3.8 Socioeconomics

This section discusses the effects S2GF would have on the local social and economic environment. The section first describes current conditions and trends in local population, work force, housing, public services, and the local economy, and then assesses the likely impacts of construction and operation of the project. More extensive analyses and tables of data supporting this discussion of existing conditions and potential impacts may be found in the ASC (Sumas Energy 2 et al. 2000).

3.8.1 Sources of Information

Sources used to describe the existing human environment included demographic series from the Washington State Office of Financial Management (OFM), economic series from the U.S. Department of Commerce Bureau of Economic Analysis, and telephone contacts with local agencies and private services providers. The client supplied information on the project's labor and logistical requirements, and a commercially available regional economic impact model (IMPLAN) was used to estimate secondary effects of construction and operation on the project area economy. (IMPLAN is the registered trademark of the Minnesota IMPLAN Group, Inc., suppliers of the regional economic input-output model and supporting databases.) Full reference citations are provided in Chapter 4.

3.8.2 Existing Conditions

3.8.2.1 Population

The S2GF would be located in Whatcom County in northwestern Washington. In April 1998, the population of the County was 157,500, or 2.8 percent of the statewide population of 5,685,300. Almost 40 percent of the County's population resides in Bellingham, which is located about 24 miles south of the project site in the City of Sumas. Sumas' population in April 1998 was 954.

Whatcom County, like the state as a whole, has slightly more women than men, and racially is predominantly Caucasian (91.0 percent). The remainder of the County's population is composed of African-Americans (0.7 percent), Native Americans (1.6 percent), Asian and Pacific Islanders (1.6 percent), and Hispanics (4.1 percent).

The population grew rapidly in Whatcom County during the 1990s, with a projected year 2000 population of 164,000 residents. The City of Sumas also experienced strong growth during the 1990s, and is projected to have approximately 1,000 residents in 2000. The OFM expects these trends to continue through 2010, with the County experiencing moderate and fairly stable population growth.

During the past 10 years the City of Abbotsford, B.C. has experienced a high population growth. The 233 square kilometer Abbotsford area reaching south from the Fraser River to the Canadian/U.S. border has a population in excess of 100,000. It is estimated to be 173,000 by 2011.

3.8.2.2 Housing

In 1990, there were 322 housing units in the City of Sumas, increasing to 384 by 1998. Countywide, there were 55,742 housing units in 1990, versus 70,897 in 1998. The vacancy rate in the City of Sumas in 1990 was reported to be 5.6 percent. Between 1990 and 1998, the City's population grew by approximately 28 percent, while the number of housing units grew by only 19 percent. These numbers suggest that vacancy rates have declined during the decade, while average household sizes have increased. Due to the stimulus of strong trans-border commerce, the City is anticipating accelerating single family and multiple family housing construction, with a strong emphasis on affordable housing.

Whatcom County's population increased by 23 percent from 1990 to 1998, while the number of housing units increased by 27 percent. These figures indicate that on the countywide level, the housing vacancy rate and average household size in Whatcom County have remained fairly stable over the period, although rental rates are down to 4 percent (Dupre & Scott 1998). The County's supply of tourist accommodations is large and growing, with numerous motels, RV parks, and campgrounds located throughout the area. There also are several large RV parks and motels in and near Abbotsford, Canada, to serve tourists visiting nearby recreation areas.

3.8.2.3 Employment and Income

In 1996, employment in Whatcom County averaged 86,516 jobs, of which 67,123 (78 percent) were held by wage and salary workers and 19,393 (22 percent) by proprietors. Place of work earnings (wages, salaries and proprietors' earnings) accounted for about three-fifths of total personal income in the County, with income from property (dividends, interest, and rent) and transfer payments (mainly Social Security) making up the balance. The principal sources of employment were services, retail trade, manufacturing, and government.

The City of Sumas is working to diversify its economic base by placing greater emphasis on industrial development. The S2GF site is located within the industrial area west of the City that is operated as a free port by the Port of Bellingham. The industrial area has rail and highway links to Abbotsford, Canada, which supports trans-border trade.

3.8.2.4 Public Services and Utilities

Fire Protection

The S2GF site lies within the boundaries of Sumas Fire District #14. The average response time to the S2GF site is within three minutes, since the site is less than a mile from the fire station. Other nearby municipal fire departments include the City of Lynden Fire Department, which can respond to fires and provide emergency services in 12 to 15 minutes, and Everson Fire District #1 (which also serves Nooksack), which has a response time of 10 minutes. All three fire departments participate in mutual aid agreements to provide assistance during large fire emergencies.

None of these departments has the equipment to fight a major fire involving the 2.5-million-gallon diesel storage tank. The Sumas County Fire Department is a voluntary station largely equipped to handle structural fires. Volunteers receive only limited training in fighting small liquid fires, and the station possesses very little foaming equipment. It would be nearly impossible for the Sumas department to handle such a potentially large flammable liquid fire without assistance. (Webb pers. comm.)

However, if all state, county, and city fire codes, regulations, and ordinances were complied with, the effort to fight a tank blaze would be reasonable. Success would depend largely on staffing and operation at the S2GF facility. If onsite specialists or training were provided (similar to those at refinery fire fighting departments) and safety procedures were built into the system, the danger of such a fire could be significantly reduced.

In addition, two refineries in Whatcom County, ARCO and BP, are equipped with onsite flammable-liquid fire departments. Mutual aid agreements exist with these refinery fire departments, but BP and ARCO are approximately 30 miles west of the project site. Again, if adequate safety procedures were built into the S2GF facility, mitigation of a tank fire could take place while better equipped assistance was summoned.

Police

The City of Sumas Police Department provides police protection to the community in the S2GF vicinity. This department has six patrol officers and three reserve officers, all of whom patrol the area near the S2GF site.

The Whatcom County Sheriff's Department patrols areas outside the City of Sumas city limits. This department has 40 patrol officers and six patrol sergeants, with one officer patrolling the areas near the S2GF site.

District #7 of the Washington State Patrol provides police services along State Route 9 and all state and county highways outside city limits within Whatcom County.

During an emergency, police officers from the City of Lynden Police Department, Whatcom County Sheriff's Department, and the Washington State Patrol may also be asked by the City of Sumas to respond to incidents at the S2GF site.

Emergency Medical Services

Emergency medical services are provided in the S2GF vicinity by primary response ambulance units and the area hospital. Ambulance units are operated through the local fire department. The primary responsibility of the fire department is to provide basic life support and to prepare the victim(s) for transport.

The only hospital in Whatcom County is St. Joseph's Hospital, located in Bellingham, approximately 24 miles from the S2GF site. The facility has 253 beds and maintains a Class 2 emergency room, childbirth center, cardiac unit, mental health center, and drug and alcohol rehabilitation center, and performs outpatient procedures, urgent care, adult health care, and both in-patient and out-patient rehabilitation. Canadian citizens or persons with dual-citizenship may be transported to the Matsqui-Sumas-Abbotsford (MSA) Hospital located across the U.S./Canadian border in Abbotsford. (Sumas Energy 2 et al. 2000)

Schools

There are several schools and educational facilities in the S2GF vicinity. The City of Sumas is part of the Nooksack Valley School District #506. This district provides schooling for the cities of Sumas, Everson, Nooksack, and part of unincorporated Whatcom County. This district operates five schools, all of which have excess student capacity available. No school buildings are located directly adjacent to the S2GF site. Institutions of higher education located in Whatcom County (Bellingham) include Bellingham Technical College, City University, Northwest Indian College, Whatcom Community College, and Western Washington University.

Parks and Recreational Facilities

Public parks and recreation facilities present within a 5-mile radius of the project site are listed in Table 3.8-1 and facility locations are shown in Figure 3.8-1. City of Sumas officials report that the largest municipal park, Howard Bowen Memorial Park, is the most intensively used public recreation facility within the project vicinity. In addition to these public facilities, semi-public and privately operated facilities are present. They include a school playground and playfield, restaurants, and an RV Park.

No county recreation facilities are within the 5-mile radius study area. The closest county facility is Silver Lake Park, located 3 miles north of Maple Falls, Washington, approximately 15 miles east of the project site. County use figures indicate that in 1997, Silver Lake Park served 121,124 visitors. Other developed county park and recreation facilities and trails are listed in Table 3.8-2 and locations are shown in Figure 3.8-2.

Undeveloped properties owned by the Whatcom County Parks and Recreation Department are also used and could be developed in the future. These facilities are listed in Table 3.8-3. County use figures indicate that in 1997, County parks served 449,376 visitors, with Hovander Homestead Park receiving the highest number of visitors.

Berthusen Park, operated by the City of Lynden, is another facility that is accessible to Sumas residents. The park is approximately 18 miles west of Sumas (see site #18 on Figure 3.8-2) and contains facilities for camping and picnicking, group shelters, playground areas, and hiking and biking trails.

Table 3.8-1: Public Park and Recreation Facilities within 5 Miles of the Proposed Sumas 2 Generation Facility

No. *	Name	Facilities	Owner
1	Sumas City Park (approximately 2.5 acres)	Picnic areas, restrooms, barbecue gazebo, and maintained lawn area adjacent to Johnson Creek	City of Sumas
2	Howard Bowen Memorial Park (Ball Park – approximately 9 acres)	Two lighted baseball fields, restroom facilities with showers, a rodeo ground used for the Sumas Junior Rodeo, and open space	City of Sumas
3	Playground (approximately 0.7 acre)	Tennis court, basketball court, and playground equipment	City of Sumas
4	Sumas Primary School Playfield	Field and playground equipment	Nooksack Valley School District

* Corresponds to numbers shown on Figure 3.8-1.
Source: City of Sumas Comprehensive Plan, 1998

Figure 3.8-1

Table 3.8-2: Whatcom County Park and Recreation Facilities

No. *	Name	Facilities
1	Hovander Homestead Park Tennant Lake Interpretive Center Fragrance Garden (summer only)	Picnic areas with tables and barbecues, children's play structures, group picnic facilities, observation tower, shelter rentals, hiking and biking trails, fishing facilities Elevated boardwalk, hiking trails, guided interpretive tours Easy wheelchair access, Braille signage, accessible restrooms
2	Plantation Rifle Range	Outdoor high power rifle range, indoor and outdoor pistol and small bore rifle range, practice trap field, meeting and classroom facilities
3	Roeder Home	Community cultural arts and social center, arts and crafts courses, concerts, gallery exhibits, lectures, and cultural events, available to rent for weddings, meetings, or receptions
4	Samish Park	Picnic areas with tables and barbecues, seasonal food concession and non-powered boat rentals, children's play structures, accessible swimming beach, day lodge rentals
5	Semiahmoo Park	Paved shoreline bike and walking path, saltwater frontage, scenic views, Semiahmoo Park Museum
6	Silver Lake Park	Public boat launch, picnic areas with tables, barbecues, children's play structures, cabin rentals, seasonal food concession, tackle shop and non-powered boat rentals (rowboats, canoes, and pedal boats), day lodge and shelter rentals, overnight camping with or without hookups, group campsites, showers, RV dump stations, hiking trails, riding trails, horse stables, fishing, swimming
7	Bay Horizon Park	Managed by the Lion's Club; Camp Horizon, playground area, overnight accommodations including barracks, mess hall, youth hostel, gym, recreation building, administrative building, and several outbuildings
8	Smith & Northwest Soccer Complex	Managed by agreement with soccer association; 12 soccer fields, 4 baseball fields, concessionaires, office and storage buildings, restrooms
9	Ted Edwards Park	Small neighborhood park, surrounded by homes and difficult to locate; shelter building and trails, open green areas and woods, minimal playground equipment
10	Interurban Trail	5.9 miles one way; easy rating
11	Lake Whatcom Trail	3.1 miles one way; easy rating
12	North Lost Lake Trail	4.6 miles one way; moderate rating
13	Pine and Cedar Lakes Trail/Park	2-3 miles one way; strenuous rating; ends in primitive campground at both lakes
14	Teddy Bear Cove Trail	0.9 mile one way; strenuous rating

* Corresponds to numbers shown on Figure 3.8-2.
Source: Whatcom County Parks and Recreation Department, 1998

Figure 3.8-2

Table 3.8-3: Undeveloped Whatcom County Park and Recreation Facilities

Site	Approx. Acres	Potential Use
Birch Bay Property	14	Include approx. 5.6-acre park site
Birchwood Property	3	Undetermined
Chuckanut Mountain	140	Multi-use non-motorized trails
Haynie Community Club Site	2	Undetermined
Euclid Site	18	Swimming, day use
Galbrath Property	262	Day use, water access
Lake Whatcom – South	175	Swimming, day use
Smith Creek Site	171	Day use, camping, swimming
Little Squalicum	13	Day use, beach access
Maple Falls/Glacier RW	113	Hiking trails
Ostrom Property	39	Day use or camping
Teddy Bear Cove	13	Day use
Pleasant Valley School Site	3	Undetermined
East Lake Samish Park	24	Day use, lake access
Source: Whatcom County Comprehensive Parks and Recreation Open Space Plan, 1991		

No state park and recreation facilities are located within the study area. The closest state recreation facility is Peace Arch State Park located approximately 25 miles west of the project. This facility is a day use site and contains 100 picnic sites, parking for 350 vehicles, a kitchen shelter, two comfort stations, a residence, shop, and greenhouse, 0.6 mile of road, 0.10 mile of trails, and 0.8 mile of interpretive trail. Activities include the annual U.S./Canadian "Peace Arch" Day, horticultural displays, interpretation, picnicking, and miscellaneous recreational programs sponsored by the City of Blaine. Other state park and recreation facilities are listed in Table 3.8-4 and locations are shown in Figure 3.8-2.

Table 3.8-4: State Park and Recreation Facilities in Whatcom County

No. *	Name	Facilities
15	Peace Arch State Park (Day Use)	Picnic sites, kitchen shelter, two comfort stations, residence, shop, greenhouse, 0.6 mile of road, 0.10 mile of trails, and 0.8 mile of interpretive trail
16	Birch Bay State Park	Campground with picnic sites and shelters, comfort station/bathhouse, fire rings, standard sites, trailer hookups, and contact station, hiking trails, wooden foot bridges, primitive group facilities, concession building, vault and pit toilets, fishing
17	Larrabee State Park	Picnic sites, underpass to beach, two-lane boat launch ramp, mountain lookout sites, foot bridges, hiking trails, comfort stations, vaulted toilets, campsites (standard and with full hookup), group camp facilities, kitchen shelters
* Corresponds to numbers shown on Figure 3.8-2. Source: Washington State Parks and Recreation Department, 1998		

There are no wild and scenic rivers, national trails, wilderness areas, wildlife sanctuaries, or public lands located within the study area. However, there are several Forest Service campgrounds within Whatcom County that provide varying facilities. These campgrounds are located along Mt. Baker Highway 542, in the Baker Lake area (Highway 20 at milepost 82), along Cascade River Road, and along North Cascades Highway 20. Additionally, the following federal recreation resources are located within approximately 60 miles of the site:

- Mt. Baker- Snoqualmie National Forest – 20 miles east
- Mt. Baker National Recreation Area – 30 miles southeast
- North Cascades National Park – 55 miles east/southeast
- Ross Lake National Recreation Area – 55 miles east
- Pasayten Wilderness Area – 60 miles east

Established Plans and Policies

Whatcom County has a Comprehensive Parks and Recreation Open Space Plan, which was adopted in 1991. This plan establishes policies under which recreation planning decisions will be made, and formulates future recreational facility needs for its jurisdiction. The City of Sumas does not have a Parks and Recreation Plan.

There are no new parks or recreation facilities planned within a 5-mile radius of the project site or the pipeline corridor.

There are no Whatcom County ordinances or regulations that would require a dedication of land for recreation facilities (or commitment of funds for such a purpose) as a condition for implementation of the proposed project. No ordinances or requirements of this type are anticipated.

No federal recreation regulations apply to the project site, nor are there federal or state plans for recreation facilities in the project area.

Public Utilities and Streets

There are four public facilities that would potentially be affected by construction and/or operation of the S2GF: streets, process water lines, sanitary sewer lines, and power lines. City hookup fees and any additional engineering and construction costs associated with service of these facilities would be assessed to the S2GF sponsor.

The City of Sumas, including the Department of Public Works, inspects and maintains all public facilities and utilities in the City. The City of Sumas does not have a schedule for making local road repairs. Repairs are done as needed, following local inspections.

Communications

Telephone service to the site and adjacent properties is provided by GTE Systems of the Northwest.

Water Supply

Potable water is available at the S2GF site from the City of Sumas municipal domestic supply. The primary source of water for the City's system is the Abbotsford-Sumas aquifer. Two wells are used to supply water to the City of Sumas and the Sumas Rural Water Association (SRWA) with a combined service area of approximately 10 square miles. See Section 3.2 for further discussion of water resource issues.

Stormwater

Stormwater runoff would be treated onsite according to permanent BMPs for low impact industrial sites. Treated stormwater would discharge to underground pipes, then to Sumas Creek, a tributary to Johnson Creek and the Sumas River.

Sewerage/Solid Waste

The S2GF site is located within the City of Sumas, and would receive public sewer service from the City. All wastewater from the City of Sumas, SCCLP, and S2GF would receive advanced treatment at the JAMES plant in Abbotsford, owned and operated by the Sumas-Abbotsford-Fraser Valley Regional District (FVRD). The ultimate discharge location for S2GF treated wastewater is the Fraser River in British Columbia, Canada.

Solid waste collection for the City of Sumas is provided through a hauling contract between Nooksack Valley Disposal Company (NVDC), a state regulated garbage utility and LENS, a "collective bargaining" group comprised of the small cities of Lynden,

Everson, Nooksack, and Sumas. It is anticipated that the S2GF facility would contract with NVDC for non-hazardous solid waste collection and disposal.

Recycling service is also provided by NVDC. Hazardous waste collection and management services are available in the County through private vendors, and for small quantity generators of hazardous waste, at the Disposal of Toxics Facility operated by the City of Bellingham.

3.8.3 Socioeconomic Impacts of the Proposed Action

3.8.3.1 Construction

Based on the anticipated permitting schedule and issuance of a Notice to Proceed, construction of S2GF would begin in sometime after receipt of all permits and approvals, although construction in 2001 or later would not change the conclusions of this analysis. Following site preparation, full construction mobilization and foundation work for the power island would commence. Construction would take approximately one and one-half years from that point. During construction, the workforce would exceed 300 workers, and peak at approximately 400.

The location of the S2GF site is within easy commuting distance (fewer than 25 miles) of the population centers of Bellingham, Ferndale, and Blaine. Therefore, it is expected that most of the construction labor force would commute to the S2GF from these areas on a daily basis. Construction personnel would also likely be hired from the Seattle/Tacoma area; these workers would probably be "weekend commuters," staying in RV parks and motels near the jobsite during the workweek. Because more specialized skills required for certain plant construction activities may not be available in the local or state labor pools, a small percentage of the workforce may be brought in from out-of-state. These employees would likely work on a short-term basis, residing in nearby motels or RV parks for the duration of their assignments, or arranging one-year or monthly rentals.

Some workforce members could be from Canada and some housing could be provided in the Abbotsford area. The mix of Canadian/U.S. workers is unknown.

A possible additional source of regional socioeconomic impacts could result from the installation of the 230 kV transmission line.

Population and Housing Impacts

Based on power plant project experience, it is expected that during the peak of construction, a maximum of approximately 140 construction workers would require temporary housing in the general vicinity of the S2GF site. It is expected that up to 10 percent (30 to 40 individuals) of the construction workforce for the S2GF would be specialized craftsmen from out-of-state areas. These workers typically have relatively short assignments, so few are expected to bring their families with them to the S2GF site.

Weekend commuters, projected to number around 100 individuals, would use motels, trailers, campers, and other forms of transient housing. While some workers are likely to seek temporary housing in the City of Sumas and nearby communities like Nooksack, Everson and the Abbotsford area, the S2GF site's close proximity to Interstate 5 indicates that a large portion of the project's temporary housing requirements could be met in the Bellingham area.

The project area is well equipped to serve the needs of the temporary workers. There are nearly 3,000 motel rooms and RV sites within 30 minutes driving time of the job site, including sites in Abbotsford, B.C. The projected peak number of non-local transient construction workers requiring accommodations in the vicinity of the project is approximately 140. This represents less than 5 percent of capacity.

Construction of the 230 kV transmission line would have negligible effects on nearby residents. By using existing utility and railroad ROWs, disturbances to adjoining parcels would be minimized. Temporary construction impacts would be associated with preparation and placement of transmission poles and installation of power lines. Temporary street closures may occur while transmission poles are installed and maintained. Work usually proceeds rapidly, however, and crews are usually only at one location for a day or two before moving on. Requirements for public services or other community resources are essentially negligible.

Local Business Effects

The consumption spending of project workers and their households out of their wages and salaries would stimulate the retail trade and services sector of the regional economy. Total payroll costs for the S2GF, including fringe benefits and other labor overhead costs, are projected at $30.6 million (SE2 1999). It is anticipated that approximately $11 million would be expended in Whatcom County during project construction. (This estimate is based on an average level of local spending equivalent to 35 percent of workers' earnings, reflecting a mix of resident and non-resident workers. Non-residential workers would be expected to spend a small fraction of their earnings in the S2GF area for housing and subsistence while away from their homes.) Local (Whatcom County) non-salary expenditures for materials, services, and equipment leasing associated with construction are projected to total about $22 million (SE2 1999). These procurements would augment the sales of many construction-related businesses in Whatcom County.

Cost data for the 230 kV transmission line is not available. Regardless, real property values of the transmission ROWs are not likely to change since it would be located in industrial and commercial areas within existing utility and railroad ROWs within the Whatcom County segment. No analysis was completed relative to the Canadian segment.

Based on the IMPLAN regional economic modeling database for construction of electric utility facilities, the project would generate 645 worker-years of direct employment at the site during the 1-1/2 years of construction. The stimulus to enterprises and government agencies throughout Whatcom County from project and worker spending would create

approximately 2,430 worker-years of additional indirect and induced employment. On an annualized basis, these incremental jobs would represent about 2 percent of countywide employment.

Sales Tax Revenues

S2GF would purchase large amounts of power-related equipment from various domestic and foreign suppliers, as well as locally supplied construction materials and services. The state use tax would be levied on the out-of-state procurements. Together with the taxable in-state purchases of goods and services (total taxable purchases would equal approximately $280 million), these procurements would generate an estimated $18 million for the State of Washington. The sum of $3.4 million would be generated for Whatcom County and the cities where purchases are made. These positive fiscal impacts to the cities, county, and the state would be a "one-time" occurrence resulting from project construction activities. S2GF is seeking tax incentives, which would diminish this amount, if they are approved by the Washington state legislature.

Although as many as 400 workers are anticipated, parking has been provided for 300. If ride sharing does not occur, city streets and parking areas could be used for parking. This would hamper some street maintenance activities and could affect some retail sales if retail parking is used.

Parks and Recreation

The majority of the S2GF construction workers are expected to reside within a daily commuting distance of Sumas. At peak construction periods, some workers may seek temporary housing in apartments or motels, or may make private arrangements for recreational vehicles. Local park and recreation facility users are expected to experience minor impacts resulting from the use of RV spaces by construction workers.

Services and Public Utilities

Construction workers commuting into the S2GF communities may create a minor and temporary increase in the demand placed on public service providers. This demand increase could have a minor and temporary impact on local public safety, fire, and emergency medical services. The impact of S2GF construction on local schools would be at most minor and temporary, as few out-of-state construction workers are likely to bring their families and local schools have excess capacity. Construction-related impacts to local utilities are also expected to be minor and temporary. It is not likely that S2GF construction activities would require additional maintenance of public facilities (beyond that which is regularly scheduled). In summary, due to the relatively short duration of the S2GF's construction phase and small number of relocated construction workers, the overall adverse impact on local public services and utilities caused by construction is not expected to be significant.

3.8.3.2 Operation

Population and Housing Effects

Since operation of the S2GF requires only 23 permanent employees, the facility would not have any significant impact on population or housing in the area, positive or negative.

Local Economy

Increased tax revenues, income, employment, and local expenditures resulting from operation of the S2GF would positively impact Whatcom County jurisdictions, local businesses, and the state. Operation of the S2GF would require 23 full-time employees working in either two 12-hour shifts or three 8-hour shifts (SE2 1998). To the extent practicable, efforts would be made to hire local individuals to staff the facility.

Based on the IMPLAN regional economic modeling database for operation of electric power facilities, a power plant employing 23 full-time workers would (1) have a gross annual value of output valued at $10.13 million, and (2) generate another $1.2 million in purchases from suppliers (including fuels, maintenance supplies and services, retail goods and professional services). Sales, use, and other indirect business taxes corresponding to that level of output would total an estimated $1.78 million per year, which would accrue to state and local government jurisdictions. Employee spending from wages and salaries is estimated at around $1.1 million per year, assuming an average local expenditure rate of 85 percent of compensation.

Parks and Recreation Facilities

There would be no operational impacts on recreational uses in the vicinity. Please see Section 3.1 - Air Quality for a discussion of visibility impacts of air emissions on recreational lands.

Services and Public Utilities

During operation, onsite security personnel, a fire brigade, and an emergency medical response team would provide essential public services. Use of onsite services and emergency response plans and devices, coupled with the relatively small number of employees that would staff the facility, would minimize additional demands placed on local public services during normal operations.

The facility is designed to operate automatically, requiring minimal operational intervention. An automatic trip system would be in place to help eliminate emergency situations, shutting down the faulty system and, if appropriate, the entire facility if abnormal or out-of-range operating conditions are detected. Systems would remain inactive until the fault has been remedied.

Prior to commencing operations at S2GF, SE2 would prepare and submit an emergency response plan to EFSEC (and to local emergency service providers) for review and approval. The plan (outlined in Section 7.2 of the ASC) would describe standard operating procedures during abnormal or emergency situations. Responsibilities defined therein would be the same as those implemented at the existing Sumas power plant. When appropriate, SE2 would provide training to local service providers. A major difference between the plants would be the 2.5-million-gallon diesel oil tank to be built at the S2GF site.

Under normal operating conditions, as many as 12 employees would be on site concurrently. Due to the low number of employees and the fact that each would be required to adhere to a strict safety program, impacts to local emergency service providers from employee injury are expected to be low. Should a major fire involve the petroleum storage tank, local fire fighting resources would not be adequate. The Emergency Response Plan would incorporate the existing mutual aid agreements with Cherry Point refinery staff, who might require 30 to 60 minutes for a response (30-mile drive plus response time), or develop a plan to establish mutual aid agreements with Canadian authorities, who might offer a quicker response.

Upon completion, the S2GF would be connected to existing utility systems. Based on the operational characteristics of the plant, no utility capacity problems are anticipated. In addition, operation of the S2GF would not likely require additional maintenance of public facilities (beyond that which is regularly scheduled). Consequently, operation of S2GF is expected to have a less than significant impact on existing public services or utilities in the plant's vicinity. Finally, due to the small size of the operating staff, the S2GF is not expected to burden the school system.

Local Tax Revenues

There would be a potential positive impact on public service and utility finances due to S2GF operation. The operational plant's assessed value would be approximately $385 million, and would generate several million dollars per year in property and sales tax revenues for municipal, county, school district, and other local jurisdictions. A portion of these funds could be used to upgrade existing public services and utilities in the County.

3.8.4 Socioeconomic Impacts of No Action

The No Action Alternative would leave the project region's socioeconomic conditions unchanged from current patterns and trends. Local providers of transient housing and other goods and services would not experience temporary increases in demand for their facilities. The assessable property tax bases and sales tax revenues of state and local jurisdictions would not expand as a result of the project. Although local construction workers may need to travel greater distances to find employment opportunities, this situation is common in the trades and should not prompt mitigation. In summary, the No

Action Alternative would have a less than significant impact on the socioeconomic health of the region.

3.8.5 Mitigation Measures

Specific mitigation measures designed to lessen construction activity impacts on public services include:

- Incorporating increased fire fighting response into the facility's SPCC to ensure increased capacity beyond that available from local services.
- Coordinating local police, fire departments, and emergency medical service providers to ensure that in emergencies, all locations in the S2GF vicinity and along the water pipeline corridor are accessible.
- Coordinating and scheduling construction vehicle trips to and from the immediate construction zone so as to minimize general traffic disruption (e.g., avoiding deliveries during "rush-hour").

For related discussions of impacts and mitigation, see Sections 3.1 (Air Quality), 3.3 (Noise), and 3.10 (Traffic, Parking, and Transportation).

3.8.6 Cumulative Impacts

The S2GF project would increase the existing demand for labor, goods and services (private and public) in the region. However, it is difficult to determine the magnitude of this potential change relative to that of other (potentially overlapping) ongoing and prospective projects in the Sumas area. The EIS team is not aware of any significant civil construction projects in the area that would interact with or influence the S2GF project. However, in light of the region's large industrial base and extensive development of economic and social infrastructure, the area has the capacity to absorb and accommodate cumulative socioeconomic impacts associated with the project without significantly straining available resources.

3.8.7 Significant Unavoidable Adverse Socioeconomic Effects

The proposed action would have no significant unavoidable effects on the socioeconomic health of the project region. Any adverse effects can be mitigated to less than significance.

3.8.8 Environmental Justice Issues

Environmental justice becomes an issue when industrial activities are placed in areas where minority or low-income populations would bear a disproportionate share of the adverse impacts associated with such activities. Infringing upon the environmental justice rights of a disadvantaged group of residents may be presumed if:

- A majority of the people living within a reasonable distance of the activities are ethnic minorities or in poverty, or
- The sponsors of the proposed facilities deliberately sited their project in low income/minority neighborhoods to minimize costs.

Neither of the criteria stated above applies to S2GF. The plant site is in an industrial park not zoned for residential use, and is surrounded by open land, transportation and utility ROWs, and commercial real estate. It was sited because of existing zoning and due to the proximity of a similar plant and the Canadian border. Ethnic minorities account for less than 10 percent of the County population, and there are no concentrations of low-income or minority people near the site.

The transmission line route from the S2GF plant to the Clayburn Substation follows existing utility and railroad ROWs. Construction of the line would not adversely affect environmental justice values in the area.