residential use.
- Sumas should enhance the facilities at existing parks and also develop new trail and park facilities by conversion of land that is unsuitable for development because of flooding.

Population Projection

After decades of relatively constant population, Sumas experienced substantial growth beginning in 1990. Figure 2-2 summarizes the situation. From 1940 to 1990, the average annual growth rate was a mere 0.25 percent, and during certain decades (e.g. 1950s, 1970s) the population fell by small amounts. In contrast, the average annual growth rate was 2.7 percent during the interval from 1990 through 2004.

Figure 2-2. Historic & Projected Population of Sumas



In 2002, the consultant firm ECONorthwest provided a "High" and a "Low" population projection for Sumas in the year 2022. Those projections are also plotted in Figure 2-2. ECONorthwest's "High" estimate of 1,669 would be achieved if growth were to occur at an annual average rate of 2.45 percent in the period from 2004 through 2022. That annual rate is slightly lower than the 2.7 percent rate actually observed since 1990. ECONorthwest's "Low" estimate reflects a growth rate of 1.7 percent.

Survey results and citizen testimony reveal that residents desire some growth in coming years. The planning commission believes that a population of about 1,750 would be compatible with the small-town atmosphere that residents wish to preserve.

In consideration of the consultant projection and the residents' desires, *Sumas plans to accommodate a population of 1,750 in the year 2024.* The target population will be attained if growth occurs at an average annual rate of 2.45 percent. Table 2-1 shows projected city population at milestone planning years, based upon the adopted rate.

Table 2-1. Adopted Population Projection

Milestone year	Projected population	Number of newcomers
2004. Baseline.	1,079	-
2010. Six-year capital planning horizon.	1,248	169
2022. ECONorthwest report horizon.	1,669	590
2024. Planning period.	1,750	671

Shoreline Goals and Policies

The 1995 regulatory reform act (ESHB 1724) established that the goals and policies of a shoreline master program (SMP) for a city are considered an element of the city's comprehensive plan, whereas all other portions of the master program are considered development regulations. The following goals and policies were formerly present in the City's SMP, but are now included here as part of an integrated rewrite of the SMP and comprehensive plan.

Goals

1. ECONOMIC DEVELOPMENT

GOAL: Encourage utilization of all economic resources to improve the standard of living for residents of the City of Sumas. Assure that the economic resources are utilized in a manner that results in the least possible adverse effect on the quality of the shoreline and surrounding environment.

2. PUBLIC ACCESS

GOAL: Assure acquisition and maintenance of an adequate supply of visual and physical access to the shorelines for the residents of the City of Sumas. As far as possible, assure utilization of public property for access areas.

3. RECREATION

GOAL: Maintain an adequate number of recreational opportunities for the residents of the City of Sumas and a reasonable number of transient users.

4. CIRCULATION

GOAL: Develop a safe, convenient, and diversified circulation system, consistent with the shoreline use goals, to assure efficient movement of people during their daily activities.

5. SHORELINE USE

GOAL: Establish and implement policies and regulations for shoreline use consistent with the Shoreline Management Act of 1971. These policies and regulations should insure that the overall land use patterns fostered within shoreline areas are compatible with shoreline environment designations.

GOAL: Identify and reserve shoreline and water areas with unique attributes for specific long-term uses, including commercial, residential, recreational, and open space uses.

GOAL: Ensure that activities and facilities are located on the shorelines in such a manner as to retain or improve the quality of the environment as it is designated for that area.

GOAL: Ensure that proposed shoreline uses are distributed, located and developed in a manner that will maintain or improve the health, safety and welfare of the public when such uses must occupy shoreline areas.

GOAL: Ensure that planning, zoning, and other regulatory and nonregulatory programs governing lands adjacent to shorelines are consistent with the provisions of this plan.

6. CONSERVATION

GOAL: Assure the preservation of unique, fragile and scenic elements and of non-renewable natural resources within the shorelines of the City of Sumas.

7. HISTORICAL/CULTURAL RESOURCES

GOAL: Protect and restore areas having historic, cultural, educational or scientific values within the shorelines of the City of Sumas.

Policies

The following activities have been identified as those types of uses which can occur on shorelines of the City. Policy statements have been developed for these various activities in order to insure the proper use of the shoreline. The following policies apply to development on the shorelines within the City of Sumas.

1. **AGRICULTURAL PRACTICES.** Agricultural practices are those methods used in vegetation and soil management. The methods used in the agricultural processes have a very great effect on the conditions of our shoreline and water quality.
 1. A buffer zone of natural occurring vegetation should be maintained between all tilled areas and their associated bodies of water.
 2. Livestock shelters and animal feeding facilities located within the shoreline area should make provisions to control run-off from feeds, manure, and associated animal wastes.
 3. Pesticides, herbicides, and other chemical products which can potentially harm aquatic life should not be used within the shoreline area.
 4. The watering of livestock in associated bodies of water should not be permitted.
 5. Tilled areas must meet erosion control guidelines as outlined by the Soil Conservation Service, U.S. Dept. of Agriculture.
2. **AQUACULTURE.** Aquaculture is the culture of food fish, shell fish, or other aquatic plants and animals. It is generally recognized that aquaculture development within the City of Sumas is unlikely. The following policies are therefore general in nature.
 1. Aquaculture activities should be compatible with the surrounding shoreline environment.
 2. Consideration should be given to visual and physical access to the shoreline when locating aquacultural activities.
3. **COMMERCIAL DEVELOPMENT.** Commercial developments are those uses which are involved in wholesale and retail trade or business activities. Because most commercial developments depend on people to support their certain activities these developments lead to concentrations of people and traffic, which in turn has a great effect on the condition of the shoreline. Water dependent commercial developments require a shoreline location. If unregulated, however, these activities can have an undesirable impact on the shoreline.
 1. Shoreline space should be reserved for those activities that are dependent on shoreline location for their day to day operations.
 2. Although some activities, such as restaurants, do not require shoreline location, they do increase public enjoyment of the shoreline and should be given consideration for location there.
 3. Commercial developments requiring parking should locate these areas away from the immediate water's edge.
 4. Consideration should be given to the effect on physical and visual access by new commercial development.

4. **MINING.** Mining is the removal of naturally occurring metallic minerals and non-metallic minerals from the earth for economic use. Removal of non-metallic aggregate (sand and gravel) from shoreline areas can lead to many adverse effects.
 1. Mining of sand and gravel from the shoreline area should not be permitted except in conjunction with flood and drainage improvement and/or habitat creation and enhancement.
 2. Mining of other minerals within the shoreline area should only be allowed if such development will have no significant adverse impact on the shoreline environment.
5. **OUTDOOR ADVERTISING, SIGNS AND BILLBOARDS.** Signs are publicly displayed boards whose purpose is to provide information, direction or advertising. Signs and billboards, because they are intended to be very visible can have a great effect on the aesthetics of an area.
 1. No off-premise advertising signs or billboards should be permitted within the shoreline area.
 2. In general, signs should be constructed against buildings to minimize visual obstruction of the shoreline.
 3. Size, height, density and lighting of signs should be compatible with adjacent shorelines uses.
6. **RESIDENTIAL DEVELOPMENT.** Residential development includes housing subdivisions or tract housing built by a person for resale, single family residences, townhouses, apartment houses, condominiums, camping clubs, or mobile home parks. All residential development, including residential development exempt from the shoreline permit requirements, should be generally consistent with the following policies.
 1. Subdividers should be encouraged to provide community access to the shoreline for residents of the subdivision.
 2. Erosion and sedimentation control measures should be included as part of the development plans.
7. **UTILITIES.** Utilities are systems which distribute or transport various items including electricity, oil, gas, communications, sewage and water. The installation of this apparatus necessarily disturbs the landscape but can be planned to have minimal visual and physical effect on the environment.
 1. Multiple use corridors should be used as much as possible when locating utilities.
 2. After installation/maintenance projects on shorelines, banks should be replanted in natural vegetation.
 3. The location of utilities should be chosen so as not to obstruct scenic views.
 4. Where possible utilities should be placed underground so as to not destroy the aesthetic qualities of the area.
 5. The use of rights of way for public access to and along the shoreline should be encouraged.

8. **INDUSTRIAL DEVELOPMENT.** This category contains those activities engaged in primary production. Industrial development can have a very great impact on shoreline areas. Their locations and size should be closely regulated.
 1. Industrial development should be compatible with the surrounding shoreline area.
 2. Cooperative use of parking and storage facilities by industry should be encouraged.
 3. Except when human safety is at risk, industrial development should provide public access to the shoreline.

9. **BULKHEAD.** Bulkheads are wall-like structures erected at bank edge or at the "toe" of a cliff. Their purpose is to protect uplands or fills from erosion by moving water. Bulkheads have been constructed of lumber and piles, reinforced concrete, rock, and steel beams. The type of construction materials used and the location of bulkheads are very important considerations to the protection of the natural shoreline. Because the rigid, artificial appearance of bulkheads has an adverse impact on the natural character of the shoreline, they should only be used where other more natural methods of shore protection are not feasible.
 1. Bulkheads should be constructed in a manner that will minimize alterations of the natural shoreline.
 2. Where possible, open type construction of bulkheads should be used.
 3. Bulkheads should only be used for the purpose of protecting upland areas and not for the purpose of creating new uplands.
 4. Bulkheads should only be used where other more natural appearing methods of shore protection are not feasible.
 5. The use of natural appearing rock should be encouraged in construction of bulkheads.
 6. Public access to the shoreline should be considered when locating bulkheads.

10. **LANDFILL.** Landfill is creation of, or addition to dry land area by depositing sand, soil, or gravel into a shoreland, or wetland area. Landfill can destroy the natural character of the shoreline and may create unnatural heavy erosion and silting problems while reducing the existing water surface.
 1. Factors such as total water surface reduction, impediment to water flow and circulation, reduction of water quality and destruction of habitat should be considered before granting landfill permits.
 2. Landfills should be designed so as to minimize damage to the shoreline environment.
 3. The perimeters of fills should be landscaped to retard soil erosion.
 4. Fill material should be of a quality so as not to cause problems of water quality.

11. DREDGING. Dredging is the removal of unconsolidated material (gravel, sand, silt) from the bottom of a stream, for purposes of drainage improvement, or to obtain bottom materials for landfill. If not adequately regulated, dredging has the potential to cause much environmental harm.
 1. Dredging other than for flood control, channel maintenance, and habitat creation/enhancement purposes should not be permitted.
 2. In those instances where dredging is permitted, the shoreline area should not be used as a disposal site for dredge spoils.
12. SHORELINE PROTECTION. Shoreline protection activities include floodplain or stream bank modifications such as levees, dams, rip rap (quarry rock) revetments, or other structures directed at containing or controlling flood waters, or preventing erosion of stream banks and soil at flood stage. Such activities are often called structural flood control, and can be extremely expensive both to construct and maintain.
 1. The design, location and construction of shoreline protection features should be undertaken only if it minimizes alteration of the natural shoreline.
 2. The use of setback dikes should be encouraged in those areas that require diking.
13. SOLID WASTE DISPOSAL. In general, all solid waste is a possible source of nuisance. Rapid, safe and nuisance-free storage, collection, transportation and disposal are of vital concern to all persons and communities. If the disposal of solid waste is not carefully planned and regulated, it can become not only a nuisance but a severe threat to the health and safety of persons, livestock, wildlife and other living things. The shoreline is a particularly sensitive area and consequently especially susceptible to the environmental impacts that usually accompany the operation of solid waste disposal facilities.
 1. Solid waste disposal facilities should not be permitted in the shoreline.
14. EARTH CHANGE. This category includes those activities which re-shape or change the character of the surface of the land. Activities covered by this section include: landclearing, landscaping, excavation and grading or other earth moving projects. Landfill, although similar to the above items, is a special type of earth change covered elsewhere in this program and therefore not included here.
 1. Earth change activities should be conducted in a manner which does not interfere with stream flow and with the flood carrying capacity of the streamway.
 2. Earth change activities in the shoreline should only be done in conjunction with an approved shoreline development or use.
 4. Careful scrutiny should be given to any earth change proposal which involves the use of machinery or equipment in water bodies, wetlands, or the conservancy environment.

15. ROAD AND RAILROAD DESIGN AND CONSTRUCTION. A road is a linear passageway for motor vehicles, and a railroad is a linear passageway with tracks for train traffic. Their construction can both provide and limit access to shorelines; impair the visual qualities of water-oriented vistas, expose soils to erosion and retard the runoff of flood waters, and accelerate or retard development.
 1. Whenever feasible, roads and railroads should be located away from shorelines.
 2. The impact on the natural shoreline environment should be the main consideration when designing, locating and constructing roads and railroads in the shoreline area.
 3. Road designs should make provisions in their rights of way for pedestrian access to the shorelines.

16. ARCHAEOLOGICAL AREAS AND HISTORIC SITES. Indian and pioneer villages, military forts, old settlers homes, and trails were often located on shorelines because of the proximity of food resources and because water provided a practical means of transportation. These sites are nonrenewable resources and many are in danger of being lost through present day changes in land use and urbanization. Because of their rarity and the educational link they provide to our past, these locations should be preserved whenever possible.
 1. Sites should be permanently preserved for scientific study and public observation.
 2. Developers should be required to notify town officials if such sites are uncovered during excavation.

17. RECREATION. Recreation is the refreshment of body and mind outdoors or indoors through forms of play, sports, amusement or relaxation. Water-related recreation accounts for a very high proportion of all recreational activity in the Pacific Northwest. The recreational experience may be either an active one involving boating, swimming, fishing or hunting or the experience may be passive such as enjoying the natural beauty of a shoreline, nature study, or picnicking. Priority shall be given to recreational activities that receive the most benefit from a shoreline location. These activities would include: walking, viewing, picnicking and camping.
 1. Insure adequate space for shoreline walking, viewing, and general shoreline enjoyment.
 2. Encourage property owners to allow some public use of their shoreline land.
 3. Encourage only those recreational activities that are compatible with the shoreline environment.

3. Land Use Element

This chapter is a required element of a comprehensive plan developed to meet the provisions of the GMA. The chapter describes how the plan's overall goals will be implemented through land-use mechanisms. In overview, this chapter presents descriptions of the local environs, an inventory of existing land use, an estimate of future demands for land, and a description of the development that must occur, both inside and outside the existing city, in order to meet future demands.

Geography and Environment

The city of Sumas is located adjacent to the Canadian border in western Whatcom county, approximately 25 miles northeast of Bellingham. The nearest neighboring city is Nooksack, which lies seven miles to the southwest. Sumas is a small city encompassing just 884 acres of land. A major border crossing is located in town, so several transportation facilities terminate at Sumas, including SR9 and a Burlington Northern railroad line. As shown on Map 1, the terrain consists primarily of gently sloping land in the Sumas River basin. At the north of town is a knoll known as Moe's Hill, site of the city's water reservoir. Map 1 also shows that higher ground is located 1.5 miles west of town. These uplands stretch extensively to the west and northwest and consist of sand and gravel deposited by outwash during episodes of glaciation.

Geology. - Figure 3-1 reveals the local geologic environment. Two faults trend southwest-to-northeast from the San Juan Islands through Whatcom County and into southern B.C. Between the faults the bedrock has dropped relative to the surrounding land, and the down-dropped area has filled with unconsolidated sands, silts, and clays, forming the areas known as the Nooksack Valley, the Sumas Prairie, and the Upper Fraser Valley. The faults might still be active. Sumas is situated on the unconsolidated sediments near the north edge of the down-dropped area.

Soils. Map 2 shows the locations of various soil types according to the Soil Conservation Service (SCS). Soil types under the developed part of the city are numbers 22 (Briscot), 162 (Sumas), and 123 (Puget). These soils consist of nutrient-rich sediments deposited by the flooding that occurs regularly along the rivers and streams. When protected from flooding, these soils are good pasture or crop land. The soils have the strength to support buildings, but drainage around foundations and footings can be a problem. Outside town on the floodplain are two other soils with similar characteristics, numbers 107 (Mt. Vernon) and 115 (Oridia).

At the northwest of town, extending to the west along the border, are soils associated with the glacial deposits underlying Moe's Hill and the uplands. These soils are numbers 96, 97, and 98 (Laxton). These soils are adequate pasture or crop land and also have the strength to support buildings, although a seasonally high water table affects the use of these soils. Soil number 157 (Squalicum) exists on the slopes of Moe's Hill. This gravelly soil is good woodland, but the 15 to 30 percent slope hinders the soil's usefulness for other purposes.

At the west of town are areas of soil number 116 (Pangborn) and 144 (Shalcar/Fishtrap). These are mucky soils that have limited usefulness for either farming or building. To support buildings, the muck must be excavated or the buildings must be constructed on pilings.

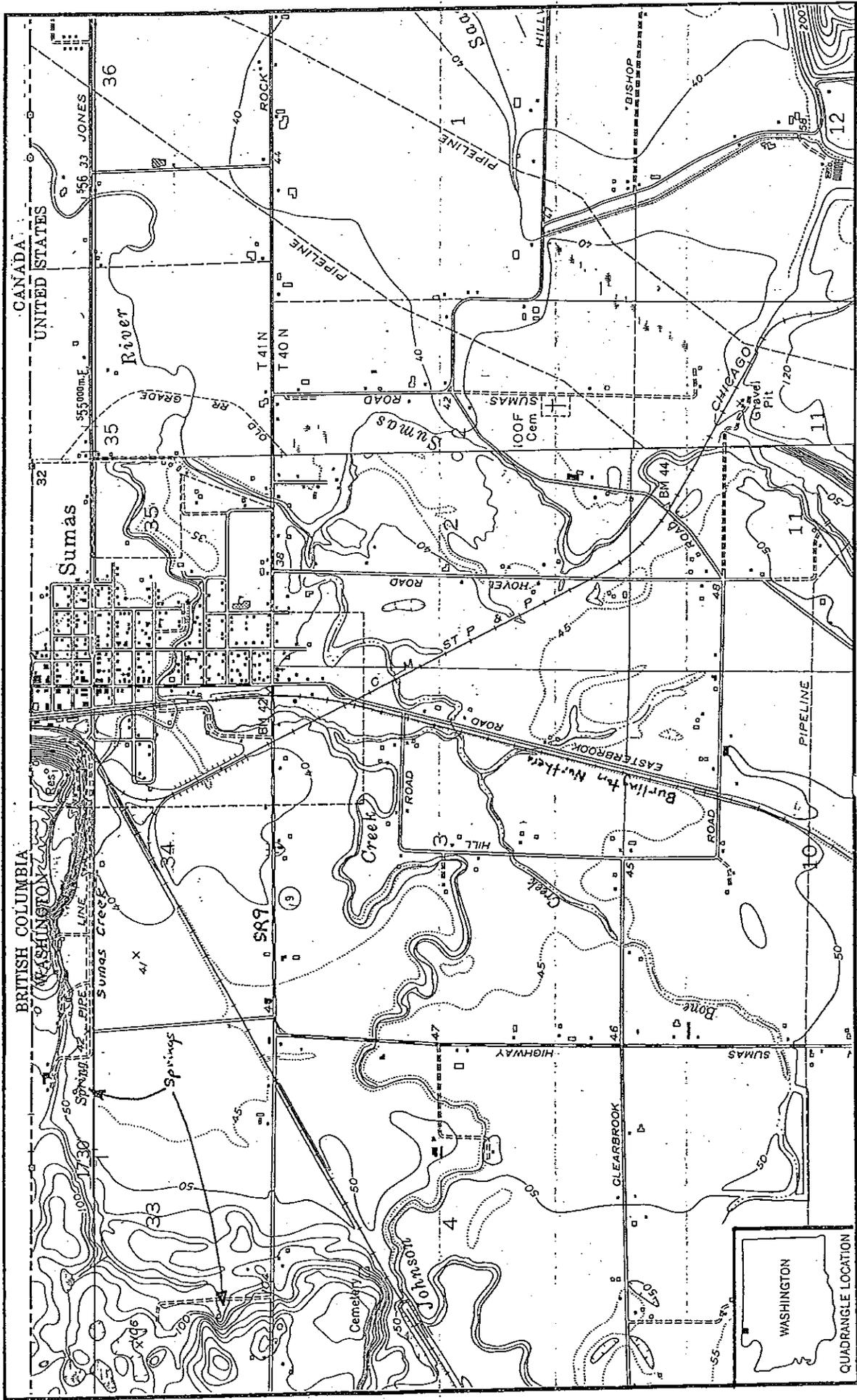
Groundwater. The sand and gravel upland to the west of town is a major regional aquifer known as the Abbotsford-Sumas aquifer. Sumas relies on the aquifer for its own domestic water supply, and Sumas also supplies groundwater to two neighboring water associations and the city of Nooksack. There are several seeps and springs scattered along the edge of the aquifer. Arrows in the northwest corner of Map 1 identify the two springs that are most important to Sumas. The city has a wellfield located at each identified site. The westernmost site is the May Road wellfield, and the northern site is the Sumas wellfield.

Agricultural activities on the upland have led to degradation of water quality. The groundwater contains elevated levels of nitrate (caused by fertilizers and manure) and trace levels of organic chemicals (caused by pesticides). At Sumas's wells, nitrate contamination is the only concern. The May Road wells produce water with a nitrate concentration of about 11 milligrams per liter (mg/l), as compared to a maximum allowable concentration in drinking water of 10 mg/l. The water is thus used only for industrial processes at this time. The Sumas wellfield produces water with a nitrate concentration of about 6 mg/l.

Wetlands and surface waters. Map 3 shows wetlands in and around Sumas as found in the National Wetlands Inventory (NWI) and in inventories conducted for the city by David Evans & Associates (DEA) and Bexar Consulting. Within the existing city limits, most wetlands are present to the west of downtown, between Halverstick Road and Kneuman Road. These wetlands are associated with the existing creeks or with sloughs formed by old courses of the creeks. Some are classified "palustrine emergent" (PEMC, PEMA according to the NWI), which means they are associated with stream courses and are seasonally flooded. Some are "riverine perennial" (R2UBH), meaning that they are permanent wetlands associated with the creeks. The westernmost wetlands on Map 3 are "palustrine forested" (PFOC, PFOA) and are associated with marshy areas at the edge of the Abbotsford-Sumas aquifer.

The major local surface water is the Sumas River, which has its headwaters on Sumas Mountain, a foothill of the Cascade Mountains lying six miles to the southeast. The region slopes gently northward, so the Sumas River flows north to the Fraser River in Canada. Three other creeks converge in town: Sumas Creek flows from the west, and Johnson and Bone Creeks flow from the southwest. The three creeks merge at the west of the downtown area, and the single resulting creek is Johnson Creek, which flows east through the downtown area and empties into the Sumas River just east of the city limits. Sumas Creek originates at springs located at the edge of the Abbotsford-Sumas aquifer. Another regional waterbody affecting Sumas is the Nooksack River, which flows west through the city of Everson (eight miles to the southwest) and empties into Puget Sound. All the local rivers and creeks follow meandering courses and have shifted beds many times in the past.

According to the Department of Ecology, the Sumas River is a 'class A' waterbody, meaning that water quality should meet high standards. Monitoring programs upstream from Sumas have revealed, however, that water quality fails to meet some class A standards: water temperature reaches 22° C in the summer, compared to a desired maximum of 18° C; dissolved oxygen concentrations have dipped as low as 6.1 mg/L, compared to a minimum of 8.0 mg/L;



Map 1. City of Sumas and Environs
 Source: Sumas, WA and Kendall, WA Quadrangles.
 7.5' Series (Topographic), U.S.G.S., 1972.

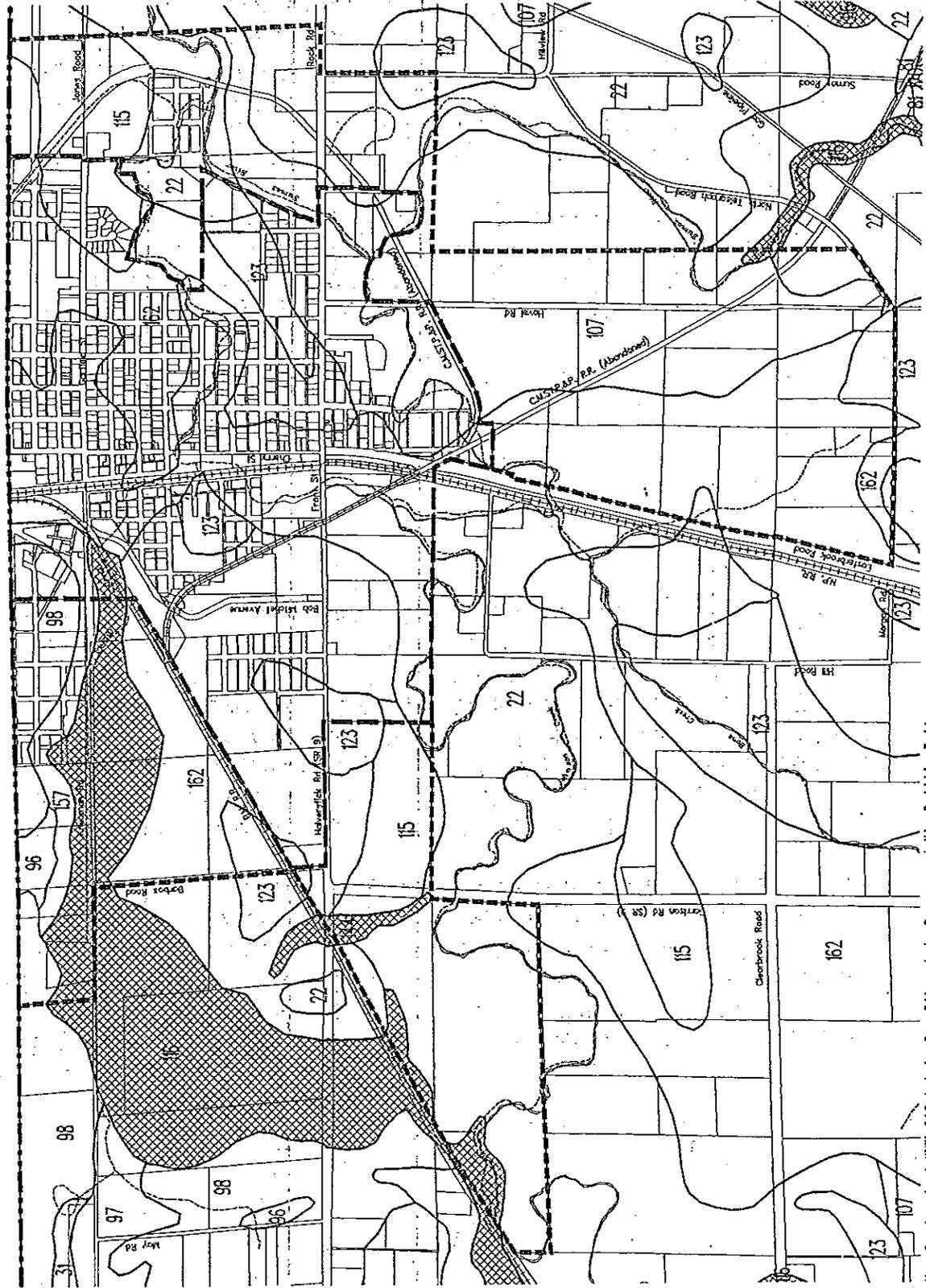
Map 2 City of Sumas

S.C.S. Soil
Classifications

Legend

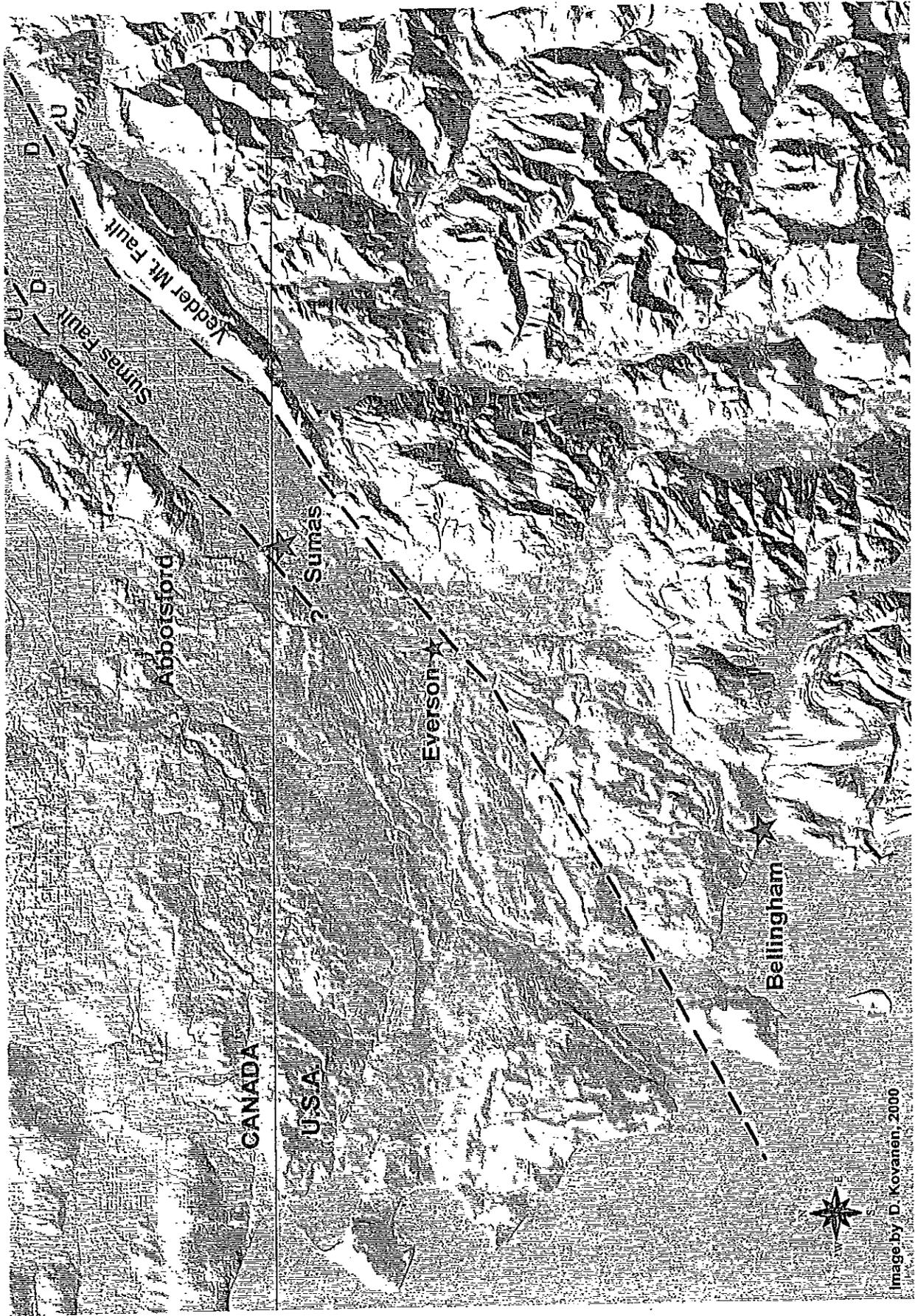
- Parcel Boundaries
- Streams
- Railroads
- City Limits
- USA Boundary
- US/Canada Border
- Mucky Soils

Canada

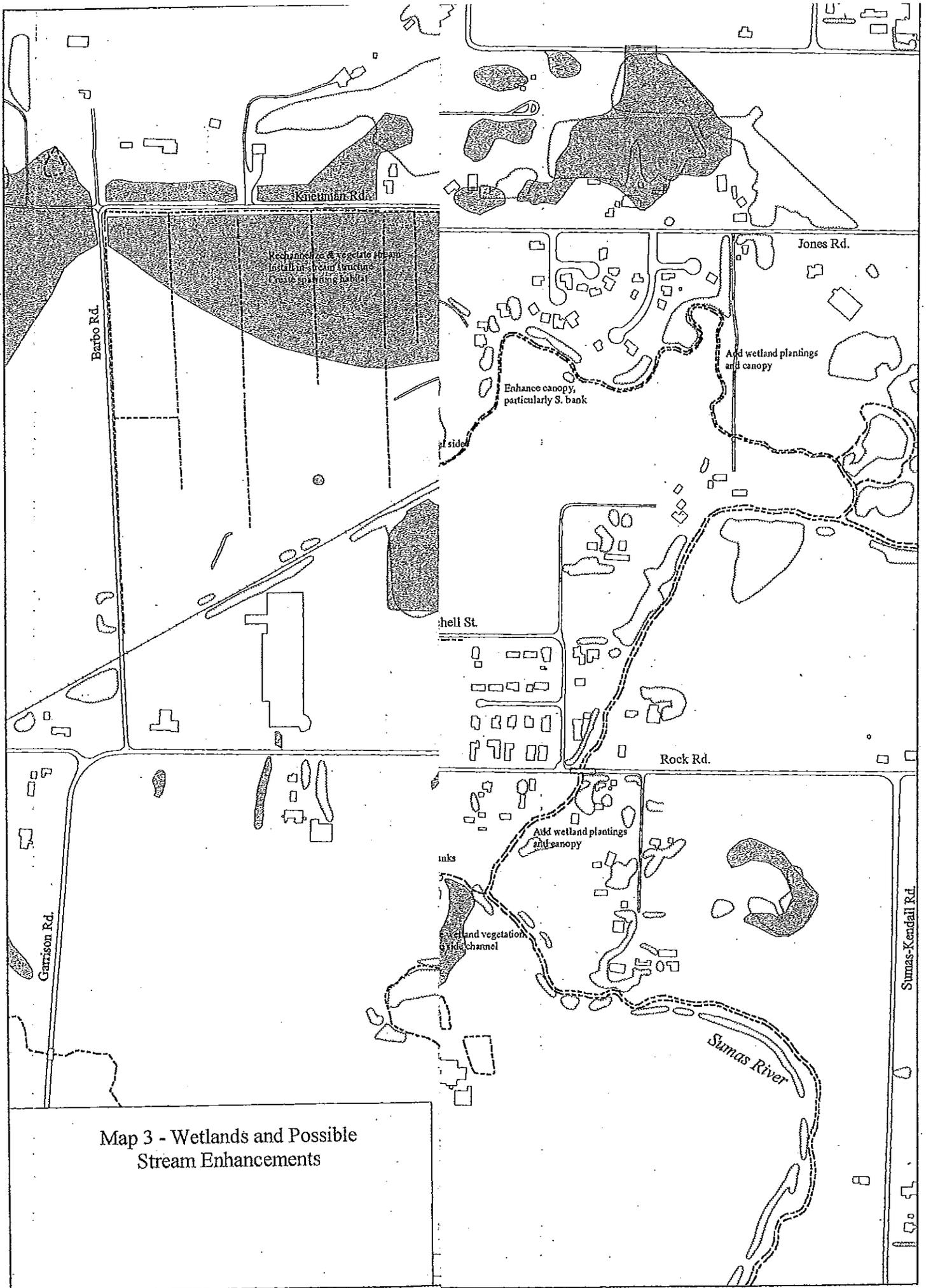


Map Produced at WNU GIS Lab by Dan Pike, Andy Boyce, and Kim RattlingToll

Sumas-Vedder Mt. Graben



Geologic Information by:
D.J. Easterbrook, D.C. Engebretson, D.J. Kovanen



Map 3 - Wetlands and Possible Stream Enhancements

concentrations of fecal coliform bacteria and of certain metals (silver, cadmium, lead, mercury) have exceeded allowable levels. With the possible exception of the metals pollution, Sumas is largely blameless for the water-quality problems. Elevated temperatures are a consequence of low flows during the summer months combined with loss of shade trees adjacent to the river, and runoff from farms is regarded as the major cause of low oxygen and high coliform concentrations. Substandard water quality detracts from many beneficial uses of the river, but particularly impacts fish habitat.

Fish and wildlife habitat. In 1998, DEA prepared a *Fish Habitat Reconnaissance Assessment* that analyzes the habitat potential in the local streams. The report indicates that fish habitat conditions in Sumas range from poor to fair. Quoting from the report:

Physical in-channel features such as wood or large substrate are mostly absent from the streams, leaving habitat structure lacking in both diversity and complexity; resultant channel conditions are often long glides of uniform dimensions interspersed with a few ill-defined pools. The few pools that do exist are infrequent, occupy small areas, and are not much deeper than the glides, because they are often infilled with fine sediment. Spawning habitat was almost nonexistent in the study streams, with a few small patches of spawning gravels noted only in the upper reach of Sumas Creek. In many of the study reaches, opportunities for fish to find cover from prey were very limited; bank undercut does provide cover periodically. In areas where riparian canopy cover is lacking, reed canarygrass dominates the riparian vegetation.

Only one area of Sumas' riverine systems can be described as providing exceptional habitat. This area is located in an extensive wetland system at the headwaters of Sumas Creek. Even this area has received some degree of impact and has some shortcomings... (p. 5)

The report provides detailed recommendations about kinds of habitat enhancement needed along the various reaches of the local streams. The recommendations are summarized on Map 3. Despite the degraded condition of the habitat, all the local creeks still function as habitat for anadromous fish. The Sumas River has steelhead and cutthroat that migrate to upstream tributaries such as Breckenridge Creek. Both Sumas Creek and Johnson River have coho, chum, and cutthroat.

There is also significant habitat for birds surrounding Sumas. The flood-prone lands south and southwest of town are good habitat for raptors, heron, waterfowl, and swans.

Flooding. Map 4 shows the location of flood-prone areas. The map shows a broad expanse of floodplain ("Special Flood Hazard Area" on Map 4) extending throughout much of the town. The floodplain is a result of flooding of the Nooksack River eight miles to the south. Given the prevailing northward slope, any overflow of the Nooksack heads north to Canada. Floods reach Sumas from the southwest along the path of Johnson Creek and are funneled toward town by the two railroad lines extending to the south and southwest. The elevated embankments function as dikes that control the path of the flood. Flood water then heads northeast through the downtown region and across the border into Canada. Major floods occurred in 1989 and 1990, with water reaching a depth of five feet downtown.

Critical Areas and Resource Lands

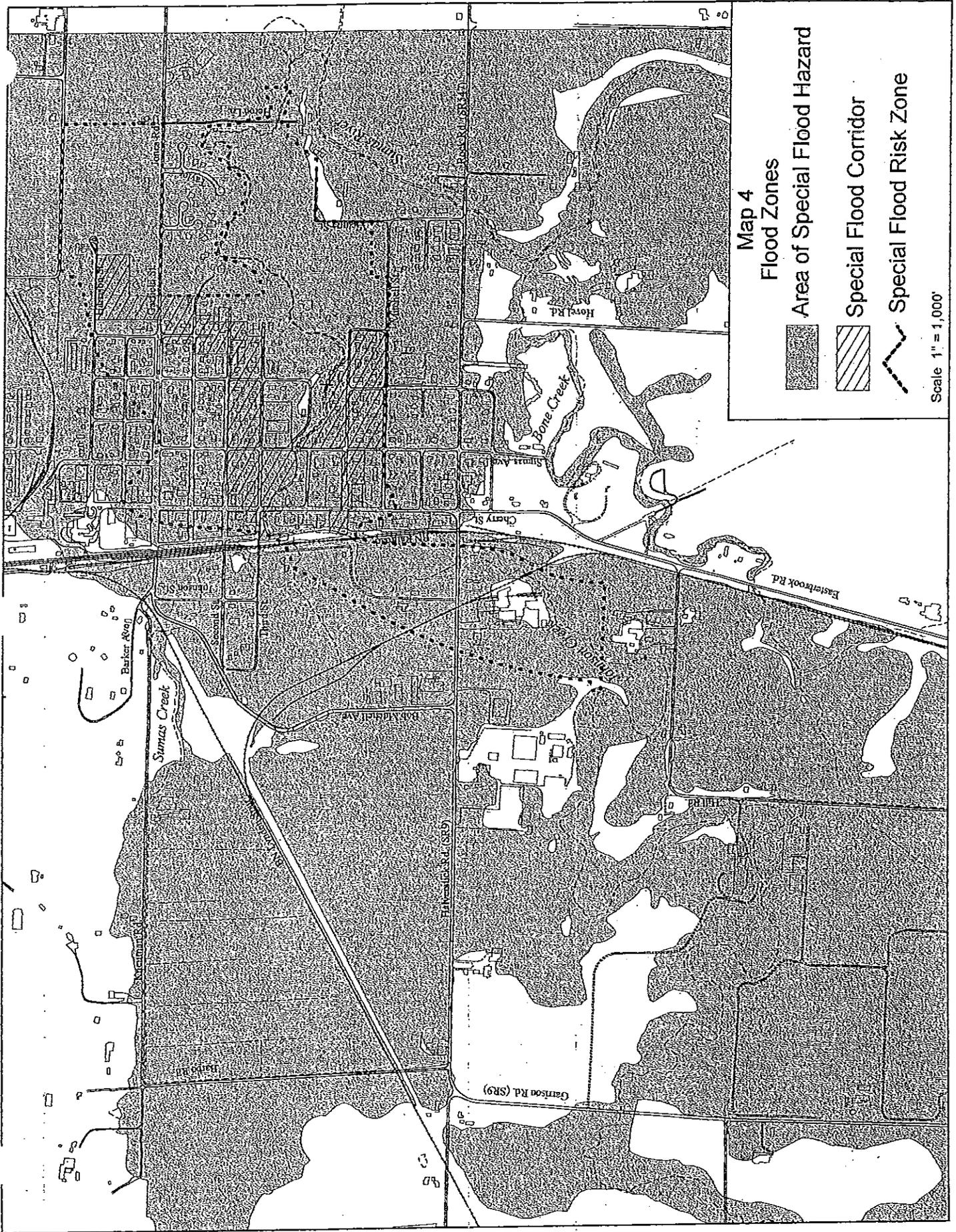
As required by the GMA (RCW 36.70A.170), the city of Sumas has adopted ordinances to designate, classify, and protect natural resource lands and critical areas. A summary of the regulations pertaining to the various kinds of areas is presented below.

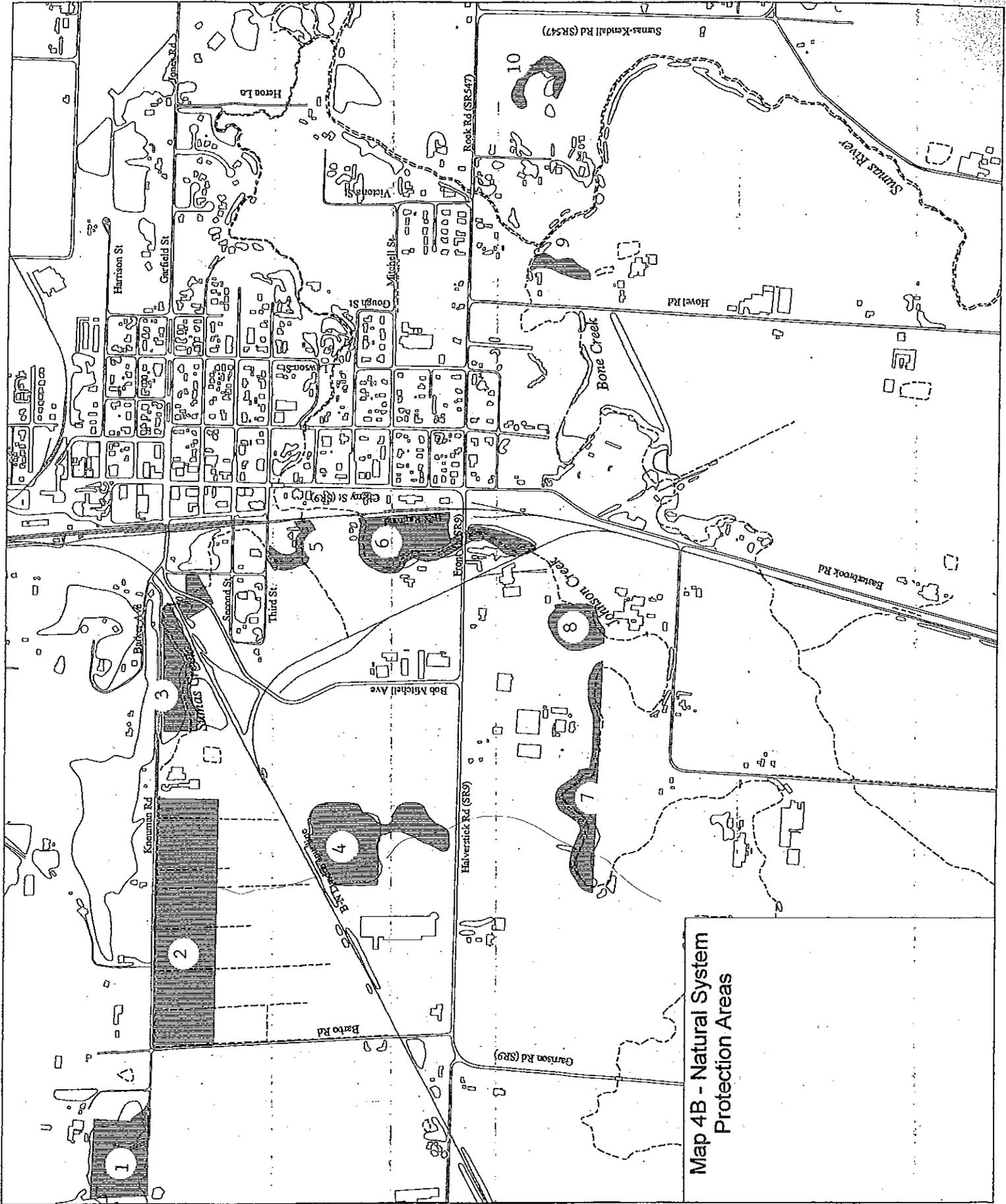
Frequently flooded areas: These areas are regulated by Chapter 14.30 SMC (the Flood Damage Prevention Ordinance). The code recognizes three kinds of areas. Map 4 shows the approximate location of these areas, but the actual boundaries of regulated areas are as identified in the current adopted version of the Flood Management Plan. The flood *hazard* area encompasses all land that has a one percent or greater chance of flooding in a given year (i.e., the 100-year flood plain). Within that area, new buildings and major remodels must have the lowest floor at a height at least one foot higher than the flood elevation. The flood *risk* zone is a smaller area encompassing all land in and around a river channel, where water must move freely in order to carry the flood. Many kinds of development are prohibited in the risk zone. New buildings must stand on pilings so that flood water can pass freely beneath. Flood *corridors* are areas targeted for conversion from urban use to open space in order to provide increased flood-conveyance capacity through developed portions of the City. No new buildings are allowed on vacant lots within a corridor.

Wetlands and streams. These areas are regulated both by Chapter 15.20 SMC (the CAO) and by Chapter 15.04 SMC (the SMP). The SMP applies to Johnson Creek, Sumas River, and all wetlands within the flood plain. The CAO applies to Bone Creek, Sumas Creek, and to wetlands outside the flood plain. Identical provisions are enacted in both sets of code. The codes recognize four categories of wetlands:

- Category I. These are wetlands with exceptional resource value because they serve as habitat for endangered or threatened species or they harbor rare wetland communities with irreplaceable ecological functions. Natural Heritage Wetlands are included in this category. Generally, no development is allowed within 100 feet of category I wetlands, although exceptions may be made for certain public purposes.
- Category II. These are wetlands with a significant habitat value because of either large size, diversity of vegetation, or presence of open water year round. Wetlands adjacent to salmon-bearing streams are included in this category. Generally, no development is allowed within 50 feet of category II wetlands, although exceptions may be made for certain public purposes.
- Category III. These are wetlands greater than 10,000 square feet, but with relatively little habitat value, diversity of vegetation, and functional value for stormwater management. Generally, development is permitted provided a mitigation plan is followed.
- Category IV. These are wetlands one acre or larger that are not included in the previous three categories. Generally, development is permitted provided a mitigation plan is followed.

Prior to approval of a development proposal, a delineation must be performed by a wetland specialist according to the method described in the *1987 Federal Manual for Identifying and Delineating Jurisdictional Wetlands*. In some instances, the city may waive the delineation requirement.





Map 4B - Natural System Protection Areas

The codes also establish buffers adjacent to streams. Buffer widths vary according to the shoreline environment designations. In urban environments, buffers range in size from 10 to 25 feet. In the conservancy environment, an upland buffer of 100 feet applies. For both stream and wetland buffers, the codes allow averaging of buffer widths and also allow reductions in buffer widths if land owners develop enhanced buffers. Off-site mitigation is also permitted, provided that the mitigation receiving area is within a Natural System Protection Area, as described below.

Fish and wildlife habitat conservation areas. Habitat conservation is accomplished via the wetland and stream provisions of the SMP and the CAO, coupled with the Natural System Protection Area overlay zone. See the discussion of Natural System Protection Areas below.

Aquifer recharge areas. Sumas relies on groundwater as a domestic water source, but the wells are at the edge of town, and the *Wellhead Protection Program* reveals that recharge areas lie in Whatcom County and British Columbia. Sumas actively participates in binational groundwater protection forums such as the Abbotsford-Sumas Aquifer International Task Force and the Abbotsford-Sumas Aquifer Stakeholders Group. As yet, no regulation specifically protects aquifer recharge areas within Sumas's jurisdiction. The agricultural zoning surrounding the city well field serves to prohibit intense urban development that could pose a threat to water quality.

Geologically hazardous areas. There are two main categories of geologic hazard in Sumas. First, there are areas of steep slope on Moe's Hill that have been subject to small slides and that are inappropriate for development. Second, western Washington as a whole is seismically active, both because of major tectonic plate movements and because of movement along shallow faults such as the two bedrock faults mentioned earlier (see Figure 3-1). The two local faults were thought to be inactive until late 2000, when evidence of their activity was presented by researchers at Western Washington University. If the faults are indeed active, the threat of earthquakes in northern Whatcom County and the Upper Fraser Valley might be greater than that elsewhere within northern Puget Sound. In Sumas, the major dangers associated with seismic activity are physical shaking of structures and liquefaction of underlying soils. Given the proximity of Sumas to the northern bedrock fault, there is also the possibility of vertical ground displacement on either side of the fault, but this threat is thought to be minor given the thickness of unconsolidated sediment overlying the actual fault.

The CAO contains few provisions specific to geologic hazards. Because the entire region is thought to be seismically active, most of western Washington is mapped as seismic zone 3 within the Uniform Building Code (UBC), and stricter standards are therefore already applicable. It is not known whether more stringent standards should be enacted locally, given the proximity of the two bedrock faults. In the normal course of events, the UBC will eventually be updated to reflect any greater danger proven to exist along the faults. Meanwhile, if larger jurisdictions such as Bellingham, Whatcom County, and the City of Abbotsford, B.C., adopt stricter standards because of the new evidence, Sumas should consider following suit.

Mineral, agricultural, and forest resource lands. No mineral, agricultural, or forest resource lands of long term significance have been designated by Sumas within either the city limits or the proposed urban growth area. However, Whatcom County's comprehensive plan does designate the surrounding unincorporated agricultural land as agricultural resource, except for portions within the Sumas UGA. This makes it difficult for Sumas to expand without impacting County resource lands. The city intends to grow such that agricultural uses will be able to coexist within the UGA until the event of an annexation. At that time agricultural lands will become available for development.

Natural System Protection Areas

The 1998 revisions to this plan and to the SMP were designed to protect and enhance the habitat value of the streams and the high-value wetlands. The regulatory framework for habitat protection is the designation of Natural System Protection Areas (NSPAs) within this comprehensive plan, together with the establishment of policies applicable to such areas. Implementation of the policies is then accomplished in the CAO and the SMP. Policies with respect to NSPAs are as follows:

- Existing habitat within an NSPA should not be adversely impacted by adjacent development.
- The habitat quality within NSPAs should be enhanced where possible.
- Above-ground structures should be prohibited within NSPAs, including parking and impervious surfaces. Underground structures should be allowed when such structures do not significantly impact habitat quality.
- Enhancement of habitat should be accomplished through regulatory incentives, including reductions in mandatory buffers when buffer quality is enhanced.
- Enhancement of habitat should be accomplished through voluntary programs, such as public or private mitigation banking.
- Mitigation banking should be authorized by code, with NSPAs serving as target areas for off-site mitigation.

In order to provide the science-based data needed to identify the existing value of habitat and the potential for habitat enhancement, Sumas commissioned two studies. DEA conducted an assessment of the fish habitat value of local streams; and Bexar Consulting updated the city's wetland inventory. The wetland and stream data was then used, in conjunction with other criteria, to designate NSPAs. Designation criteria include:

- Areas now serving a valuable habitat function for fish and/or waterfowl.
- Areas capable of serving a valuable habitat function after enhancement.
- Areas serving additional function as flood conveyance paths or as wellhead protection areas.
- Areas with large parcel sizes, so that significant parts of a parcel would remain outside of a designated area and thus available for development.
- Areas not now containing urban development (i.e., impervious surfaces, buildings).
- Areas targeted for habitat enhancement by land owners.

Designated NSPAs are shown on Map 4B. The following site-specific discussion is linked to the numbered areas on that map:

1. This 7.8-acre area includes the City's well-field parcel, as well as some land immediately adjacent to both the east and west. Sumas Creek flows through the southern edge of the area, and the area contains several springs feeding the creek, as well as forested wetlands hydraulically continuous with the creek. This part of the creek contains good spawning habitat, according to DEA's fish habitat assessment. The area also serves as the sanitary control area for the City's potable well field.
2. This 27-acre area contains all of Tract C of the Sytsma Lot-Line Adjustment, except for an 80-foot wide swathe across the southern edge of Tract C, which is excluded from the NSPA in order to provide the owners with greater flexibility of use. The area is designated as an NSPA because the intended use of Tract C is wetland mitigation banking. The area is attractive for this purpose because it abuts Sumas Creek and because it contains topography and soil types conducive to conversion to wetlands.
3. This 7.3-acre area includes portions of undeveloped parcels owned by Burlington-Northern Railroad and by Sumas. Sumas Creek flows through the parcels, and the parcels contain significant canopy cover, as well as wetlands continuous with the creek. Within the B-N parcel, a 60-foot wide swathe on the right bank is included within the NSPA, as well as all land on the left bank between the creek and Kneuman Road.
4. This 11.7-acre dumbbell-shaped area lies within an undeveloped 40-acre industrially-zoned parcel owned by Hesselgrave Farms that will likely be converted to industrial use early within the planning horizon. The northern part of the dumbbell corresponds to a forested Category II wetland, and the southern part contains a farmed wetland pasture that is mapped in the National Wetland Inventory. The farmed wetland has minor value as waterfowl habitat at this time and has potential for conversion to higher-quality wetland. The farmed wetland also serves an important flood- and stormwater-conveyance function. As mitigation for wetland impacts elsewhere on site, the eventual developer of the 40-acre parcel should enhance the farmed wetland either in its present location or in closer proximity to the forested wetland.
5. This 1.9 acre area lies within an undeveloped 20-acre industrially-zoned parcel owned by Sumas Associates. The NSPA contains land within a 120-foot wide swathe centered upon Sumas Creek, along the reach of the creek from the culvert under W. Third Street to the culvert under the B-N main line. DEA's fish habitat assessment identifies several enhancements appropriate to this reach, including installation of in-stream structures and planting of riparian vegetation. The eventual developer of the 20-acre parcel should enhance the creek riparian zone as mitigation for wetland impacts elsewhere on site.
6. This 9.9 acre area extends along the reach of Johnson Creek from the rail trestle behind Elenbaas to the rail trestle under the B-N main line. The area includes a 60 foot swathe along the left bank of the creek; and all of the right bank of the creek north of Front Street and west of the rail line; and the forested portion of the right bank south of Front Street; but exclusive of the Front Street right-of-way. This creek reach is identified as quality fish habitat within DEA's assessment. The reach should be preserved and enhanced. Possible enhancements include planting of riparian vegetation, particularly on the right bank at the north end of the reach. The area is also the main route of Johnson Creek flooding, which limits its development potential.

7. This 7.1-acre area stretches across the southern edge of four large parcels containing or intended for industrial development (Jaeger, Sumas Industrial Park, SOCC/SEI, Dentech). Existing development within the four parcels is distant from Johnson Creek. The NSPA contains a 60-foot wide swathe on the left bank of Johnson Creek, as well as all portions of the four parcels on the right bank of Johnson Creek. DEA's habitat assessment identifies improvements to riparian vegetation that could be made along this reach. Developers on the parcels should enhance the riparian zone as mitigation for wetland impacts elsewhere on site.
8. This 3.6-acre area is a topographically low area on the left bank of Johnson Creek at the back of the Tyrell parcel, together with a swathe 60 feet wide on the opposite bank. DEA's report identifies this area as a good site for a constructed side-channel. The site should be enhanced as off-site mitigation for impacts to low value wetlands elsewhere in town.
9. This 1.4-acre area contains a wetland that is tributary to Bone Creek. DEA's report notes that the wetland could be enhanced to provide off-channel rearing habitat. Alternatively, the wetland could be enhanced to improve water quality and wildlife habitat functions. The site should be enhanced as mitigation for impacts to low value wetlands elsewhere in town.
10. This 1.8-acre area contains a forested wetland associated with an old oxbow of the Sumas River. The oxbow is no longer continuous with the river, but it does offer significant habitat value to water fowl. The oxbow wetland should be preserved.

Areas of Historical Significance

Several structures in Sumas are listed on the Whatcom County Register of historic places, including: the Parkinson House, the Sumas Methodist Church, the Thomas House, the BB & BC Railroad Depot, the Northern Pacific Railroad Depot, and the old U.S. Border Station. None of the sites are listed in either the state or national registers of historic places, although the U.S. Border Station was determined to be eligible for listing on the state register. The county register also includes a Native American campsite adjacent to the Sumas River at the east edge of the city.

Current Land Use

Table 3-1 contains a summary of land use within the city limits as of January, 2004. The table is organized according to the zones defined in the Sumas Municipal Code. For each zone, the table shows the total acreage within the zone, the amount of the acreage that has already been developed, and the amount that is vacant. Map 5 shows the locations of the various zones within the city. Generally, the business zones stretch the length of Cherry Street, the industrial zone is further west, bracketing Halverstick Road, and the residential zones are to the south and east, except for the low-density residential zone to the northwest at Moe's Hill.

Buildable land supply

This section presents an analysis of the supply of land available to accommodate growth within the existing city limits. The methodology generally follows a scheme developed by the county Growth Management Oversight Committee.

Residential supply. "Vacant lots" comprise existing lots of record that are easily served with utilities. A total of 54 such lots are present in Sumas, as identified on Map 5A. "Underdeveloped lots" comprise those lots that contain some development (typically a house), but that could contain additional residences. An estimate was made of the specific number of homes that could be placed on each such lot. A total of 29 such home sites are identified on Map 5A.

Environmental constraints can make it prohibitively expensive to pursue development on certain parcels. This concept is reflected in the city's analysis of "Vacant land." For the residential zones, vacant parcels within the Special Flood Risk Zone have been classified as undevelopable, as have areas within buffer setbacks adjacent to streams and high-value wetlands. A total of 47.2 vacant developable acres is therefore available in the residential zones (22.6 acres High density, 22.2 Medium density, and 2.4 Low density). Map 5A identifies these lands with gray shading – they are generally located on Moe's Hill and in the area south of Rock Road. At a density of 3 units per gross acre (i.e., 4 units per net developable acre), 142 units can be accommodated in these areas.

Altogether, the above analysis reveals residential infill capacity for 225 housing units.

Commercial supply. The only significant parcel of commercial land available in Sumas is the underdeveloped "Business – General" area south of Front Street, visible on Map 5. This area is 7.6 acres in size, but contains five existing homes and a church. There is also vacant land sandwiched between the railroad tracks and Johnson Creek, immediately north of Front Street, but development of this area is very problematic because of floodplain and shoreline issues.

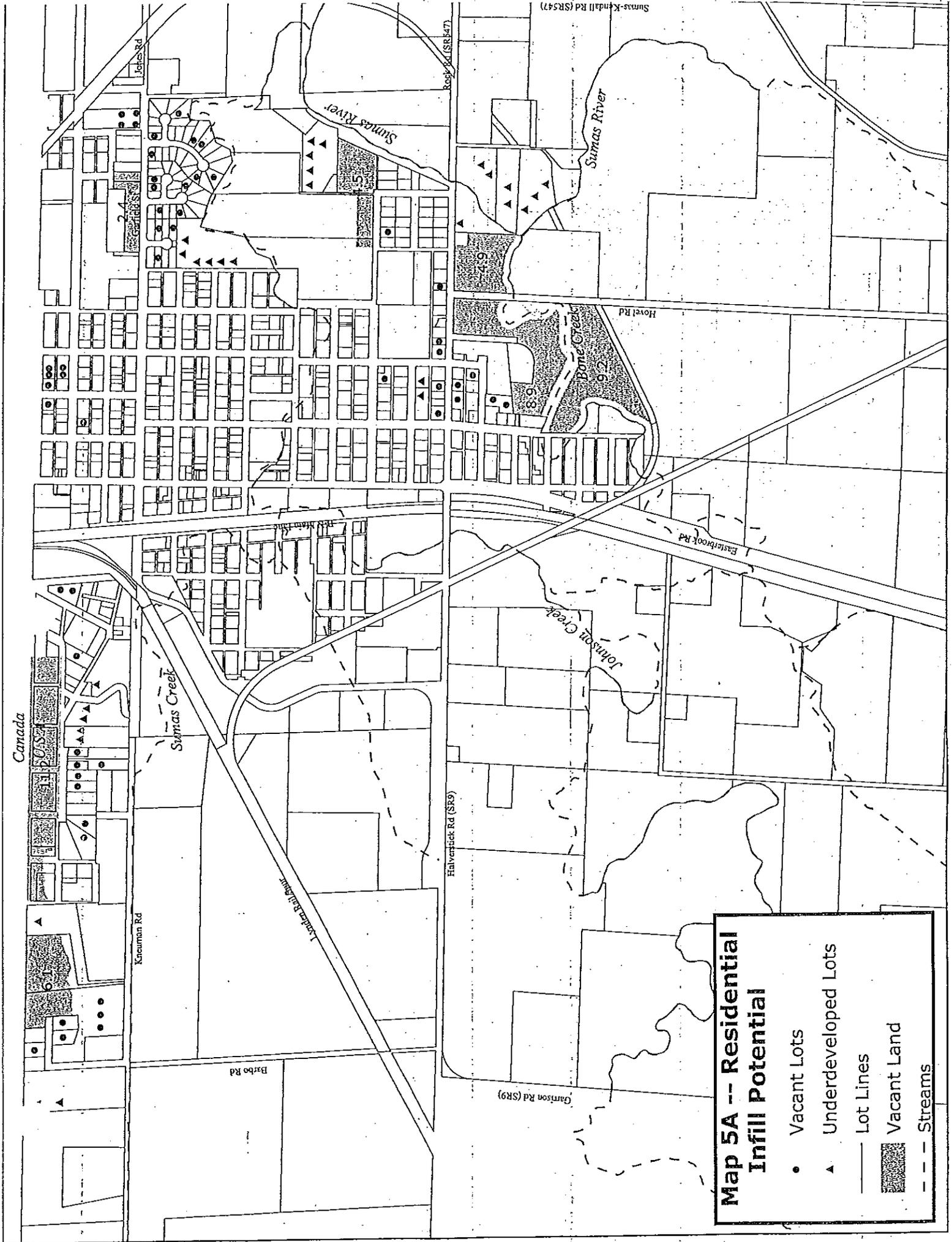
Industrial supply. There are seven significant parcels of developable industrial land within Sumas, as identified on Map 5B. The combined developable area of the parcels amounts to 115 acres, as shown in Table 3-1. There is an additional 135 acres of industrial land that is not economically developable because it is within either the Special Flood Risk Zone, a buffer of a Category II wetland, or a stream setback. In addition, the usefulness of some industrial land is lessened by a second factor -- some of the inventory is chopped into small parcels. The problem

is worst near at the northeast corner of the industrial area, where industrial zoning replaced residential zoning a number of years ago. Parcels are very small in this area, and some are still occupied by single-family homes.

Table 3-1. Land Inventory, Existing City Limits

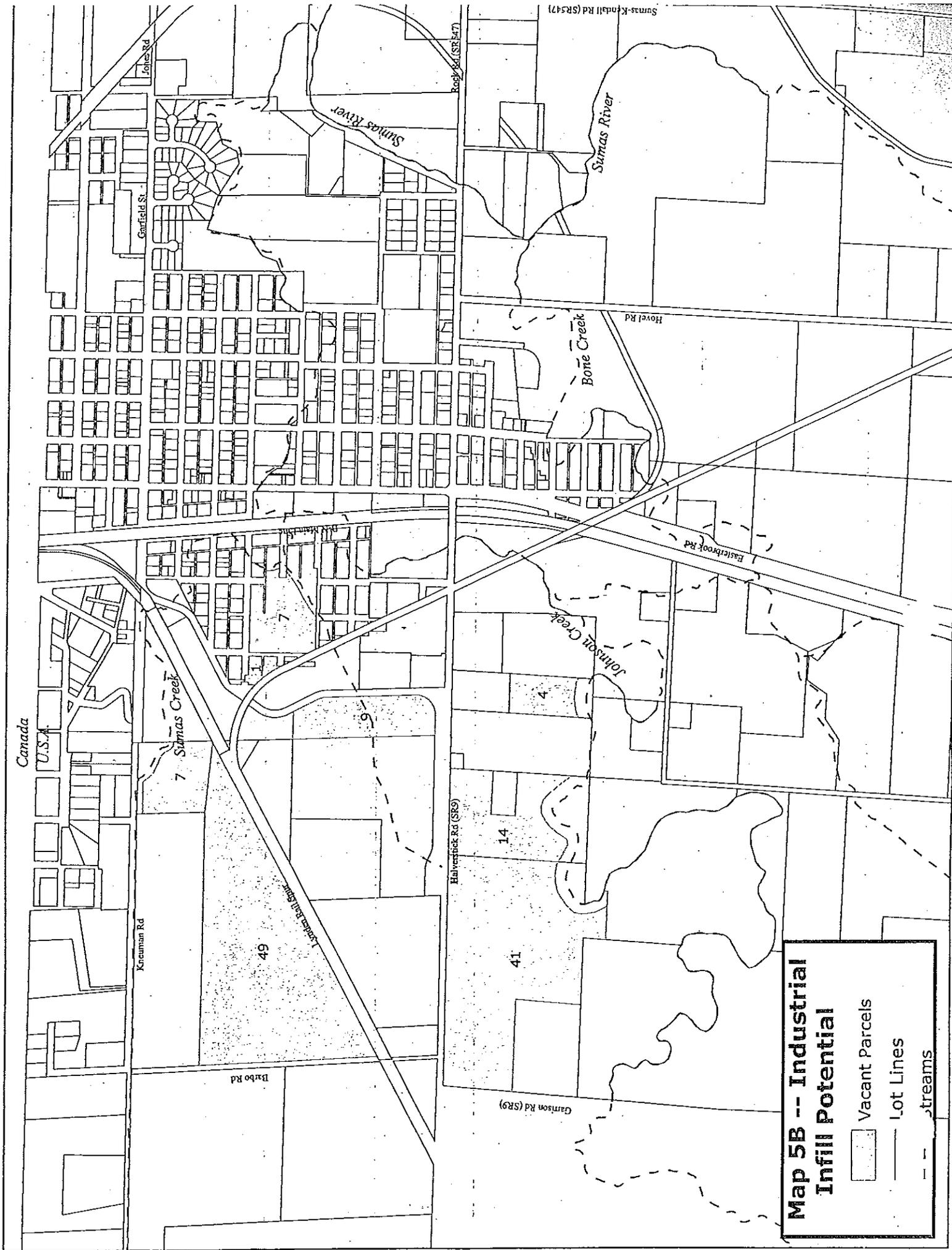
Zone	Area (acres)			
	Total	Developed	Vacant Not developable	Developable
Res – High density. A residential zone with minimum lot size of 6,000 sf. Multi-family units conditionally permitted.	188.6	131	35.1	22.5
Res – Medium density. A single-family residential zone with minimum lot size of 7,200 sf.	79.6	33.5	24	22.1
Res – Low density. A residential zone with minimum lot size of 15,000 sf.	38.8	20	16.4	2.4
Agriculture. A zone containing agricultural use, accessory activities permitted.	81.2	81.2	0	0
Business District – Traffic. A commercial zone that serves the needs of travelers. Motels, restaurants, convenience stores permitted. Retail, office, gas stations, and other businesses conditionally permitted.	21.9	15.9	6	0
Business District – General. A commercial zone that provides day-to-day goods and services to residents.	35.6	28	0	7.6
Business District – Low-impact. A commercial zone containing businesses that generate little traffic and that typically cater to the needs of residents. Residential use also permitted.	8.7	8.7	0	0
Industrial. A zone containing light manufacturing, warehousing, wholesale, and selected retail businesses. Heavy manufacturing permitted as a conditional use.	397.4	145.2	137.2	115
Mini-warehouse. A zone containing warehouses suitable for individual storage.	1.8	1.8	0	0
RV Park. A zone containing recreational vehicle parks.	5.2	5.2	0	0
Public	25.6	25.6	0	0
Total	884.4	496.1	218.7	169.6

Note: The classification of land as undevelopable in this plan does not affect a property owner's right to develop a parcel. The classifications are theoretical assessments of the probability that given parcels will be economically developed.



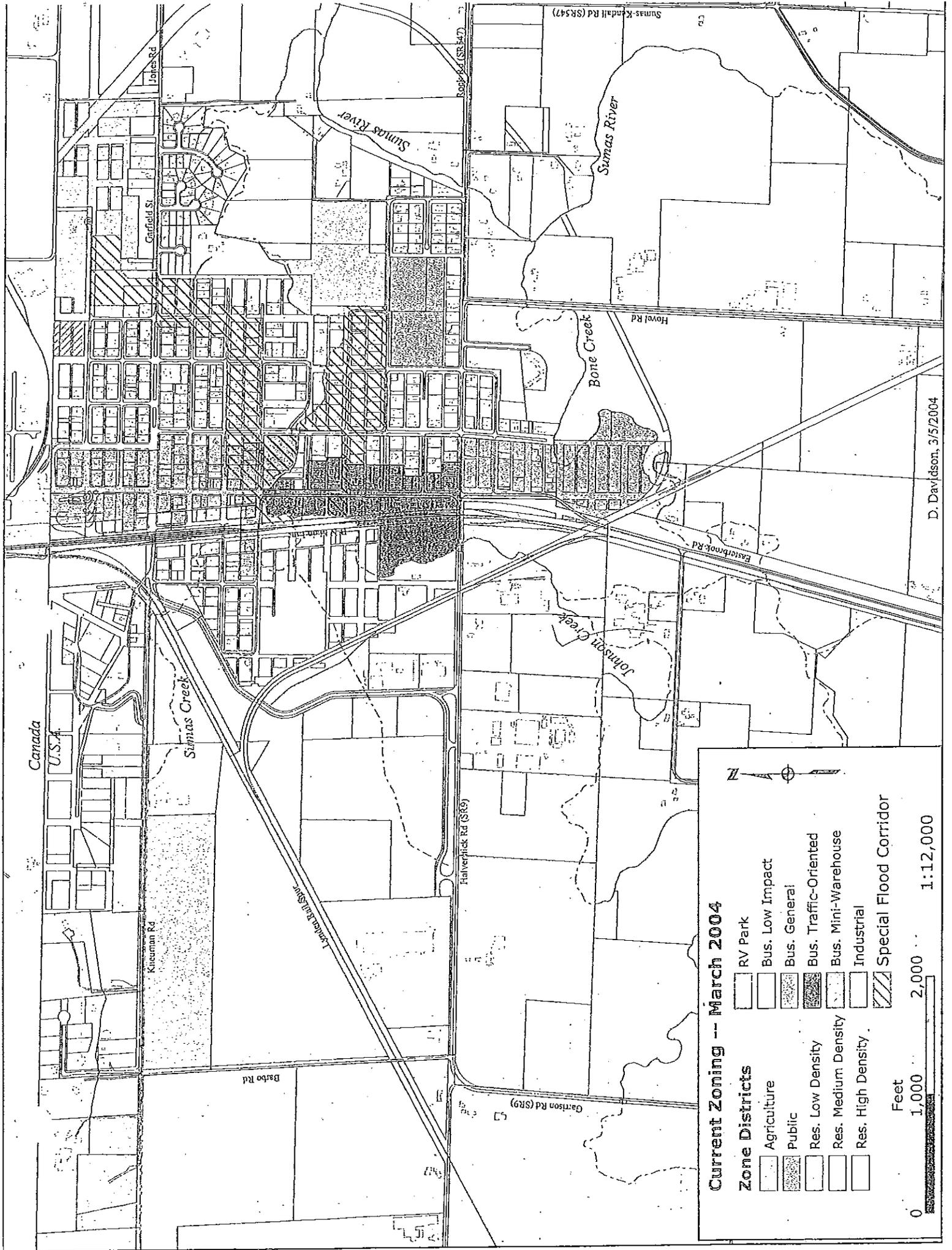
Map 5A -- Residential Infill Potential

- Vacant Lots
- ▲ Underdeveloped Lots
- Lot Lines
- ▨ Vacant Land
- - - Streams



Map 5B -- Industrial Infill Potential

-  Vacant Parcels
-  Lot Lines
-  Streams



Canada
U.S.A.

Sumas Creek

Sumas River

Bone Creek

Johns Creek

Kieuman Rd

Barbo Rd

Leland Rd

Halverlick Rd (SR9)

Garrison Rd (SR9)

Estebanok Rd

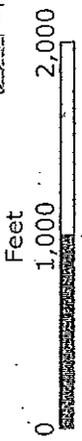
Hovel Rd

Rock Rd (SR547)

Sumas-Kandall Rd (SR547)

Current Zoning -- March 2004

- Zone Districts**
- Agriculture
 - Public
 - Res. Low Density
 - Res. Medium Density
 - Res. High Density
 - RV Park
 - Bus. Low Impact
 - Bus. General
 - Bus. Traffic-Oriented
 - Bus. Mini-Warehouse
 - Industrial
 - Special Flood Corridor



1:12,000

D. Davidson, 3/5/2004

Future Needs

As stated in the community vision, Sumas intends to promote growth that is balanced between the three major categories of land use.

Residential. In computing the demand for residential land, a value of 2.5 persons per household is used, matching the Whatcom County average household size as identified in the 2000 census. A density of 3 units per gross acre is used. This is equivalent to a density of 4 units per net developable acre, assuming that 25 percent of the gross area is consumed for public purposes such as right-of-way, utilities, parks, etc.

The population projection in Chapter 2 anticipates that a total of 671 newcomers must be accommodated in the coming 20 years. At 2.5 persons per household, the newcomers can be accommodated in 268 households.

The city's Floodplain Management Plan calls for the creation of two Special Flood Corridors that will traverse existing residential areas. The locations of the corridors are shown on Map 5. These corridors are intended for conversion to open space in order to provide conveyance channels that will then reduce flood impacts in the remaining parts of town. There are 51 existing homes located within the corridors. To accommodate the relocation of these residents, a total of 319 housing units will be needed – 268 as computed above, plus 51 relocated families.

The buildable land supply calculation revealed that 225 housing units can be accommodated within the existing city limits. An Urban Growth Area (UGA) is needed to accommodate the remaining 94 households. At an average of 3 units per gross acre, about 31 acres of residential land is required within the UGA. As recommended by DCTED, this base value of 31 acres should be inflated by a factor of 25 percent to account for imbalances between supply and demand. A residential UGA of approximately 39 acres is therefore required.

Commercial. Relative to its size, Sumas contains a large traffic-oriented business sector, and residents see little need for more retail development that caters solely to passers-through. However, residents describe a need for commercial development oriented toward local customers (e.g., florist, hairdresser, dentist), but also dependent on Canadian traffic. 7.6 acres south of Front Street were rezoned six years ago in order to create a location for the desired retail development.

Truck traffic volumes at the Sumas port of entry have climbed steadily throughout the past ten years, even at a time when automobile crossings have declined. An average of 350 trucks per weekday now head south through Sumas, and this volume is projected to grow to 800 per day in the year 2021. The planned realignment of SR9 has the potential to divert even more trucks to Sumas. Sumas is a reasonable location for a large truck plaza, including a gas station, restaurant, washrooms, mechanic bays, and parking areas. Such a facility has a footprint of about 20 acres, and there is no parcel of that size available within town adjacent to the highway. Such a plaza would need to be located in the UGA.

Industrial. Relative to other small towns, Sumas contains a large amount of undeveloped industrial land and a variety of existing industrial firms. Residents express mixed feelings about the need for further industrial expansion. However, Sumas acknowledges that it is well positioned to accommodate certain kinds of industrial development because of factors such as: proximity to major truck and rail transportation facilities; existence of a 24-hour border crossing station; availability of water and electric power; proximity to major gas pipelines. Sumas also acknowledges the economic goals and policies developed by Whatcom County in response to county-wide needs and visions.¹ Those goals and policies support the development of a more diversified economy that contains a broad base of industrial employers, some of which will preferably locate in the eastern part of the county to provide job opportunities for Foothills residents. In recognition of all these factors, Sumas plans to accommodate substantial industrial development. Desirable industries include those dependent upon the identified factors unique to Sumas, yet requiring relatively little sewer service. Examples are intermodal transfer facilities (such as truck-rail or pipeline-rail), warehousing, manufacturing, and electric co-generation.

Public. Sumas owns a 9-acre park that includes a rodeo ground, two softball diamonds, a concession stand, and a restroom building (*see blue "Public" zone at south of town on Map 5*). The park abuts South Cherry Street, a local street that will be completely rebuilt in 2006 as the new alignment of SR9. This new highway segment will be an all-weather limited-access facility capable of supporting the growing volume of truck traffic that crosses to Canada through Sumas. The highway realignment will create serious impacts to the park. The main impact will be loss of parking. Today, during a large event such as a rodeo, hundreds of cars park along the shoulders of the existing street. This parking will be eliminated when the highway is built. A secondary impact will be the loss of developed park land for use as highway. A portion of the developed area is within the right-of-way that was purchased by WSDOT. The park's viability is severely threatened by the highway realignment.

Sumas proposes to expand the park into the undeveloped area immediately adjacent to the east, thereby establishing access to Hovel Road. The existing two ball diamonds can be converted to off-street parking for rodeo contestants, who arrive with their stock in large trailer rigs. Preliminary plans reveal that a parcel of 30 acres will be needed to accommodate four ball diamonds and two soccer fields, together with associated parking and stormwater treatment facilities. The "Parks and Recreation" discussion within Chapter 4 contains additional background regarding the planned ballfield.

Overall demand. The above discussion reveals a need for a UGA containing at least 89 acres – 39 acres for residential purposes, 20 acres for commercial, and 30 acres for park expansion. The Sumas UGA designated by Whatcom County in 1997 contains enough acreage to meet Sumas's needs.

¹ See chapter 7 of Whatcom County Comprehensive Plan, particularly policies 7A-1, 7A-6, 7A-8, 7K-4, 7K-6.

Sizes, locations, and densities of proposed zones

Map 6 shows proposed future zoning for Sumas and the UGA. Table 3-2 shows the size of each proposed zone and also accounts for the impacts of critical areas. This table can be compared to Table 3-1 to see what is gained with the proposed zoning. As before, the "Total" column shows the total acreage occupied by each zone and accounts for all acreage in the combined city and UGA. Sumas might eventually expand into 158.7 acres of unincorporated land under this plan.

The minimum lot size for the Low-density Residential zone is proposed to be changed from 15,000 sq. ft. to 10,890 sq. ft. in order to allow for compact urban development consistent with the densities identified in Goal 2N of the Whatcom County Comprehensive Plan.

Neighborhood-specific discussion of zoning

Locations of zones are established based on the geographic attributes of the land as related to goals and policies described elsewhere in this plan. The following area-specific discussion is linked to Map 6 -- each numbered area listed below has a corresponding number on the map. Discussion is centered upon areas where zoning changes are proposed, significant future development is anticipated, or other unusual circumstances exist.

- 1) *Residential panhandle north of Kneuman Rd.* This 110-acre area is now zoned Agricultural and Low-, Medium-, and High-Density Residential. The area includes a ridge of high ground extending west from Moe's Hill. The ridge is partially forested and in certain places slopes so steeply as to make development unlikely. Good views are obtained from the crest of the ridge.

Table 3-2. Land Inventory, UGA & City Combined

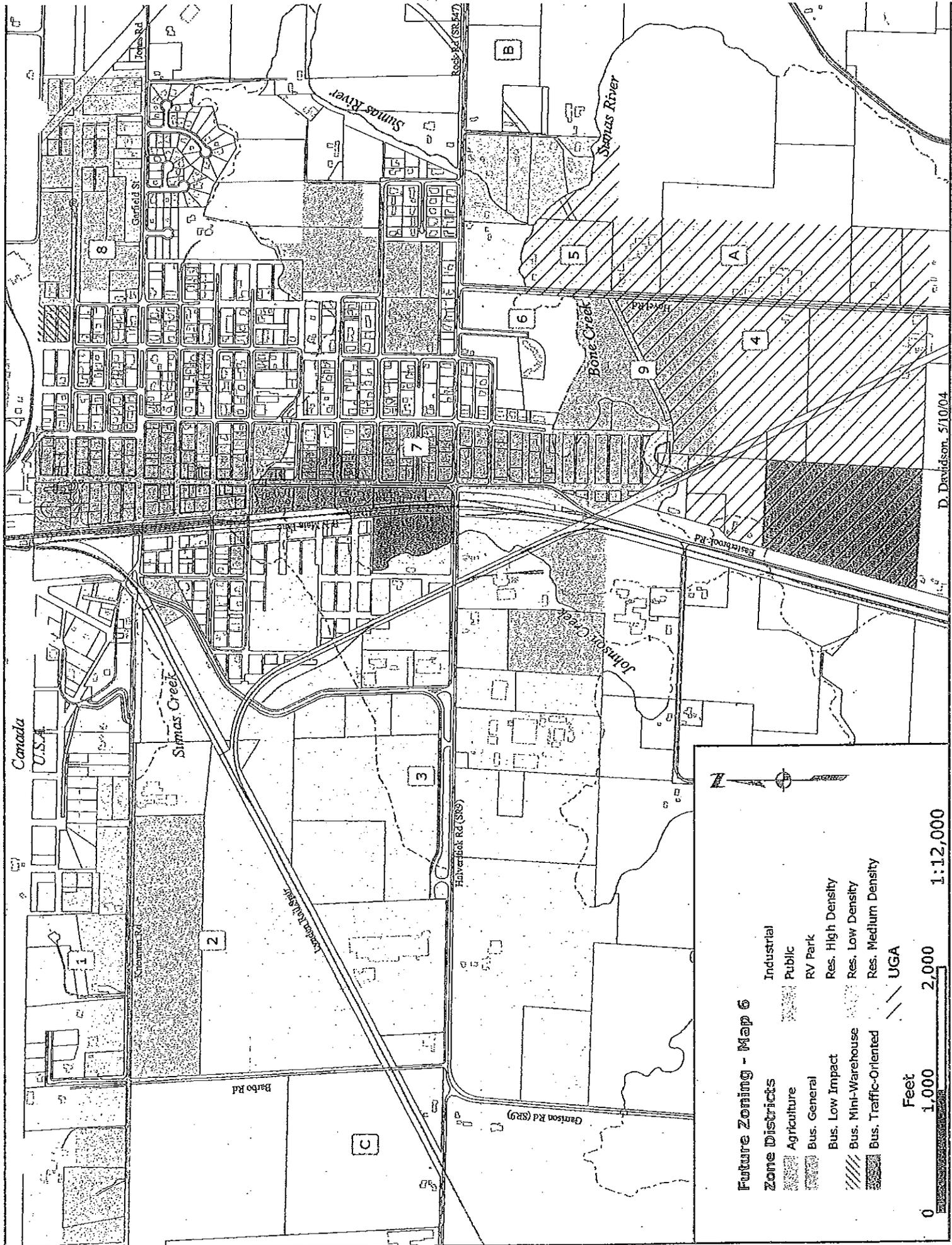
Zone	Total	Area (acres)		
		Developed	Not developable	Vacant Developable
Res - High density	180.7	130.7	12.0	38.0
Res - Medium density	176.4	33.4	38.2	104.8
Res - Low density	47.7	20.0	25.3	2.4
Agriculture	101.2	101.2	0	0
Business District - Traffic	43.1	15.9	2.2	25.0
Business District - General	49.9	42.3	0	7.6
Business District - Low impact	3.6	3.6	0	0
Industrial	374.0	145.2	113.8	115.0
Mini-warehouse	1.8	1.8	0	0
RV Park	5.0	5.0	0	0
Public	59.7	25.6	0	34.1
Total	1043.1	524.7	191.5	326.9

At the south base of the ridge, the area includes wetlands and peat soil and is partially within the flood plain. Sumas Creek flows along the south boundary of the area, in the Kneuman Road ditch. The city's main potable well field is located at the far western end of this area, and the zone of contribution to the wells includes much of the area west of Barbo Rd. A major water line runs along the north edge of the area from the well field to the reservoir. Agricultural remains appropriate in the area closest to the well field. Residential zoning continues to be appropriate for the remainder. Along the high ridge, Medium-Density zoning will remain. On the low ground, the High-Density zoning existing adjacent to Barbo Road is proposed to revert to Low-Density in recognition of environmental limitations (peat soils, wetlands, and floodplain) and the character of the neighboring uses (i.e., Agricultural land to the south and west, and Low-Density Residential land further to the east).

- 2) *Triangular wedge between Kneuman Rd. and the Lynden rail spur.* This 99-acre area is now zoned Agricultural and Industrial and was recently annexed. The Ag-zoned area to the north contains peat soils and is entirely within the flood plain. Sumas Creek flows from the well-field springs through the Kneuman Road ditch along the north boundary of the area. The Creek has good potential for enhancement of fish habitat, and the peat soils are well suited to conversion to wetlands. As part of the annexation arrangement, the owner agreed to restrict development on the parcel. The owner intends to develop the site as a wetland mitigation bank, possibly including relocation of Sumas Creek away from Kneuman Road. Agricultural zoning is proposed for the area in the interim before the wetland conversion is accomplished. Much of the mitigation area is included within the Natural System Protection Area overlay zone. Use of the area for stormwater facilities for the adjacent urban uses is also proposed.

The area has 3,000 feet of railroad frontage and is accessible to SR9 along Barbo Road. Barbo Road and Kneuman Road are substandard roads not now capable of supporting industrial traffic. Bob Mitchell Avenue could be extended into the area from the east in order to provide heavy-load access. Some of the area can drain to the sewer under Bob Mitchell Avenue, but a new lift station may be needed in order to serve the west end of the area. Main water and electric lines run along Barbo Road and are also present on Bob Mitchell Way. A new water line from Barbo Road to Bob Mitchell Way is needed to provide industrial fire-flow to the area and to provide system redundancy. The cost of all necessary infrastructure improvements in this area should be borne by developers and/or outside sources such as CERB and the Whatcom County EDI fund.

- 3) *Area west of B-N main line straddling Halverstick.* This is the major industrial area within the city. The area contains several wetlands (including a category II wetland proposed as a Natural System Protection Area), and most of the area lies within the flood plain. A swathe at the east is included in the Special Flood Risk Zone. The area has 6,000 feet of frontage on the railroad as well as 4,000 feet of frontage on SR9. A nonpotable water line, a potable water line, and a major power line extend along SR9, and sewer service is available throughout. The area is served by a haul road capable of supporting Canadian-weight trucks. Industrial zoning will continue in this area. Environmental constraints limit development in some of the area, but other portions are capable of supporting major industrial facilities.



Future Zoning - Map 6

- Zone Districts**
- Industrial
 - Agriculture
 - Bus. General
 - Bus. Low Impact
 - Bus. Mini-Warehouse
 - Bus. Traffic-Oriented
 - Public
 - RV Park
 - Res. High Density
 - Res. Low Density
 - Res. Medium Density
 - UGA



D. Davidson, 5/10/04

- 4) *Panhandle south of city limits.* This 148-acre area is now zoned Agricultural in the county and is in active farm use. The area exists in large parcels and all of it is controlled by two families. Both families endorse inclusion in the UGA, and both are discussing annexation. However, development might be hindered by the monopolistic pattern of ownership if the landowners seek above-market returns. The area is largely protected from flooding by the railroad embankment running along the west boundary. The culverts beneath the railroad are the path by which Nooksack flood waters reach this area, and only 20 percent of the area is contained within the 100-year flood plain. This area contains the largest chunk of non flood-prone land contiguous to Sumas. The area is served by Hovel Road, which is classified by the county as a local road, but which carries much north-south traffic to town. The B-N main line and Easterbrook Road run along the west boundary of this area, as does a state-owned right-of-way that will become the new alignment for SR9. The new SR9 will be a limited access highway, and it will therefore be possible to access it only via widely-spaced intersecting streets. The backbone street network within this panhandle should therefore be east-west streets connecting Hovel to SR9. Provision of sewer service will be problematic because the panhandle is separated from existing sewers by Bone Creek. A new lift station near the northeast corner of the panhandle would work best with existing topography. Main water lines already extend south along Hovel Road and Easterbrook Road. East-west loop connections between these lines are needed to provide service within the panhandle. Public zoning is proposed at the north-center of the panhandle, in order to accommodate an expansion of the existing ballpark and rodeo ground. Medium-Density Residential zoning is proposed for the remainder of the area, with the exception of a 25.8 acre parcel at the southwest corner of the panhandle. Given its frontage upon the new highway alignment, this parcel is recognized as a viable location for a large, full-service truck stop. If the entire parcel can be developed for this purpose by a single owner, the development would be consistent with this plan. No other commercial use of the parcel is supported, and the parcel should otherwise be developed as Medium Density Residential land. Likewise, should the proposed ballpark expansion fail, the proposed public zoning should be classified Medium Density Residential. An 8-inch high-pressure gas line traverses the area, and the intent of City is that residential lots be prohibited within 50 feet of the gas line easement.
- 5) *Parcel east of Hovel Road, south of Bone Creek.* This 10-acre parcel is now zoned Agricultural in the county and is in active farm use. The parcel owner has repeatedly asked to annex to the City. The eastern part of the area is a low flood-prone wetland continuous with Bone Creek and within a Natural System Protection Area. The western part adjacent to Hovel Road has no environmental limitations and is suitable for development. An 8-inch city water line runs along the west property line (Hovel Road). City sewer does not yet extend south of Bone Creek, hindering development of the UGA panhandle (area 4 discussed above) and the incorporated land slated for park expansion. Annexation of this parcel should be pursued in the near term in order to create a larger contiguous portion of developable land south of Bone Creek, thereby making provision of sewer feasible. This parcel is the logical location for a lift station that would serve the entire UGA panhandle.

- 6) *Residential area south of Front Street and north of Bone Creek.* This area has been the site of much multi-family development. It includes the 20-unit Creekside Meadows complex operated by the Housing Authority, a 52-unit condominium project under construction, and a site proposed to house four duplexes. Continued multi-family development is appropriate.
- 7) *South commercial zone between Cherry Street and Sumas Avenue.* A change in zoning is proposed in this area. Existing zoning includes Traffic-Oriented Business fronting Cherry, Low-Impact Business fronting Sumas, and General Business south of Front Street. The realignment of SR9 is likely to lead to rapid development of the southern General Business parcels, and there has been a minor resurgence of business in the Traffic-Oriented Business zone along Cherry. Most newly-sited businesses, however, have pursued uses not permitted outright within the Traffic-Oriented Business zone. The underground tanks have been removed at the old Yorkies gas station, and it has been converted to a retail use. Therefore, all businesses south of the Costcutter building are compatible with the General Business zone regulations at this time. It is not desirable to promote construction of more gas station / mini-marts in Sumas. To encourage the development of a new General Business area at the crossroads of SR547 and SR9, the zoning will be changed to General Business in this area.
- 8) *Minor zone edge anomalies.* There are several small instances of illogical zone boundaries in the northern portion of town as noted below and as marked on Map 5:
- *Industrial parcels east of B-N main line.* Three illogical pockets of industrial zoning between Cherry Street and Railroad Street are proposed to be rezoned to Business-General in order to match the zoning elsewhere between those streets. The pockets contain the post office, two tavern parking lots, and a swathe of the federal port-of-entry facility.
 - *Business parcel east of City playground.* Upon completion of a City playground connecting the tennis courts to the City park, a sliver of Business-General zoning was left east of the playground. The southern portion is in use for a business purpose, but the northern portion contains a residence. To minimize the possibility of expansion of business uses straddling the playground, the northern portion is proposed to be rezoned to High-density Residential.
 - *Residential parcel in flood buy-out corridor.* The old "Sutherland" property north of Garfield Street is predominantly Agricultural, but is assigned High-density Residential zoning toward the west. Part of this residential zoning is within the flood buy-out corridor, in which construction of a home on vacant land is impossible. The swathe of residentially-zoned buy-out corridor extending north from Garfield to Harrison is proposed to be rezoned Agricultural to match the adjacent land to the east.
- 9) *Proposed park expansion.* The City intends to expand the existing ballpark and rodeo ground as discussed earlier in the "Future Needs" section. The ideal expansion site is the 30 acres immediately east of the existing park and south of Bone Creek, including some land within the City as well as abutting unincorporated land to the south. As of May, 2004, the City applied for grant funding for the project and began negotiating for purchase of property. On Map 6, the proposed site is shown as Public zoning. Should the park expansion project fall through, the zoning for the site is proposed to revert to Medium-density Residential.

Long-Range Land Use Plan

While not required pursuant to the GMA, a long-range view of the Sumas environs is presented here. The foregoing discussion establishes that the designated UGA is adequate to contain planned growth in the coming 20 years. However, certain external factors could limit the usefulness of parts of the UGA and/or create the need for an adjustment to the UGA. Three likely factors are discussed below, each labeled with a letter corresponding to an area on Map 6.

- A) *Unavailability of UGA panhandle on the east side of Hovel Road.* The family that owns the majority of the land within the UGA operates a large dairy farm. They have invested heavily in expansion of the dairy, and the bulk of the investment has been in facilities located on the east side of Hovel Road. While it is desirable for them to allow annexation and development of the undeveloped land west of Hovel Road, redevelopment of the east strip would effectively destroy the viability of their entire dairy. They are not likely to pursue annexation and development of the 43 acres of land east of Hovel Road. This land constitutes 40 percent of the residential UGA. The remaining 60 acres of residential UGA might not be sufficient.
- B) *Rural development south of Rock Road, east of city limits.* This 18-acre area contains an 8-unit mobile home park and three hobby farms, all dependent upon septic systems. It is now zoned Agricultural in the county, but contains development that is more appropriately described as rural – i.e., 11 housing units in an 18-acre area. It is likely that eventual replacement or rehabilitation of the septic systems will be problematic because of the clay soils. The City's 1997 flood modeling revealed that much of the area is either outside the floodplain, or subject to very shallow inundation. In a prior plan version, Sumas had proposed inclusion of the area in the UGA, but inclusion was not supported by Whatcom County. If landowners eventually pursue annexation because of sewer problems, Sumas is willing to accept this area. To make extension of the sewer economically feasible, a larger area than this must be residentially developed. An acceptable area would be the triangular wedge of land bounded by Rock Road, the Sumas River, and the center line of section 35.
- C) *Industrial UGA.* Map 5B shows a seemingly adequate number of "Vacant" industrial parcels. However, there is enormous interest in industrial development in Sumas at this time, primarily because of the softwood tariff. Canadian firms are relocating wood remanufacturing facilities to the U.S. in order to import low-value raw materials and add value here, thereby avoiding high tariffs. There are preliminary plans for wood remanufacturing facilities that would consume three out of the seven parcels identified on Map 5B. It is very possible that all sites will be developed within a 10-year horizon.

If additional industrial development is to eventually occur, the 39-acre parcel west of Barbo Road and north of Halverstick is the most logical site. It contains rail frontage and is also served by the City's main electric and water lines on Barbo Road. It is underlain by reasonable soils and is predominantly out of the floodplain. The land owner desires to be included in the Sumas UGA.

Essential Public Facilities

This plan acknowledges a major public facility of *regional or statewide* significance -- the new alignment of SR9. The proposed future zoning reflects the possibility that traffic will pass straight through town along a new southward extension of Cherry Street.

A second facility of regional significance is the proposed construction of new jail facilities within Whatcom County. Sumas anticipates the construction by Whatcom County of a minimum security facility in calendar years 2005 and 2006. The County has proposed a funding mechanism whereby cities contribute to the capital cost of the facility in exchange for the future ability to house prisoners at lower rates. This mechanism is conceptually acceptable to the City of Sumas, and the capital facilities element of this plan includes the jail as a line item in the general fund. The City intends that the jail project be an acceptable use of funds from the Real Estate Excise Tax proceeds, as well as other general funds.

The county-wide planning policies contain a number of policies related to the siting of essential facilities (see Appendix IV). The city will participate as those policies are translated into firm processes, and the city will adopt the processes developed cooperatively with other jurisdictions.

4. Capital Facilities Element

This chapter is a required element of a comprehensive plan developed to meet the provisions of the GMA. This element is crucial because it serves as a gauge of the practicality and feasibility of the other elements. Essentially, this element reveals which public facility projects are required in order to accomplish the development described in other elements, and also proves that the city has the financial resources to undertake those projects.

The GMA defines public facilities as "streets, roads, highways, sidewalks, street and road lighting systems, traffic signals, domestic water systems, storm and sanitary sewer systems, parks and recreational facilities, and schools." (RCW 36.70A.030(12)) This element includes a discussion of each of these categories, although the transportation-related categories are all grouped together. In each section, the existing status of the system will first be described, and future needs will then be discussed. Preceding these sections is a presentation of Sumas's goals and policies related to capital facilities, as well as a discussion of the planning assumptions developed in other chapters that are pertinent to the analysis presented in this chapter.

Goals and Policies

Sumas adopts the following goals and policies:

Goal: To provide capital facilities consistent with statutory requirements and with the other elements of this plan.

- The city shall accord highest priority to those projects required by statute or necessary for the preservation of public health and safety.
- The city shall develop capital facilities in a manner that directs and controls land-use patterns and intensities in accordance with the land-use element of this plan. As required by RCW 36.70A.070, the city shall reassess the land-use element if funding is unavailable for the capital projects needed to support a planned use. Development shall be allowed only when and where there are facilities and services available to serve that development.

Goal: To allocate the cost of a facility fairly among those that benefit from the facility.

- Long-term borrowing should be used to pay for facilities that will benefit more than one generation.
- General governmental revenues should be used to pay only for facilities of general benefit. Other financing methods such as connection fees, utility rates, LIDs, and revenue bonds should be used to pay for facilities that benefit a narrower group.
- Facilities providing benefit only to a new development should be paid for by the developer.
- Facilities providing benefits to both existing residents and newcomers should be paid for by both groups, with each group paying a share proportional to their corresponding benefit. Connection fees and impact fees shall be based upon this principle of proportional benefit.

Goal: To build and operate facilities as efficiently as possible.

- A planning process should precede all major capital expenditures. This capital facilities element should be the cornerstone of that process. This element should be updated every other year and, with the exception of emergency projects, the capital budget for any given year should include only those projects identified in this element.
- The city should coordinate the projects in a given location in order to reduce costs.
- The city should aggressively pursue low-cost funds such as grants and subsidized loans.
- Major developments should have a full range of facilities, including streets, water, sewer, storm sewer, sidewalks, and neighborhood parks. These facilities should be installed and paid for by the developer and thereafter dedicated to the city.
- The city should adopt and enforce sensible design and construction standards for capital facilities systems.
- Existing facilities should be adequately maintained, because maintenance is usually more cost-effective than replacement.

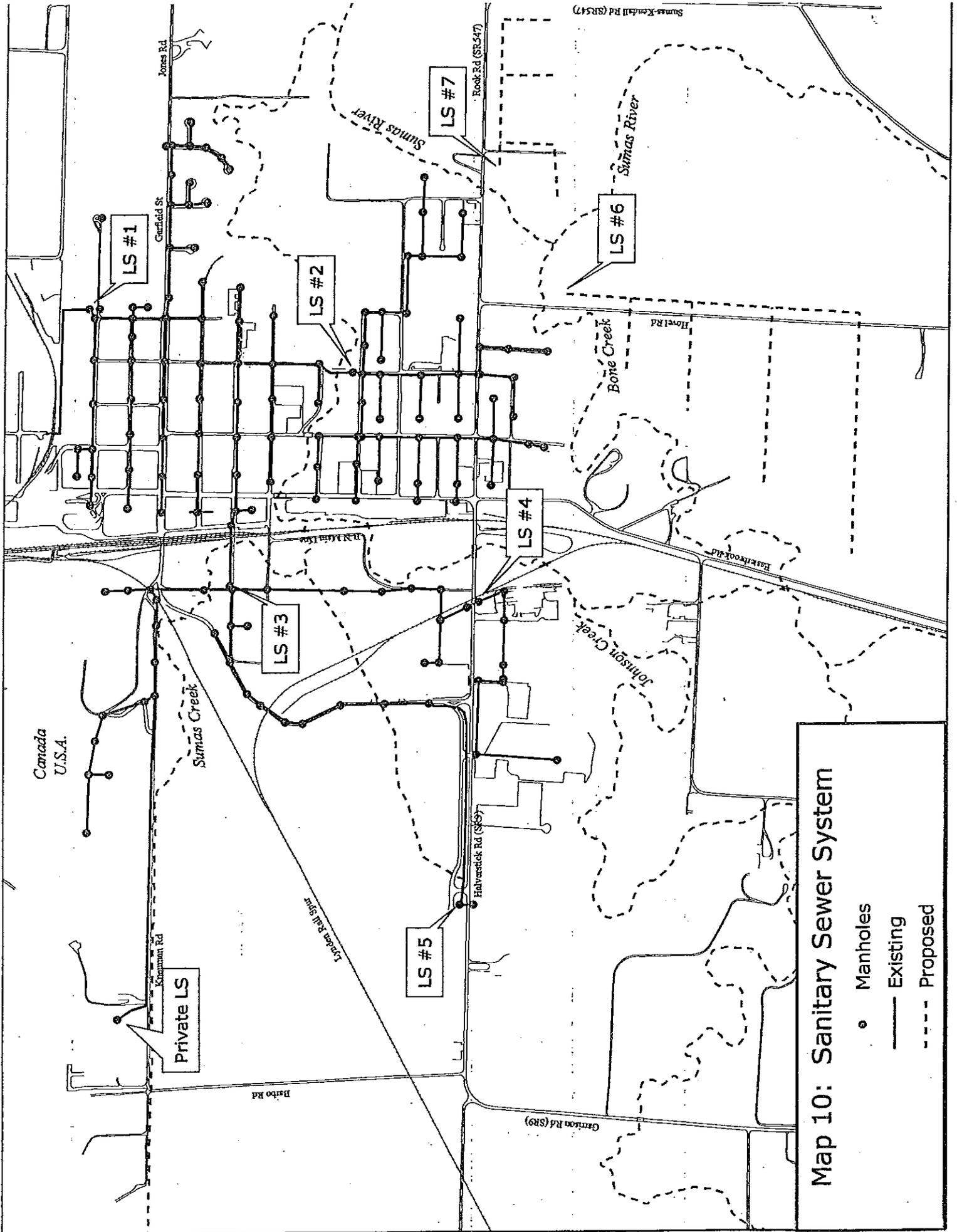
Sewer System

The following discussion is based on a 1991 *Wastewater Facilities Engineering Report and General Sewer Plan* prepared by the engineering firm Kramer, Chin, & Mayo (KCM). Map 10 accompanies this discussion.

Existing conditions

Collection. Prior to 1972, sewage disposal in Sumas was handled by on-site septic tanks. In 1972 a sewage collection system and treatment plant were built. As shown on Map 10, the sewage collection system now consists of 10 miles of pipe spanning 300 acres, less than half of the incorporated area. The system provides service to 245 residential, 70 commercial, and 11 industrial customers. About a half-dozen residences are still on septic tanks.

The system is divided into five drainage basins, each basin served by a lift station. Generally, gravity mains carry sewage from south to north within each basin, and a lift station then pumps the sewage past a barrier such as a creek or highway. Sewage ultimately reaches lift station 1 in the northeast (i.e., the lowest) corner of town. Lift stations 1, 2, and 3 were rehabilitated in 1998 as part of the project to connect to the Abbotsford sewer and are in good shape. Station 5 was installed in 1997 in order to serve the western part of the industrial zone and is in good shape. Station 4 was installed in the mid to late 1980s, at the time that the Sumas industrial park was developed, and has not since received any upgrades. It is now running beyond design capacity accommodating the effluent generated at the SEI co-generation plant. A breakdown of even one of its two pumps would require that SEI reduce flow. Station 4 should be rehabilitated with a larger maximum design capacity. In addition, there is a privately-owned lift station at the west end of town near Barbo Road. This station is capable of handling anticipated flows from residential development at the west end of the Moe Hill.



As sewer systems age they tend to develop leaks, so the condition of a system can be gauged fairly well by measuring the amount of infiltration and inflow (I&I). The system experiences very low levels of I&I in the dry season, despite the fact that most lines are beneath the water table. I&I peaks are only noticed during high rainfall events, primarily during the winter. We therefore know that most of the system is very tight, with some leakage near the ground surface, either in manhole risers or through manhole lids. During major floods, huge amounts of water enters the sewer through flooded toilet fixtures.

Treatment. As of mid-1999, sewage has been treated at a large regional facility in Abbotsford, B.C. The facility is owned and operated by the Fraser Valley Regional District (FVRD). Sumas has a long-term contract with the FVRD and the City of Abbotsford, allowing for conveyance and treatment of sewage and disposal of sludge. The contract allows for a discharge of 317,500 gpd during calendar year 2004, increasing by 5,500 gpd each year for the coming 15 years, reaching an ultimate ceiling of 400,000 gpd. Existing daily usage is approximately 230,000 gpd, of which 130,000 gpd is attributable to a single customer – the SEI co-generation plant. Surplus capacity is about 85,000 gpd at present.

Future conditions

Collection. The design of the existing collection system makes it economical to extend sewer service to much of the remaining developable land within the city limits. A recent extension east along Garfield Street supports development in the northeast corner of town. Another extension east along Front Street supports development at the southeast. Development in the central-east, near Victoria Street, can be handled by extending a line east along Vancouver Street.

Provision of service to the urban growth area and newly annexed areas will generally be more expensive because of natural barriers such as the Sumas River and Bone Creek. Map 10 shows a likely arrangement of trunk lines that could serve outlying areas:

- *South.* In the area between Hovel Road and Easterbrook Road, west-to-east lateral lines would drain into a trunk line on Hovel Road. The trunk line would lead north to a new lift station at Bone Creek (station #6 on the map). The station would pump sewage a short distance north to station #2's basin.
- *Southeast.* The Sumas River separates the Swartwood Road area from the existing sewer system. A new lift station (station #7 on the map) would be needed to support development on either side of Rock Road. This station would probably pump west into station #2's basin.

The improvements mentioned above will be costly, but the capital cost of such improvements will be borne by developers and therefore need not be included in the city's six-year financial analysis.

Treatment. With existing surplus capacity of roughly 85,000 gpd, and with a growth component allowing an increase of 82,500 gpd over the coming 18 years, the contract with Abbotsford offers adequate room for growth. Excluding the co-gen plant, the remaining current usage of 100,000 gpd can expand by 180 percent over the planning period.

Water System

The City recently developed a water system plan with the assistance of David Evans & Associates. The plan was approved by the state Department of Health in December, 2000. The September 11, 2000, revision of the *City of Sumas Water System Comprehensive Plan* is incorporated by reference as a component of this capital facilities element.

Storm Sewer System

Information about this system was provided by the public works director and the city crew. The crew mapped the storm sewer system in order to facilitate capital planning.

Existing conditions

Collection. Sumas has an extensive storm water system consisting of two pump stations, 38,000 lf of drainage line, and 3,000 lf of open ditch. The underground lines range in size from 4-inch to 36-inch, with the larger lines made of concrete and the smaller lines made of PVC, concrete, or clay. Johnson Creek divides the town into two drainage basins. The general layout of the system is shown in Map 11.

In the northern basin, the backbone of the collection system is a 36-inch square concrete drainage line installed by the WPA seventy years ago. This line extends from the railroad tracks through the heart of downtown and then east along Harrison Street to the city limits. The line continues cross-country under farm land to an outfall on the Sumas River.

Most of the northern basin is drained through the WPA line to the Sumas River, but the basin also includes four smaller outfalls directly to Johnson Creek. A pump station is located near an outfall on Gough Street. Generally, the basin drains by gravity through the various outfalls until water levels rise in the rivers. When water can no longer drain by gravity, flaps close to prevent creek water from backing up into the system, and the pump station kicks in.

The southern basin is less extensive and not as dependent upon a major trunk: there are fourteen outfalls to Johnson Creek, the Sumas River, and Bone Creek. Again, the outfalls are equipped with flaps to prevent backflow, and there is another pump station (also on Gough Street) that pumps into Johnson Creek during high water.

The existing system works well and there are few areas of town with drainage problems. One exception is at the north end of Cherry Street, near the Red Apple market and the border crossing station. The area is almost entirely covered by asphalt and is prone to puddling.

The collection system requires regular maintenance, particularly those lines with small diameters. Some part of the system is flushed each year, and major line-flushing projects occur twice a decade. The eastern end of the WPA line has become a maintenance burden. The line has weakened, and the line develops leaks regularly, leading to cave-ins in the overlying farm fields.

Treatment. As is typical of a small-town system installed decades ago, most residential stormwater is discharged without treatment. Since the mid 1980s the city has required commercial and industrial customers to install oil-water separators. The major expanses of pavement associated with gas stations and businesses along Cherry Street all have separators. Property owners are required to maintain the separators, and the city inspects them annually.

Since publication of DOE's *Stormwater Technical Manual* in the early 1990s, Sumas has required installation of stormwater BMPs at new industrial facilities. Both the co-generation plant and the IKO shingle plant have detention ponds as well as bioswales. The Port of Bellingham's industrial area east of Bob Mitchell Avenue is the only industrial site with no provision for stormwater treatment. Stormwater from this site is discharged untreated to Sumas Creek.

In 1997, Sumas adopted an ordinance requiring all new development and redevelopment to comply with the guidelines established in the 1992 *Stormwater Technical Manual*.

Future conditions

Correct deficiencies. Sumas must address two problems identified earlier. First, drainage must be improved at the north end of Cherry Street. This can be accomplished by installing a new line from that area to the 36-inch WPA line, or by upgrading lines that currently connect the area to the WPA line. The cost of this project is unknown.

Second, the east end of the WPA line must ultimately be replaced. The best alignment for a new line is open to question. The existing line heads due east for 4,000 feet before reaching the Sumas River. If a replacement line were to instead veer southeast (roughly along the alignment of the abandoned C.M.St.P.&P. railroad spur that loops east of town), the line would reach the Sumas River sooner. There is the strong possibility that any replacement facility would be built as an open swale in order to accomplish some degree of treatment. No firm plans for replacement of the line are yet in place.

Establish new standards. According to the requirements of the Puget Sound Stormwater Plan, Sumas must adopt a basic stormwater program containing at least the following elements:

- Ordinance establishing minimum stormwater requirements for new developments and redevelopment projects.
- Adoption of a set of technical design standards for stormwater facilities.
- Ordinance establishing an operations and maintenance program applicable to privately owned drainage facilities.
- Adoption of a public education program.

Sumas has at this time complied with the first two listed elements. A more comprehensive ordinance should be adopted once appropriate small-town models become available.

In addition, Sumas coordinates with the recently launched WRIA 1 watershed planning process, a county-wide multi-year process that includes water quality components.

Streets and Sidewalks

Please see the transportation element for a discussion of the transportation-related capital facilities in Sumas. That element was developed jointly with the Whatcom Council of Governments (WCOG) and includes a discussion of existing conditions and future needs. A discussion of financial viability is included at the end of this chapter.

Schools

This plan section was first compiled in 1994 and has not been updated since. NVSD has made a policy decision not to impose impact fees, so no effort has been made to keep the section current.

Nooksack Valley School District No. 508 (NVSD) provides public schooling for Sumas as well as Everson, Nooksack, and part of unincorporated Whatcom county.

Existing conditions

NVSD operates four schools as described in Table 4-2. According to criteria used by the state superintendent of public instruction, NVSD has excess capacity at all grade levels, as can be seen by comparing enrollments to building capacities. Note, however, that primary enrollment is not balanced between the two facilities: the South Primary operates slightly above capacity and the North Primary has considerable excess capacity. This situation persists because more primary students live closer to the southern facility, and the district is reluctant to bus primary students over large distances.

NVSD's facilities are generally in good shape. The South Primary school is a new facility opened in the fall of 1993, and the Elementary school underwent a major renovation in the 1993 - 1994 school year. Four new classrooms were added to the Jr/Sr High school during that school year. The district's capital improvement plans as of spring 2001 are unknown.

Future conditions

The state superintendent of public instruction provides enrollment projections based on cohort survival (i.e., the progression of students from one grade to the next). The projections show that K-6 enrollment will slowly rise to 1,062 in 1999 and 7-12 enrollment will rise to 1,011 in the same period. At those growth rates, upper-school enrollment will exceed available capacity in the year 2000, while lower-school enrollment will become problematic in 2004.

The lower-school projections based on cohort survival don't seem to adequately capture the regional demographic trends. All three cities in the NVSD service area grew at a rate of at least 4 percent per year between 1990 and 1993. Each city expects its incorporated population to double in the next two decades, and similar growth is expected in the unincorporated areas. At an annual growth rate of 3.5 percent, K-6 enrollment would grow to 1,192 in 1999 and thereby consume the available K-6 capacity.

In summary, NVSD will probably need to expand upper-school capacity by the year 2000 and lower-school capacity by 1999.

Table 4-2. Characteristics of School Facilities

School (location)	Grades	Classrooms (reg/hdcp)	Capacity ¹ (reg/hdcp)	Enroll- ment	Class size ²
North Primary (Sumas)	K-3	16/2	320/24	243	14.3
South Primary (Everson)	K-3	14/2	280/24	322	21.5
Elementary (Nooksack)	4-6	21/2	525/24	420	19.1
<i>K-6 Subtotals</i>	<i>K-6</i>	<i>51/6</i>	<i>1,125/72</i>	<i>985</i>	<i>18.2</i>
Jr/Sr High (county)	7-12	34/3	1,020/36	680	21.6

¹ Capacity based on ratio of 20 students per room (K-3), 25 students per room (4-6), 30 students per room (7-12), and 12 handicapped students per room (K-12).

² "Enrollment" divided by "Classrooms", with each handicapped classroom counted as half a regular classroom.

Parks and Recreation

Development of element

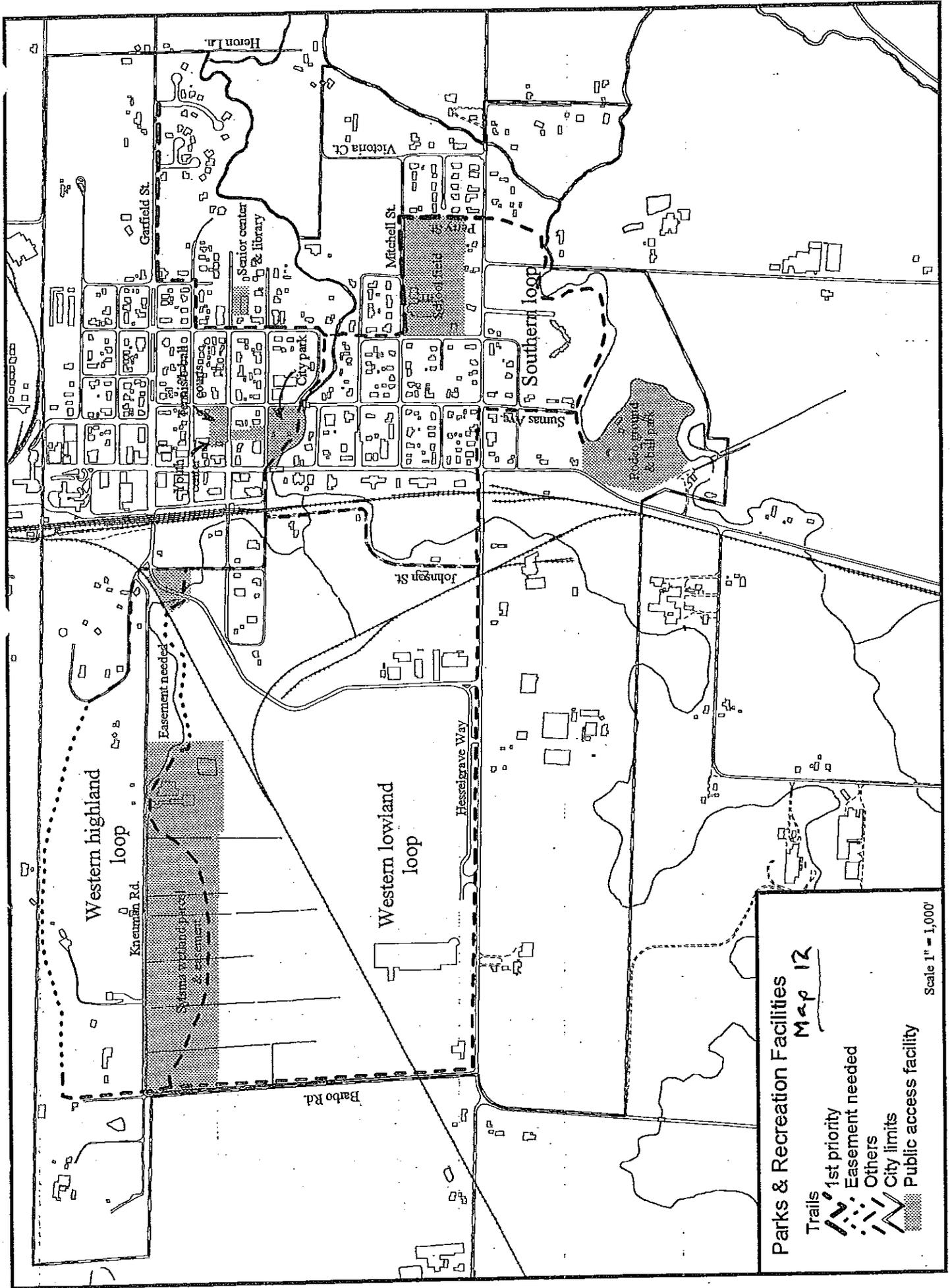
In the summer of 2000, the Mayor directed that a parks and recreation planning process begin, leading to a more detailed parks plan than previously contained in the Comprehensive Land-Use Plan. The city administrator and planning commission therefore completed the planning process described below:

- August, 2000. Introduction of topic at planning commission meeting. Discussion of existing parks facilities and request for commissioners to bring ideas to next meeting.
- September, 2000. Review of existing facilities, solicitation of commissioners' and public's ideas. Decision to perform community survey.
- October, 2000. Survey prepared and mailed to all residents. (A copy of the survey document is included in Appendix III.) Survey results tabulated.
- November, 2000. Survey results presented to planning commission and public. Discussion of results. Group workshop to tentatively prioritize projects based upon citizen preference, financial viability, and ease of implementation.
- November, 2000. First draft chapter written and presented to planning commission, lacking CIP and many details. Comments received from commissioners.
- January, 2001. Revised draft incorporated into draft comprehensive plan.
- February, 2001. Second draft chapter presented to commissioners. Group workshop to develop proposed CIP and balance projects with financial capability.
- March, 2001. Third draft chapter presented to commissioners and approved for forwarding to City Council and public review.

Existing conditions

Listed below is an inventory of all City facilities and easements pertinent to parks and recreation. Map 12 shows the locations of the various facilities.

- City park. This 2.5-acre facility is alongside Johnson Creek in the city center. The facility includes picnic tables, a restroom building, and a barbecue gazebo as well as an expanse of maintained lawn adjacent to the creek. The park is the site of various annual events sponsored by service organizations, such as Community Days and the Fishing Derby.
- Ball park/rodeo ground. This 9-acre facility is located at the south end of the city. The facility includes two lighted softball fields, restroom facilities with showers, a concession stand, and a rodeo ground used for the Sumas Junior Rodeo and the Bull-a-Rama. The softball fields are used for recreational league play by several groups within the Nooksack Valley, the rodeo grounds are used by riding clubs, and the grounds as a whole are used for occasional meetings and events.



Parks & Recreation Facilities
Map 12

- Trails
- 1st priority
- Easement needed
- Others
- City limits
- Public access facility

Scale 1" = 1,000'

- Playground. This 1.5-acre facility is located on either side of Second Street, between Cherry and Sumas. The facility includes a tennis court, a basketball court, and some playground equipment. The facility received a major facelift in 1999, when new playground equipment was installed and the tennis and basketball courts were repaved, fenced, and equipped with new lights.
- Youth center. This 2-story remodeled house is located on Second Street immediately west of the playground. The City operates a drop-in youth center that is open for a small number of hours each week. The center is run by part-time co-managers and is also staffed by volunteers. The City has struggled to operate the facility -- funding constraints, volunteer availability, and customer behavior are a challenge to operations.
- Senior center & library. This complex is on Second Street east of Lawson. The 4,000 sq-foot building was built in 1998 and houses a branch of the Whatcom County Library System, as well as a senior center operated by the Whatcom County Parks Department. The City owns and maintains the building, and the leaseholders operate the programs.
- Riparian tract. The Port of Bellingham deeded this 1-acre parcel of land to the City in 1998. The parcel straddles Sumas Creek near the north end of Bob Mitchell Avenue. The parcel is not useful for industrial purposes because of environmental constraints associated with the Creek. The parcel contains a deed restriction limiting use to passive recreational activities or riparian enhancement.
- Sytsma farm easement. As a condition of the industrial rezone of the Sytsma farm in 1997, the City received an easement allowing a trail across part of the farm. A 29-acre portion of the farm is earmarked for wetland mitigation and possible relocation/reconstruction of the stream itself.

Typical planning standards call for 2.5 acres of community park and 1.5 acres of neighborhood park per 1,000 population. Sumas itself has a population of 980, but Sumas is also the major service provider to an unincorporated rural community with an estimated population of 2,200 (based upon the number of rural route customers served by the Sumas Post Office) and encompassing about 35 square miles. For a service population of 3,200 people, planning standards would therefore call for about 7.5 acres of community park and 4.5 acres of neighborhood park. In comparison, Sumas has about 9 total acres of park that can variously be thought of as either neighborhood or community park (i.e., 1.5 acre playground, 2.5 acre city park, and 5 acres of ball fields within the rodeo complex). In addition, the city's facilities are supplemented by the fields and playground associated with the Sumas Primary School. The school places limits upon what use may be made of its athletic field.

A comparison to typical planning standards supports conclusions that are obvious to local users. First, the existing City parks perform well in their capacity as "neighborhood" parks. The needs of nearby residents are well met, and facilities such as the playground equipment and the tennis courts are not crowded. Second, the City parks are deficient in their capacity as "community" facilities. The City softball fields are heavily used by adult and youth leagues within the Nooksack Valley, and the community's need for baseball and soccer fields is met at other facilities, all of which are also heavily used. Users now find themselves driving large distances (i.e., 7 miles to Everson, 12 miles to Lynden, 23 miles to Ferndale) in order to participate in many organized leagues.

Survey results

A survey was mailed to approximately 350 households in October, 2000. All ideas generated by planning commissioners and the public during early brainstorming sessions were contained as options in the survey. Most proposed facilities are self-explanatory, but a few must be described:

- Recreation center. This facility would contain an exercise room, weight room, and gymnasium large enough for basketball and volleyball. An indoor pool might also be included in the center, in a separate phase.
- Recreation program. This would be a summer program for local youth with typical offerings such as: sports education using the City's basketball and tennis courts; arts or crafts offerings conducted in the Youth Center building; field trips to local events.
- Expand rodeo. This option would involve expanded use of the rodeo grounds, either through making physical improvements, offering more events, or promoting greater use of the facility for other kinds of events (i.e., reunions, "camp-in" meetings of clubs, etc.).

A copy of the survey document is enclosed in Appendix III. A total of 35 responses were returned, an excellent response rate in comparison to other City surveys. The results of the survey are tabulated below in order of the total number of responses in favor of each choice.

Desired Facility	Priority Assigned to Facilities by Respondents									Total
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	
Swimming Pool	8	3	3	4	5	1	0	0	0	24
Recreation Center	9	4	3	3	2	1	0	0	0	22
Expand Rodeo	5	4	5	1	3	0	0	0	1	19
Trails	8	2	3	3	2	0	0	0	0	18
Rec. Program	4	5	3	3	2	0	1	0	0	18
Skateboard Park	2	2	4	4	3	2	0	1	0	18
Baseball Fields	4	3	4	0	0	1	0	0	0	12
Soccer Fields	1	1	2	0	5	0	2	0	0	11
Civic Auditorium	2	2	1	0	2	1	0	0	0	8
BMX Park	2	0	0	4	2	0	0	0	0	8
Playgrounds	1	0	3	3	0	1	0	0	0	8
Sidewalks	1	3	1	0	0	0	0	0	0	5
Horse Trails	0	0	1	0	1	0	0	0	0	2
Discontinue Rodeo	0	1	0	1	0	0	0	0	0	2

Respondents had the following additional comments and ideas:

- A trail or sidewalk should link the new Garfield St. subdivisions with the rest of town (2 responses).
- A neighborhood playground is needed at the new Garfield St. subdivisions (3 responses).

- A sidewalk is needed on Mitchell St. heading east from the school to Victoria St..
- A ballfield complex should contain two 60-foot diamonds and one 90-foot diamond. Infields should be grass, not rock and sand.
- An auditorium could host a community theatre.
- A multi-use arena is needed, with ability to convert to an ice arena.
- A recreation center should contain an indoor jogging track.
- The city has enough playgrounds already.
- Expand the school playground for toddlers.
- Include a climbing wall in a recreation center.
- Build a fishing pond.
- Build a dog-training park.
- Take what we have and make it better.
- Build a wetland park with trails.
- Existing sidewalks need to be kept clean and passable.

Goals and objectives

In consideration of local capacity, existing facilities, and community vision/preferences, the following goals and objectives are adopted.

- Goal 1. Provide sidewalks and trails in support of the Comp. Plan vision of easy pedestrian access to all downtown amenities.
 - Objective 1.1. Provide pedestrian access from major neighborhoods to the downtown core.
 - Objective 1.2. Provide pedestrian access to major public facilities such as schools, churches, and libraries.
 - Objective 1.3. As part of the SR9 realignment process on S. Cherry Street, assure pedestrian access to the rodeo grounds
- Goal 2. Provide neighborhood parks consistent with the overall City vision of convenient pedestrian access.
 - Objective 2.1. Provide a neighborhood park in the Garfield Street subdivision.
 - Objective 2.1. Ensure that adequate land for neighborhood parks is acquired through developer dedication when processing major new subdivisions.
- Goal 3. When economically feasible, support the recreational needs of the Nooksack Valley community.
 - Objective 3.1. Develop additional athletic fields (soccer, baseball) in a configuration that will support hosting of athletic tournaments.

- Objective 3.2. Allow access to City recreational programs and facilities by residents of the Nooksack Valley.
- Objective 3.3. Develop a skateboard/BMX facility.
- Goal 4. When economically feasible, provide facilities and events targeted to the County and the region.
 - Objective 4.1. Continue to provide a facility for rodeo events.
 - Objective 4.2. Develop a recreational center targeted at a regional user-group, including amenities such as a rock-climbing wall, jogging track, weight room, exercise room, gymnasium, and/or pool.
- Goal 5. Provide recreational facilities and opportunities to residents of all ages.
 - Objective 5.1. Continue to provide a senior center facility and program.
 - Objective 5.2. Enhance the program currently offered at the Youth Center, to include more operating hours and structured summer classes and activities.
 - Objective 5.3. Maintain existing facilities such as the basketball and tennis courts that are used by people of all ages.
 - Objective 5.4. Develop a trail system for recreational walkers.
- Goal 6. Provide facilities that are compatible with and capitalize upon Sumas's rural setting.
 - Objective 6.1. Develop trails that link downtown with planned open spaces, including wetland mitigation areas.

Project feasibility analysis

The feasibility of developing various facilities was explored by ranking each facility against a number of criteria. Four projects were omitted from further consideration based upon their poor showing in the survey: horse trails, sidewalks, civic auditorium, and conversion of the rodeo ground to an alternate use. The following matrix shows the results of the feasibility exercise.

	Soccer fields	Recreation center	Playgrounds	Recreation program	Pool	Baseball fields	Trails	Skateboard/BMX park	Fishing pond and nature trail
Ranking in survey (L, M, H)	M	H	L	H	H	M	H	H	-
Capital cost (L, M, H)	M	H	L	L	H	M	L	M	M
Operating cost (L, M, H)	M	H	L	M	H+	M	L	L	M
Staffing requirement (L, H, Zero)	L	H	0	M	H+	L	0	0	L
Grant funding likelihood (L, M, H)	M	L	L	L	L	M	H	L	H
Revenue from user fees?	Y	Y	N	Y	Y	Y	N	?	Y
Risk (L, M, H)	M	H	L	L	H	M	L	M	M
Target market (City, Local, Region)	R	R	C	C	R	R	L	R	R
Competition	Sumas, Lynden, Everson	Lynden Y, Everson private gym		Lynden Y, Church, misc. leagues	Lynden Y, Bellingham, Abbotsford	Sumas, Lynden, Everson		Bellingham	Saxon

Project prioritization and phasing

Upon completion of the feasibility analysis, projects were placed into the following three groups corresponding to a conceptual development schedule.

Near term (1 – 2 years). These facilities/programs are popular, yet require little capital investment. They are within the realm of possible development by the City acting alone.

- **Trails.** Rights-of-way and easements already available to the City provide the skeleton upon which a trail system could be developed. Relying upon those easements, a proposed trail/sidewalk system is included on Map 12. The proposed facilities are discussed in priority order, based upon existing need and feasibility of construction.
 - *Sidewalk connecting Garfield Street subdivisions to downtown.* There will eventually be 65+ homes straddling Garfield, and the area already contains 30+ children. Residents of the area must now walk on the paved shoulder of Garfield Street to reach town. A sidewalk is needed along the south shoulder of Garfield, separated from the street by curbing or by a grass strip. \$15,000
 - *Trail/sidewalk east along Mitchell Street from the school to the undeveloped Perry Street right-of-way.* This facility is also needed to move children off the street. The school district has agreed to allow construction of a crushed rock trail along the north and east edges of their field. This trail can be used to reach school, and also can be used as a jogging track in P.E. classes. \$4,000
 - *Western lowland loop.* A loop can almost be completed through the western industrial area using the rights-of-way along Van Street, Johnson Street, Hesselgrave Way, and Barbo Road, together with the trail easement through the Sytsma wetland tract. A missing link exists along Sumas Creek, immediately east of the Sytsma tract. The City should approach Burlington-Northern to gain an easement and allow completion of the loop. The length of the loop would be about 13,000 feet, and cost for a crushed rock trail is estimated at \$50,000.
 - *Western highland loop.* As development occurs along Moe Hill, the City should require developer installation of the proposed trail, which could make use of existing Barker Avenue and Spring Street rights-of-way. Cost is estimated at \$18,000.
 - *Southern loop.* As development occurs south of Front Street, the City should require developer installation of a trail to connect the rodeo grounds to the Perry Street trail mentioned above. The segment connecting the rodeo ground to town along Sumas Avenue should be included within WSDOT's upcoming SR9 realignment project. WSDOT proposes to upgrade Sumas Avenue as part of that project.
- **Recreation program.** A fledgling summer youth program should be attempted in the summer of 2002, using a design that minimizes capital expense – i.e., maximum use should be made of existing facilities such as the youth center and the tennis/basketball courts. The major expense would be associated with staff, but the fees charged to participants could be set so as to recover the bulk of the cost. For budget purposes, the City should assume that \$10,000 of non-reimbursable cost is incurred.

- **Promote use of rodeo ground.** A marketing effort should be launched to promote increased use of the rodeo ground for private events such as reunions, riding clubs, etc. Such an effort could be channeled through the Chamber of Commerce and could use media such as a web site, brochures, or direct email to targeted clubs/organizations.
- **Pursue pond/nature trail project.** The feasibility of construction of a pond within the Sytsma wetland tract should be explored. Sumas Creek is available as a natural water source for such a pond, and the Creek could be relocated away from Kneuman Road as part of the project. Additional trails could be looped around and near the pond, and parking and interpretive signs could be installed. Cost for such a project is roughly estimated at \$300,000. Resource agencies (Ecology, DFW) have commented upon the great potential of this wetland tract. Should the project prove feasible, grant funding should be pursued through such sources as the Aquatic Lands Enhancement Account, and construction of the facility should occur in later years.

Medium term (2 - 6 years). These facilities require significant planning and capital outlay, and the City does not have the financial resources to pursue them immediately. At the same time, the cost of these facilities is of a small enough magnitude that the City should be able to develop a funding mechanism.

- **Baseball & soccer fields.** There is a clear shortage of baseball and soccer fields in the local area -- all existing facilities are used heavily by youth groups and clubs. Building upon the two existing baseball fields, development of additional baseball fields would make it likely that Sumas could attract tournaments, which typically require at least four fields. A baseball/soccer field complex, together with bathrooms, parking, and concession stand, should be developed. Such a complex would occupy 10+ acres and cost \$250,000 to \$400,000.
- **Skateboard park.** Few opportunities are available in the region for the many youth who like to skateboard. Most local cities view the use of skateboards on streets and sidewalks as a hazard and have enacted ordinances prohibiting such use. Owners of private parking lots have also typically prohibited use of their facilities by skateboarders. The new facility in Bellingham is 45 minutes distant by car, and most skateboarders are too young to drive. A facility in Sumas would accommodate local youth, but also serve a wider region including Everson, Nooksack, Lynden, and Abbotsford. The cost of a facility would be \$100,000 to \$300,000, depending upon size and complexity.
- **BMX park.** Similar to the skateboard situation, there are few dedicated facilities for BMX riders in the region. Riders have built makeshift trails on both private and public parcels. A dedicated facility would attract riders from throughout the region and could be the site of races and events. Size and cost of such a facility are unknown at this time.
- **Playgrounds.** Neighborhood "tot lots" are needed in two areas. One should be developed in the Garfield Street subdivisions, and eventually, a second in the undeveloped area south of Front Street. At Garfield Street, development of a lot will involve purchase (or donation) of a land parcel, whereas near Front Street, the land should be acquired through dedication during the subdivision process. On top of land costs, the cost of playground equipment would be about \$7,000 per site.

Long term (10+ years): An indoor swimming pool and recreation center are included in this category. These facilities require a major capital outlay and pose the greatest risk, in that there are competitive facilities within the target regional market. A recreation center is of lesser risk than a pool because of the possibility of conversion of the building to an alternate use, the lower capital and operating costs, and lesser need for staffing. Similar to the new Bellingham pool, it is assumed that a pool would be used for swim teams, public swims, rentals, lessons, and youth programs. The two facilities would ideally be co-located in order to share facilities such as parking and changing rooms. Capital costs would be in the range of \$2+ million.

Financial Plan

A sequence of desired projects is included in the table pertaining to General Government expenditures, in the overall *Six-Year Financial Analysis* that immediately follows this section. The following are funding sources available for development of park/recreation facilities:

- General fund revenue. Capital could be allocated annually to an improvement program from general fund revenues. Given the other demands on this fund, an annual expenditure of approximately \$20,000 is the most that could be accommodated.
- Capital facilities fund. This fund receives revenue from the Real-estate Excise Tax and has gradually built to a fund balance of about \$80,000 over a nine year period.
- Economic development revolving fund. This fund receives revenue of about \$50,000 per year from the Electric Fund. Certain projects with a clear economic development linkage could be funded from this fund.
- Limited purpose levy. The voters could be asked to approve a levy for the specific purpose of raising money for a facility. In Sumas, a levy of \$0.50 per \$1,000 of assessed valuation would bring in about \$70,000 in each year levied. A four-year levy would therefore provide enough money to tackle a project such as a ballfield complex.
- IAC grant. Upon acceptance of this Parks & Recreation Chapter by the state Interagency Committee on Outdoor Recreation (IAC), Sumas will be eligible to apply for state grants for facilities such as ballfields and trails.
- ALEA grant (or similar). Projects such as the wetland trail loop will be eligible for grants from resource agency programs such as DNR's Aquatic Lands Enhancement Account (ALEA).

Six-Year Financial Analysis

This section demonstrates whether the city has the resources to pay for the capital facilities anticipated during the next six years. No attempt is made to account for the on-site costs of expected development. Developers will bear those costs completely. We will instead focus on major system-wide projects, such as new wells, substations, etc.

Five spreadsheets are shown below, corresponding to the five major funds (or groups of funds) in the Sumas accounting system. Each spreadsheet shows projected revenue and expenditure over the six-year span from 2004 through 2009. The spreadsheets are based on the 2003 year-end results. The dozens of line items in the accounting system are consolidated into a few major categories. For instance, expenditures are allocated to just four categories: salaries and benefits, operations and maintenance, debt service, and capital outlay. The major capital projects discussed earlier in this chapter are listed individually.

One column contains percentage values used to predict future trends. For the most part, we simply assume that revenues and expenditure will increase proportionate to the expected growth rate of 2.7 percent. For some kinds of revenue and expenditure (e.g., scheduled debt), no growth in costs is shown. No adjustment for inflation is made, but no rate increases are shown either. We assume that rates can be increased in proportion to inflationary pressure.

At the bottom of each spreadsheet are two lines showing the annual operating results and the cumulative fund balance. Annual results are calculated by subtracting annual expenditure from actual annual revenue (i.e., ignoring the balance brought forward from a prior year).

Following is a discussion of each system-specific spreadsheet:

General Government. This spreadsheet represents costs associated with legislative, executive, judicial, legal, general governmental, police, health, fire, park, cemetery, and library cost centers. The major capital expenses in this fund relate to park projects – it is this fund that must support the parks and recreation capital improvement plan. A ballpark complex estimated at \$950,000 is scheduled for construction in 2006. The assumption is that the City will develop a successful IAC grant application that will pay 45 percent of the cost, and that donations, in-kind contributions, force account (water, sewer, electric materials and labor) and a one-time drawdown of the Economic Development Fund will pay for the remainder.

Absent some new source of revenue, this fund shows a pattern of gradual decline over the coming six years. General government, together with the transportation system, are the fund groups that have suffered most from the decline in tax revenue associated with the drop in Canadian passers-through (i.e., sales tax, gas tax). The repeal of the gambling tax has also affected this fund.

Given the presence of major industrial natural gas consumers in town, one reasonable option is the imposition of a utility tax on natural gas. A tax capable of producing revenue of \$160,000 in the year 2005 is proposed. The tax is shown in italics in this spreadsheet. This level of revenue

is sufficient to create a small surplus at the end of the six-year period, which is then available to use to cover the shortfall in the Transportation System funds discussed below.

Transportation System. This spreadsheet represents costs associated with the street fund. It is assumed that future major street projects (e.g., SR9 auto-queuing area) will be funded through state and federal grants, a reasonable assumption given the City's eligibility for federal border and corridor funds and its participation in the binational IMTC planning process. The \$360,000 FHWA revenue shown in the spreadsheet is already in hand.

Ignoring major projects, the underlying fund shows a pattern of gradual decline over the coming six years. As discussed above in the General Government section, a new tax is proposed that would generate enough revenue to balance both the Transportation System and General Government fund groups.

Electric System. The future health of this fund hinges upon the wholesale power rate charged by BPA for the 2006 -- 2011 rate period. BPA will be able to reduce rates substantially in 2006, because there is now a better alignment between its committed load and its hydropower system capacity. A 15 percent decrease in wholesale power costs is shown in the spreadsheet for the years 2006 and beyond. Given the anticipated wholesale rate reduction and the completion in 2004 of the conversion to 12.5 kV transformers, the fund is healthy through 2009.

Substantial cash is transferred from this fund to the General Government fund, partly because of a 6-percent payment in lieu of utility tax, and also because of a \$50,000 annual transfer to the City's Economic Development Fund.

Sewer System. This spreadsheet incorporates the sewer fund, the sewer bond fund, and the bond reserve fund. The only project planned for this utility is the installation of an in-line grinder pump in the year 2004. The fund is in good shape, and it would be reasonable to begin a program of prepayment of debt. The debt associated with the Canadian hook up will be paid off by 2008, but this event will have no effect on the fund's finances, because it is anticipated that the City will simultaneously eliminate the "debt amortization surcharge" component of the industrial sewer rate that was imposed in 1998 in order to pay down the Canadian debt. This is shown as a reduction in the sewer sales revenue from SEI-1.

Water System. This spreadsheet incorporates the water fund, the water bond fund, and the bond reserve fund. There are no major projects planned for this fund, and the fund is in good shape.

Consolidated results. This spreadsheet simply adds together the results of the previous five. It shows that the city has the overall resources to fund the projects anticipated in the next six years, with a projected cumulative surplus of about \$600,000. About half of that surplus is due to the expected reduction in BPA's wholesale power rates.

	2004	2005	2006	2007	2008	2009	6-Yr Total
Population forecast	2.7%	1029	1057	1085	1115	1145	1176
General Government							
Revenue							
Balance brought forward	674,890	768,780	850,506	808,985	863,660	904,508	
Property tax	375,904	375,904	375,904	375,904	375,904	375,904	
Sales tax	100,668	103,386	106,177	109,044	111,988	115,012	
Utility taxes	14,830	15,230	15,642	16,064	16,498	16,943	
REET	8,000	8,216	8,438	8,666	8,900	9,140	
Hotel/motel tax	3,152	3,152	3,152	3,152	3,152	3,152	
Leasehold tax	6,504	6,680	6,860	7,045	7,235	7,431	
State-shared & entitlements	49,491	49,491	49,491	49,491	49,491	49,491	
Licenses, permits	26,281	26,991	27,719	28,468	29,236	30,026	
Fines, forfeits	86,789	89,132	91,539	94,010	96,548	99,155	
Charges for services	10,000	10,270	10,547	10,832	11,125	11,425	
Miscellaneous	73,448	75,431	77,468	79,559	81,707	83,914	
Interest	7,218	8,096	8,297	8,363	8,841	9,177	
LAC grant - ballpark complex			440,000				
Donations/in-kind/other - ballpark			315,000				
Water/sewer/electric ballpark xfers			85,000				
<i>Proposed natural gas utility tax</i>	160,000	164,320	168,757	173,313	177,993	182,798	
E.D. transfer from electric	50,000	50,000	50,000	50,000	50,000	50,000	
In-lieu utility taxes	125,523	126,163	126,819	127,493	128,186	128,897	
Total revenue	1,772,698	1,881,241	2,817,316	1,950,390	2,020,463	2,076,972	
Expenditure							
Salaries & benefits	623,452	642,155	661,420	681,263	701,700	722,751	
Operations & maintenance	273,960	281,357	288,954	296,756	304,768	312,997	
Misc. minor capital exp.	26,506	27,222	27,956	28,711	29,487	30,283	
Ballpark complex			950,000				
FD#14 contract	80,000	80,000	80,000	80,000	80,000	80,000	
Total expenditure	1,003,918	1,030,734	2,008,331	1,086,730	1,115,955	1,146,031	
Annual operating results	93,890	81,727	-41,521	54,675	40,848	26,433	256,051
Cumulative balance	768,780	850,506	808,985	863,660	904,508	930,941	

Inc. current expense, cemetery, CIP, civic, economic development, youth, criminal justice lo-pop funds

	2004	2005	2006	2007	2008	2009	6-Yr Total
Population forecast	2.7% 1029	1057	1085	1115	1145	1176	
Transportation system							
Revenue							
Balance brought forward	131,994	82,190	64,903	25,117	2,739	-42,326	
Gas taxes	34,873	35,814	36,781	37,774	38,794	39,842	
Property tax	50,000	50,000	50,000	50,000	50,000	50,000	
FHWA earmark					360,000		
TIB grant					540,000		
Misc.	4,453	4,453	4,453	4,453	4,453	4,453	
Interest	1,071	735	450	139	-198	-563	
Total revenue	222,391	173,193	156,587	117,484	995,789	51,407	
Expenditure							
Salaries & benefits	83,000	85,490	88,055	90,696	93,417	96,220	
Operations & maintenance	22,201	22,800	23,416	24,048	24,697	25,364	
Chip seal	20,000		20,000		20,000		
Noble Street reconstruction	15,000						
SR9 auto-queuing area					900,000		
Total expenditure	140,201	108,290	131,470	114,744	1,038,114	121,584	
Annual operating results	-49,804	-17,287	-39,786	-22,377	-45,065	-27,851	-202,171
Cumulative balance	82,190	64,903	25,117	2,739	-42,326	-70,177	

	2004	2005	2006	2007	2008	2009	6-Yr Total
Population forecast	2.7%	1057	1085	1115	1145	1176	
Electric & TV utilities							
Revenue							
Balance brought forward	319,506	291,779	290,463	361,236	468,670	562,467	
Power sales	1,473,836	1,473,836	1,473,836	1,473,836	1,473,836	1,473,836	
TV sales	85,667	85,667	85,667	85,667	85,667	85,667	
Service hookups	3,500	3,595	3,692	3,791	3,894	3,999	
Misc.	8,341	8,567	8,798	9,035	9,279	9,530	
Interest	3,056	2,911	3,258	4,150	5,156	5,625	
Total revenue	1,893,907	1,866,354	1,865,714	1,937,715	2,046,501	2,141,123	
Expenditure							
Salaries & benefits	280,256	288,663	297,323	306,243	315,430	324,893	
Transfer to CE in-lieu tax	88,640	88,646	88,652	88,658	88,664	88,670	
Transfer to E.D. fund	50,000	50,000	50,000	50,000	50,000	50,000	
Elec. Excise tax	32,616	32,620	32,624	32,627	32,631	32,636	
Operations & maintenance	188,011	193,087	198,300	203,655	209,153	214,800	
BPA purchase	903,827	903,827	768,253	768,253	768,253	768,253	
Misc. minor projects	10,000	10,270	10,547	10,832	11,125	11,425	
Ballpark project	40,000						
Transformer cut-over	8,778	8,778	8,778	8,778	8,778	8,778	
CERB repayment	1,602,128	1,575,891	1,504,477	1,469,046	1,484,034	1,499,455	
Total expenditure							
Annual operating results	-27,727	-1,316	70,773	107,433	93,797	79,201	322,162
Cumulative balance	291,779	290,463	361,236	468,670	562,467	641,668	

	2004	2005	2006	2007	2008	2009	6-Yr Total
Population forecast	1079	1105	1131	1159	1186	1215	
Sewer system	2.4%						
Revenue							
Balance brought forward	230,433	242,930	273,946	283,414	311,262	337,517	
Sewer sales	152,406	156,064	159,809	163,645	167,572	171,594	
SEI-1 sewer sales	167,328	167,328	167,328	167,328	105,328	105,328	
Hookup fees	6,400	6,400	6,400	6,400	6,400	6,400	
Misc.	3,000	3,000	3,000	3,000	3,000	3,000	
Lift Station #4 reimbursement		20,000					
Interest	2,367	2,584	2,787	2,973	3,244	3,498	
Total revenue	561,934	598,306	613,270	626,760	596,806	627,337	
Expenditure							
Salaries & benefits	71,860	74,016	76,236	78,523	80,879	83,305	
Transfer to CE in-lieu tax	15,464	15,684	15,908	16,138	16,374	16,615	
Operations & maintenance	122,165	125,097	128,100	131,174	134,322	137,546	
Debt service (bonds)	25,515	25,515	25,515	25,515	25,515	25,515	
Misc. capital projects	2,000	2,048	2,097	2,147	2,199	2,252	
In-line grinder	20,000						
Ballpark project			20,000				
New debt/Canada hookup	62,000	62,000	62,000	62,000			
Lift station #4 upgrade		20,000					
Total expenditure	319,004	324,360	329,856	315,498	259,289	265,233	
Annual operating results	12,497	31,017	9,468	27,848	26,255	24,587	131,670
Cumulative balance	242,930	273,946	283,414	311,262	337,517	362,103	

6-Yr Total

2004 2005 2006 2007 2008 2009

Population forecast 2.7% 1029 1057 1085 1115 1145 1176

Water system

Revenue

Balance brought forward	218,207	243,273	266,347	272,261	290,917	307,289
Water sales	238,266	244,699	251,306	258,091	265,060	272,216
SEI-1 sales	118,273	118,273	118,273	118,273	118,273	118,273
Hookup fees	6,400	6,573	6,750	6,933	7,120	7,312
Interest	2,307	2,548	2,693	2,816	2,991	3,143
Misc.	6,000	6,000	6,000	6,000	6,000	6,000
Total revenue	589,453	621,366	651,369	664,374	690,360	714,234

Expenditure

Salaries & benefits	141,858	146,114	150,497	155,012	159,662	164,452
Transfer to CE in-lieu tax	21,392	21,778	22,175	22,582	23,000	23,429
Operations & maintenance	139,893	143,670	147,549	151,533	155,624	159,826
Debt payment (bonds)	27,500	27,500	27,500	27,500	27,500	27,500
Misc. capital projects	15,537	15,957	16,388	16,830	17,285	17,751
Ballpark project			15,000			

Total expenditure

Total expenditure	346,180	355,019	379,108	373,457	383,071	392,959
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Annual operating results

Annual operating results	25,066	23,074	5,914	18,656	16,372	13,985
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Cumulative balance

Cumulative balance	243,273	266,347	272,261	290,917	307,289	321,275
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103,068

Consolidated city resources

Annual operating results

Annual operating results	53,983	117,337	5,034	186,487	132,531	116,753
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Cumulative balance

Cumulative balance	1,629,013	1,746,349	1,751,383	1,937,870	2,070,401	2,187,155
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612,125

5. Housing Element

This chapter is a required element of a comprehensive plan developed to meet the provisions of the GMA. In overview, this chapter describes existing characteristics of housing, provides a statement of goals and policies related to housing, projects future housing needs, and demonstrates the availability of sufficient land for housing.

Planning Assumptions

This chapter has been developed in accordance with county-wide planning policies and has been integrated with other plan elements to ensure consistency throughout the plan. In particular, two assumptions developed in the land-use element are used as the basis for projections in this chapter:

- The population of the city will increase substantially during the planning period, from 1,079 in 2004 to 1,750 in the year 2024.
- The number of persons per household is 2.5 and is expected to remain constant during the planning period.

Existing Conditions

Information about existing housing conditions was gathered from three sources: the 2000 US Census, the city's building permit records, and the Whatcom County Housing Authority.

2000 Census data

The 2000 Census data was gathered in two ways. Some questions were asked of the whole population and every housing unit (referred to as "100-percent" questions), and some questions were asked of only a part of the population (referred to as "sample" questions). Data derived from the sample questions was then extrapolated to make assumptions about the entire population. Statistics derived from the sample data are often slightly inconsistent with those based on the 100-percent data because of various errors inherent in the statistical methods. An example of this inconsistency is apparent in the data for Sumas. By definition, the number of *occupied housing units* (which is based on 100-percent data) should be the same as the number of *households* (which is based on sample data). However, the 2000 Census data shows that Sumas had 357 households, but only 343 occupied housing units.

Residences associated with farming -- that is, units on land larger than one acre or having an income from agricultural products -- are NOT included in sample calculations such as value of housing units and size of rents. Nonfarm residences are identified as Specified Owner-Occupied and Specified Renter-Occupied housing units. For the sake of consistency, various nonfarm statistics were used for analysis of the entire population. This may skew the data toward lower value figures and has been taken into consideration in the summary of this chapter.

To summarize:

- 100-Percent Data: Derived from the entire population and every housing unit.
- Sample Data: Derived from a sample of the entire population and then extrapolated to make assumptions about the entire population.
- Specified Owner-Occupied and Specified Renter-Occupied Housing Units: Nonfarm residences generally located on one or less acres of land and having little or no income from the sale of agricultural products. Using nonfarm data provides a more accurate picture of the housing value and rent calculations.

This document indicates, whenever 2000 Census data is cited, whether *100-percent* figures, *sample* figures, or *specified* housing units have been used for analysis. Refer to the 2000 US Census for more information.

Amount and type of housing. Based on 100-percent data, the city of Sumas had 405 housing units² within city limits, of which 254 were detached single-family residences, 37 were mobile homes, RVs, or trailers, and 114 were multi-family residences. Comparing the 1990 Census data to the 2000, there was an increase of 27 detached single-family residences, 43 multi-family residences, and 13 mobile homes, RVs, or trailers. The majority of the growth in Sumas (i.e., 68 percent) during the 1990s was accommodated in structures other than single-family residences.

Age of housing stock. Table 5-1 describes the age of the housing stock based on sample data. In general, the housing stock reflects the same kind of trends as revealed in the population data discussed in Chapter 2. There is a substantial amount of very old housing (pre-1939) and of very new housing (post-1990), and a period of relatively little housing construction during the mid- to late part of the century.

Table 5-1. Age of Housing Stock
(US Census, 2000)

Year Built	Number of Units	Fraction of Total
1999 - 2000	2	1%
1995 - 1998	14	3%
1990 - 1994	73	18%
1980 - 1989	40	10%
1970 - 1979	76	19%
1960 - 1969	46	11%
1940 - 1959	37	9%
pre 1939	117	29%
Total	405	100%

² A housing unit is a structure or a portion of a structure in which a single family or a single individual lives. A single apartment or a single family house is considered 1 unit, while a duplex is considered 2 units.

Condition of housing stock. The 2000 US Census provides certain measures of interior conditions considered to be substandard and the target of home improvement/rehabilitation efforts. Three housing units were identified as lacking-complete plumbing facilities. One unit was identified as lacking complete kitchen facilities.

Ownership and occupancy. The 100-percent data shows that out of 314 occupied units, 144 (46 percent) were owner-occupied, and 170 (54 percent) were renter-occupied. Based on sample data, 97 (67 percent) of the owner-occupied homes were mortgaged and 47 (33 percent) were owned free and clear.

Value of housing stock. Table 5-2 profiles the value of specified homes in Sumas. The median value of Sumas's owner-occupied homes was \$119,800. The equivalent statistic for Whatcom County as a whole was \$155,700.

Table 5-2. Value of Specified Owner-Occupied Housing Units
(US Census, 2000)

Value \$	Number of Units	Fraction of Total
< 50,000	1	0%
50,000 - 99,999	37	26%
100,000 - 149,999	87	60%
150,000 - 199,999	15	10%
> 200,000	4	3%
Total	141	100%

Table 5-3. Percentage of Income Toward Rent and Housing Costs
(US Census, 2000)

% of Income Toward Rent or Housing	Owners	Renters	Total	Fraction of Total
< 20%	55	42	97	31%
20 - 29%	36	50	86	27%
> 30%	44	68	110	35% ←
Not computed	9	10	19	6%
Total Units	144	170	314	100%

Affordability of housing. HUD defines housing as "affordable" when a household pays less than 30 percent of its total income toward housing costs. Households paying less than 20 percent are considered to live in "very affordable" housing. Table 5-3 summarizes the affordability of both owner- and renter-occupied units within the city of Sumas. The table is derived from sample data and therefore has some built-in inaccuracies, as discussed earlier, but the table nevertheless allows identification of trends. The row marked by the arrow shows the part of the community living in unaffordable housing.

As seen in the left columns, 31 percent of *owners* live in unaffordable housing (i.e., 44 out of 144). It is impossible to know whether those owners have assumed large mortgages as a matter of choice or have encountered hard times and are struggling to keep their homes. As shown in the next column, the situation of the *renters* is worse: 40 percent of renters live in unaffordable housing (i.e., 68 out of 170). Overall, 35 percent of the community lives in unaffordable housing.

Table 5-4 shows the economic situation of households in Sumas according to classifications established by HUD. The left column shows HUD's definitions of income brackets. Note that each bracket is defined with respect to the *median household income* within the community. That value was \$29,297 in Sumas, so a "very low" income household would be one with an income less than 50 percent of that amount, or less than \$14,648, as shown in the second column. The right column reveals an interesting profile: there are large high- and low-income segments of the community, and a smaller middle ground. In addition, there has been a slight deterioration since the 1990 Census, which showed that 49 percent of households were Very Low, Low, and Moderate Income, as compared to 53 percent in the year 2000.

Table 5-4. Households By Income Group
(Derived From US Census, 2000)

HUD Definition of Income Brackets	Corresponding \$ in Sumas	# Households	Fraction of Total
Very low < 50% of median	< 14,648	99	28%
Low 50 - 80% of median	14,649 - 23,438	45	13%
Moderate 80 - 95% of median	23,439 - 27,832	45	13%
Middle/High > 95% of median	> 32,228	168	47%
Totals		357	100%

Building permits

Census data from 2000 fails to reflect activities of the last four years (April 2000 - March 2004). In this period there were permits issued for 24 new residential structures, providing a total of 42 new housing units. 18 single-family residences were constructed with a median value of \$141,000, an amount somewhat higher than the overall median of \$119,800 reported in the 2000 Census. Six building permits were for multi-family structures (all four-plexes). The recent permits show a continuation of the trend mentioned earlier in which the majority of new housing units (i.e., 57 percent, 24 out of 42 units) are multi-family.

Subsidized housing

Several subsidized housing projects have been undertaken in Sumas, as discussed below.

- *Creekside Meadows.* Two multi-family structures, including 20 units, are located south of Front Street. Creekside Meadows was funded by the state as a Tax Credit Project. Rent and utilities are no more than 30 percent of a household's adjusted income. Eligibility is based on income. Two- and three-bedroom units are available.
- *Sumas Square.* Sumas Square is an 11-unit structure managed by the Whatcom County Housing Authority for elderly and handicapped persons. Rent, including utilities, equals 30 percent of monthly income, after medical expenses have been deducted. Eligibility is based on age, disability, and income.
- *Sunrise Apartments.* This 12-unit structure was built several years ago under WCHA's sponsorship, but is now privately owned. Rents are established based upon monthly income.
- *Two HUD-owned homes.* HUD owns two homes that are available for rent by eligible low-income families.
- *Rehabilitation project.* In the early 1980s, about 25 homes were rehabilitated using federal grant funds.

Section 8 vouchers and certificates are available in Whatcom county. There are approximately 25 families in the Sumas zip code area involved in Section 8 programs, of which an unknown number live within city limits.

Summary

Considering all of the data presented above, a number of conclusions can be reached:

- Census data reveals a large proportion of Sumas residents are Very Low, Low, and Moderate income, according to HUD standards. The proportion of people within those categories grew during the 1990s, with 53 percent of residents now falling in those categories.
- Housing within Sumas is generally at the low-cost end of the spectrum of what is available within the county. Existing homes have lower median value, and new construction is marketed at a cost that is lower than median home values elsewhere in the county.
- Since 1990, the majority of housing built in Sumas was multi-family.
- Census data indicates that 110 households (35 percent of the total) are situated in unaffordable housing and that 68 of those households are in rental units. There are 45 units of subsidized rental housing available in town, so more such units could be used.

Projected Housing Needs

Amount of housing. New housing stock will be needed to accommodate anticipated growth. Table 5-5 identifies the projected housing demand for Sumas over the course of the 20-year planning period. The table relies upon an assumption that the relative economic condition of residents will remain constant (i.e., that the same proportion of people will be low income over time). The table shows that Sumas will accommodate about 268 new households, of which 109 will consist of Low- or Very Low-income people.

Availability of sufficient land. As described in Chapter 3, available infill sites in combination with the established UGA provide enough land to accommodate 268 new housing units.

Provision for diverse needs. As noted in the summary above, the marketplace has done a good job of adjusting to the needs of the diverse economic segments found in Sumas. Availability of suitable land will ensure continued responsiveness in the marketplace, and the land-use plan identifies such land. The regions identified for infill development (see Map 5A in the land-use chapter) are adjacent to varied kinds of existing housing. The region to the northeast abuts a higher-income single-family neighborhood and can be expected to attract more development of a similar nature. The region to the northwest (Moe Hill) is also attracting larger single-family homes. The region to the south (Boon Street) encircles an attractive subsidized apartment complex, and other multi-family development has recently located there. That area will probably continue to attract multi-family housing, and the description of the area (Area 6 discussed on p. 3-15) emphasizes its suitability for multi-family development.

Table 5-5. Projected Housing Demand

	2004	2009	2014	2019	2024
Population	1,079	1,218	1,375	1,551	1,750
Persons Per Unit	2.5	2.5	2.5	2.5	2.5
Income Bracket	Number of Units Needed in Bracket				
Very Low	121	136	154	173	196
Low	54	61	69	78	88
Moderate	54	61	69	78	87
Middle/High	203	229	258	291	329
Total Housing Units	432	487	550	620	700

Goals and Policies

Goal: Support healthy residential neighborhoods that reflect a high degree of pride in ownership.

Policy Enforce the ordinances that affect the appearance of neighborhoods, such as the ordinances pertaining to abandoned cars and to noxious weeds.

Policy Adhere to the residential zoning code and refrain from granting variances that might change the character of neighborhoods.

Goal: Strive to preserve and enhance the existing housing stock.

Policy Serve as lead agency for residents interested in seeking federal grant funds targeted at rehabilitation of housing.

Goal: Encourage the development of affordable housing for all income brackets.

Policy Supply enough residential land to meet the projected housing need over the next 20 years.

Policy Support the development of some neighborhoods containing only single-family residences.

Policy Allow for the development of multi-family housing to meet affordable housing needs, provided that the character of the community is maintained.