

**SULTAN CITY COUNCIL  
AGENDA ITEM COVER SHEET**

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**ITEM NO:** A-6

**DATE:** September 25, 2008

**SUBJECT:** First Reading and Adoption of Ordinance No. 995-08 adopting Amendment No. 2 to the 2005 General Sewer Plan

**CONTACT PERSON:** Deborah Knight, City Administrator

**ISSUE:**

The issue before the City Council is to have First Reading and Adoption of Ordinance No. 995-08 Amendment No. 2 to the 2005 General Sewer Plan (Attachment A).

Amendment No 2 to the General Sewer Plan for the City documents how the sewer system will be upgraded to be consistent with the 2008 Revisions to the 2004 Comprehensive Plan.

**STAFF RECOMMENDATION:**

Have First Reading and adoption of Ordinance No. 995-08 adopting Amendment No. 2 to the City of Sultan 2005 General Sewer Plan for submittal to the Department of Ecology; providing for severability; and establishing an effective date.

**SUMMARY:**

Amendment No. 2 to the General Sewer Plan is prompted by revisions to the City's 2004 Comprehensive Plan.

The Growth Management Hearings Board has found that Sultan's 2004 Capital Facilities Plan was not adequate to demonstrate that anticipated future growth could be accommodated by improved infrastructure, including its sewer and water systems.

The adoption of this Ordinance is necessary to resolve the finding of noncompliance in the Final Decision and Order issued by the Board related to Case No. 06-03-0017.

Amendment No. 2 to the 2005 General Sewer Plan contains goals, policies, system maps and design standards intended to guide the development of water system facilities. Important components of the Plan include: Goals and Policies, Design Standards, Population Projections, Water Demand Projections, Capital Improvements, and Financial Implications.

### What's Changed

The General Sewer Plan has been amended to reflect the discussion and direction from the Planning Board at its September 9, 2008 meeting:

*Parcels with existing development using on-site sewage systems where a sewer is available are not required to connect to the sewer unless the on-site system fails, or the ~~existing structure is remodeled, the property is sold or changes ownership or the~~ property owner wishes to connect. Determination of on-site sewage system failure is the responsibility of the Snohomish County Health Department.*

### Sewer Utility:

1. Sewer service will be made available to all properties within the urban growth area and all properties that develop or redevelop within the UGA will be required to connect to the City sewer system as new on-site sewage systems will not be allowed.
2. Projected population to be served by City sewers will increase to 11,119 people by 2025 and require increased wastewater treatment capacity to be provided by a membrane bioreactor process that will be paid for by new development through increased capital facilities charges as defined by the recent sewer rate study.
3. New sewer extensions may require some property owners to participate in utility local improvement districts.
4. Extension of sewer mains past existing properties now served by on-site sewage systems will require the property owners to pay for the benefit conferred by the sewer but will not require actual connection unless the on-site system fails, the structure is remodeled, the property is sold, or it changes ownership.
5. Reclaimed water from the wastewater treatment facility may become available to some customers for irrigation use or other non-potable purposes in lieu of potable water from the City water system.
6. Sewer extensions to some properties will be served through new local sewage pump stations, which will be built in the local neighborhood resulting in some minor noise and visible appurtenances.

## **DISCUSSION:**

At the Planning Board public hearing on September 16, 2008, the Planning Board requested a couple of changes to the sewer plan amendment:

**Sewer utility policy:** There is a sewer utility policy which reads: “extension of the sewer mains past existing properties now served by on-site sewage systems will require the property owner to **pay for the benefit conferred by the sewer** but will not require actual connection...”

The Planning Board understands the need to pay for the sewer system within the 20-year time frame, and they are looking for some language that would clarify the payments would be reasonable to the property owner. In other words, the payment for the benefit wouldn't necessarily be required in an immediate lump sum.

The consultant team discussed this issue. A sewer may be built in front of some property by three methods: a developer extension (with latecomer agreement defining payment by benefited property owners); a ULID/LID (which would necessarily include and assess all benefiting properties); and by a City-built extension (and the City could define how and when connection charges are paid). The only limitation that may appear is if the City is seen as lending its' credit.

Capital costs normally are paid by the developer with other benefiting property owners paying their fair share of that capital cost t he time of hookup. If someone does not hookup within the latecomers period (usually ten or so years), then the developer won't receive their reimbursement, and those property owners have no capital cost when they eventually hookup. They would still pay the City a general facilities charge (for their share of the treatment plant etc.).

If the sewer line is extended through a ULID, then the City bonds the capital cost, and the developer and other property owners pay alike either in a lump sum or over time (again usually over ten or so years) with interest to retire the bonds later.

So, if the developer up fronts the cost of the sewer line, then the other benefiting property owners don't pay until they hookup (and pay only if they hookup during the latecomers period). If the City upfronts the cost of the sewer line (through an ULID or with other public funds), all of the benefiting property owners pay from the start either by a lump sum far share or an annual assessment with interest. It entirely depends on whether the capital costs were initially funded privately or publicly.

The recommended policy seems to anticipate that all benefiting property owners will pay from the start whether they hook up or not. Which may intend that the latecomers charge (which is only lump sum) must be paid at the time of development and not at the time (with a latecomers agreement) when or if a benefiting property owner hooks up.

The purpose of such a policy would be to make it easier for developers to get reimbursed without the formation of an ULID (which is doubtfully legal). If a latecomers agreement could be crafted that allowed benefiting property owners who don't hookup to pay their fair share over time (like an annual assessment with or without interest), then the policy would make more sense and be more practical in its application in Sultan where too many benefiting and unhooked-up property owners can't afford to pay a lump sum.

The real purpose is to facilitate development of sewer lines concurrent with development, which seems like a worthwhile public purpose, particularly if it can be made affordable to property owners of all income levels and not just those who can afford to buy a new home at today's market prices that now require a sewer line among many other costly new home expenses.

To make the policy meaningful, the City will need to have a new version of a latercomers agreement that mimics an ULID for privately funded sewer capital costs. Otherwise, an ULID is required to make it affordable to existing low and moderate income property owners, particularly on a functioning septic system.

**Staff Recommendation: No change to the policy. Evaluate potential implementation strategies through development code at a later date.**

**Tables :** Expand Table 4 in the GSP amendment to include information showing past system capacity (2005-2008) to track with Table 3. Specifically, ERU's available. The WWTP Engineering Study provides this information for 2005. Year 2007, 2009 and 2012 are in the WWTP engineering study are extrapolated. It would be difficult to collect and incorporate this information into Table 4 before the September 30, 2008 deadline.

**Staff Recommendation: No change to Table 4.**

#### **BACKGROUND:**

The City of Sultan adopted its 2004 Growth Management Act Comprehensive Plan in accordance with the Washington State Growth Management Act (GMA) on November 22, 2004 Ordinance No. 841-04.

Adoption of the Comprehensive Plan was an essential prerequisite to adoption of a Water System Plan, in that the GMA Comprehensive Plan provides the City with analysis and guidance in assessing and anticipating population growth and infrastructure needs for the present and future residents within the City's water system service areas.

On December 14, 2005, the City adopted the 2005 General Sewer Plan with the passage of Ordinance No. 896-05.

On February 12, 2007 an appeal (Case No. 07-03-0017) was filed with the Central Puget Sound Growth Management Hearings Board (Board) and the Board ruled on September 5, 2007 the City's action in adopting a Capital Facilities Element by Ordinance No. 942-06 did not comply with Growth Management Act (GMA), chapter 36.70A RCW, requirements since it did not include level-of-service standards to support the needs assessment; it did not demonstrate that there would be adequate public facilities and services; and that the City did not reassess its land use element or take other measures to maintain consistency.

On March 14, 2008, the Board established a coordinated compliance schedule and issued its Order of Continuing Noncompliance, Amending Compliance Schedule (Compliance Order) establishing September 30, 2008, as the deadline for the City of Sultan to take appropriate legislative action to comply with the GMA.

The City Council and Planning Board began working together in January 2008 to make the necessary changes to the 2004 Comprehensive Plan and appendices including the 2005 City of Sultan General Sewer Plan.

The City provided 60-days notice to state agencies of proposed revisions to the 2004 City of Sultan Comprehensive Plan and appendices on July 1, 2008 consistent with RCW 36.70A.106(1).

A State Environmental Policy Act (SEPA) Environmental Checklist was prepared for Amendment No. 2 to the 2005 General Sewer Plan on July 17, 2008 and a threshold Determination of Non-Significance was issued on August 4, 2008 for the required 14-day comment period pursuant to WAC 197-11-340(2).

The City did not receive an appeal of the City's Determination of Non-Significance on Amendment No. 2 to the 2005 General Sewer Plan prior to expiration of the 14-day SEPA comment period on August 18, 2008.

The Planning Board conducted a public hearing on Amendment No. 2 to the 2005 General Sewer Plan on September 16, 2008 and provided an opportunity for citizens to comment regarding proposed amendment.

Following City Council approval of Amendment No. 2, the amended Water System Plan will be submitted to the Department of Ecology for its final approval.

#### **ALTERNATIVES:**

1. Have First Reading and adoption of ordinance No. 995-08. This action implies the City Council believes Amendment No. 2 to the 2005 General Sewer Plan meet the goals and regulatory requirements of the Growth Management Act.

2. Have First Reading of Ordinance No. 995-08 but delay adoption and direct staff to areas of concern. This action implies the City Council has questions or concerns regarding Amendment No. 2 to the 2005 General Sewer Plan and would like to direct staff to make corrections to the document(s) prior to adoption. The City Council would need to set a special meeting date to take legislation action on the proposed revisions prior to the September 30, 2008 deadline set by the Growth Management Hearings Board.
3. Do not have First Reading of Ordinance No. 995-08. This action implies the City Council has fundamental concerns regarding the proposed amendment and would like to delay First Reading to allow staff time to correct deficiencies. The City Council would need to set a special meeting date to take legislation action on the proposed revisions prior to the September 30, 2008 deadline set by the Growth Management Hearings Board.

**RECOMMENDED ACTION:**

Have First Reading and adoption of Ordinance No. 995-08 adopting Amendment No. 2 to the City of Sultan 2005 General Sewer Plan for submittal to the Department of Ecology; providing for severability; and establishing an effective date.

**ATTACHMENTS**

Attachment A – Ordinance No. 995-08

**CITY OF SULTAN**  
**WASHINGTON**  
**ORDINANCE NO. 995-08**

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**AN ORDINANCE OF THE CITY OF SULTAN ADOPTING  
AMENDMENT NO. 2 TO THE CITY OF SULTAN 2005  
GENERAL SEWER PLAN FOR SUBMITTAL TO THE  
DEPARTMENT OF ECOLOGY; PROVIDING FOR  
SEVERABILITY; AND ESTABLISHING AN EFFECTIVE  
DATE**

WHEREAS, the City of Sultan operates a wastewater treatment plan and conveyance system with a current NPDES permit issued by the Department of Ecology; and

WHEREAS, on December 14, 2005, the City Council approved Ordinance No. 897-05 adopting the City of Sultan 2005 General Sewer Plan; and

WHEREAS, on June 8, 2006, the City Council approved Ordinance No. 925-06 adopting Amendment No. 1 to the City of Sultan General Sewer Plan to amend the population projections, projected sewer system demand, and projected impacts to the capital facilities plan to be consistent with the City of Sultan 2004 Comprehensive Plan; and

WHEREAS, an appeal (Case No. 07-03-0017) was filed with the Central Puget Sound Growth Management Hearings Board (Board) on February 12, 2007 and the Board ruled on September 5, 2007 the City's action in adopting a Capital Facilities Element by Ordinance No. 942-06 did not comply with Growth Management Act (GMA), chapter 36.70A RCW, requirements since it did not include level-of-service standards to support the needs assessment; it did not demonstrate that there would be adequate public facilities and services; and that the City did not reassess its land use element or take other measures to maintain consistency; and

WHEREAS, on March 14, 2008, the Board established a coordinated compliance schedule and issued its Order of Continuing Noncompliance, Amending Compliance Schedule (Compliance Order) establishing September 30, 2008, as the deadline for the City of Sultan to take appropriate legislative action to comply with the GMA; and

WHEREAS, the Sultan City Council desires to bring the City into compliance with the GMA and the Board's Compliance Order by September 30, 2008; and

WHEREAS, the City Council and Planning Board began working together in January 2008 to make the necessary changes to the 2004 Comprehensive Plan and appendices including the 2005 City of Sultan General Sewer Plan; and

WHEREAS, the City Council and Planning Board held joint meetings to discuss proposed revisions to the 2004 City of Sultan Comprehensive Plan and appendices on March 5, 2008, March 19, 2008, April 1, 2008, April, 15, 2008, May 6, 2008, May 13, 2008, May 20, 2008, May 27, 2008, June 3, 2008 and September 9, 2008; and

WHEREAS, the City held open houses in March, April, May, June and August providing for early and continuous public involvement under the GMA, RCW 36.70A.140; and

WHEREAS, the City sent notification of proposed revisions to the 2004 City of Sultan Comprehensive Plan and appendices to each household and post office box in the City of Sultan and unincorporated areas in the 98294 zip code; and

WHEREAS, the City provided 60-days notice to state agencies of proposed revisions to the 2004 City of Sultan Comprehensive Plan and appendices on July 1, 2008 consistent with RCW 36.70A.106(1); and

WHEREAS, a State Environmental Policy Act (SEPA) Environmental Checklist was prepared for Amendment No. 2 to the 2005 General Sewer Plan on July 17, 2008 and a threshold Determination of Non-Significance was issued on August 4, 2008 for the required 14-day comment period pursuant to WAC 197-11-340(2); and

WHEREAS, the City did not receive an appeal of the City's Determination of Non-Significance on Amendment No. 2 to the 2005 General Sewer Plan prior to expiration of the 14-day SEPA comment period on August 18, 2008; and

WHEREAS, the Planning Board conducted a public hearing on Amendment No. 2 to the 2005 General Sewer Plan on September 16, 2008 in accordance with Sultan Municipal Code 17.04.170, and provided an opportunity for citizens to comment regarding proposed amendment; and

WHEREAS, the City published notice on September 15, 2008 and September 23, 2008 in its paper of record of the opportunity to provide public comment on proposed revisions to the City of Sultan Comprehensive Plan and Final Supplemental Environmental Impact Statement, and related amendments to appendices of the Comprehensive Plan; and

WHEREAS, the City Council conducted a public hearing on Amendment No. 2 to the General Sewer Plan on September 25, 2008 in accordance with Sultan Municipal Code 17.04.170, and provided an opportunity for citizens to comment regarding proposed regulatory changes; and

WHEREAS, Amendment No. 2 to the General Sewer Plan documents how the sewer system will be upgraded to be consistent with the Comprehensive Plan; and

WHEREAS, Chapter 173-240-050 WAC, adopted in part pursuant to the authority of Chapter 90.48.110 RCW, requires amendments to be submitted to and approved by the Department of Ecology (DOE) before implementing the plan; and

WHEREAS, in accordance with RCW 36.70A.130(1) the Sultan City Council is prepared to take legislative action following notice and a public hearing finding that a review and evaluation has occurred and identifying revisions to the City's 2004 Comprehensive Plan and its appendices; and

WHEREAS, the City Council finds that adoption of Amendment No. 2 to the 2005 Sultan General Sewer Plan is consistent with and implements the City's Sewer System Policies, the requirements of Washington law, and serves and advances the public health, safety and welfare of Sultan citizens.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SULTAN, WASHINGTON, DO RESOLVE AS FOLLOWS:

**Section 1. Findings.** The City Council makes the following findings:

- A. The City Council adopts and incorporates the foregoing recitals as findings as if set forth fully herein.
- B. The adoption of this Ordinance is necessary to resolve the finding of noncompliance in the Final Decision and Order issued by the Board related to Case No. 06-03-0017.
- C. Chapter 90.48.110 RCW, authorizes the State Department of Ecology to review plans and reports for public wastewater facilities.
- D. On December 14, 2005, the City adopted the 2005 General Sewer Plan with the passage of Ordinance No. 897-05.
- E. The City of Sultan adopted its 2004 Growth Management Act Comprehensive Plan in accordance with the Washington State Growth Management Act (GMA) on November 22, 2004 Ordinance No. 841-04. All findings, recitals and other provisions of Ordinance No. 841-04 and all provisions of the Comprehensive Plan and the public record supporting the Comprehensive Plan are incorporated herein by this reference. Adoption of the Comprehensive Plan was an essential prerequisite to adoption of a General Sewer Plan, in that the GMA Comprehensive Plan provides the City with analysis and guidance in assessing and anticipating population growth and infrastructure needs for the present and future residents within the City's sewer system service areas.
- F. In accordance with Chapter 43.21C RCW, the State Environmental Policy Act (SEPA), on August 4, 2008 and after timely public notice, the City's SEPA Responsible Official issued a threshold Determination of Non-Significance (DNS). There were no appeals to the DNS
- G. Amendment No. 2 to the 2005 General Sewer Plan contains goals, policies, system maps and design standards intended to guide the development of sewer system facilities. Important components of the Plan include: Goals and Policies, Design Standards, Population Projections, Water Demand Projections, Capital Improvements, and Financial Implications.

**Section 2. Adoption.** Amendment No. 2 to the 2005 Sultan General Sewer Plan is approved in its entirety. The Council declares that the adoption of Amendment No. 2 to the General Sewer Plan through this Ordinance is necessary for the protection of public health and public safety.

**Section 3. Preparation of Final General Sewer Plan Copies.** Copies of Amendment No. 2 to the City of Sultan 2005 General Sewer Plan approved by the City Council shall be prepared by the Sultan Department of Public Works staff and made available for public inspection following final approval by the State Department of Ecology. The Final Plan shall include as necessary all grammatical and numerical revisions and revisions.

**Section 4. Filing.** The Final General Sewer Plan as approved by the City Council shall be filed with the City Clerk and shall be available for public inspection upon the effective date of this Ordinance.

**Section 5.** In the event there is any inconsistency between the General Sewer Plan as accepted and approved by the Department of Ecology and the City's Comprehensive Plan, the

City shall undertake a public participation process and amend the General Sewer Plan to be consistent with the Comprehensive Plan.

**Section 6. Effect Of Amended General Sewer Plan(s).** Upon the approval of Amendment No. 2 to the General Sewer Plan by the Department of Ecology any previously drafted and adopted General Sewer Plan(s) amended by this Ordinance shall be superseded by Amendment No. 2 to the General Sewer Plan, EXHIBIT A.

**Section 7. Severability.** If any clause, sentence, paragraph, section or part of this Ordinance or the Plan adopted herein, or their application to any person or circumstance is held to be invalid or unconstitutional by a court of competent jurisdiction, such order or judgment shall not affect the validity or constitutionality of the remainder of any part of this Ordinance or Plan. To this end, the provisions of each clause, sentence, paragraph, section or part of this Ordinance and Plan are declared severable.

**Section 8. Effective Date.** This Ordinance shall be effective on the date on which the Department of Ecology approves in writing Amendment No. 2 to the General Sewer Plan, which date is more than five days following publication of this Ordinance or a summary thereof. If DOE does not approve the Plan in its entirety, then those portions approved by DOE shall be effective, and the portions not approved by DOE shall not be included in this adoption.

ADOPTED BY THE CITY COUNCIL AT A REGULAR MEETING THEREOF ON THE  
\_\_\_\_ DAY OF \_\_\_\_\_, 2008.

CITY OF SULTAN

\_\_\_\_\_  
Carolyn Eslick, Mayor

ATTEST/AUTHENTICATED:

\_\_\_\_\_  
Laura Koenig, City Clerk

Approved as to form:

\_\_\_\_\_  
Kathy Hardy, City Attorney

Filed with the City Clerk:  
Passed by the City Council:  
Date of Publication:  
Effective Date:



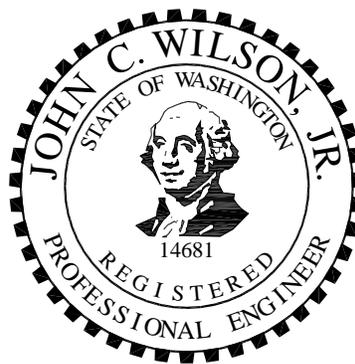
# General Sewer Plan AMENDMENT NO 2

September 2008

Prepared By

**BHC Consultants LLC**  
720 Third Avenue  
Seattle, WA 98104

John C Wilson PE  
Project Manager



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John C Wilson PE

\_\_\_\_\_  
2008

**City of Sultan  
 GENERAL SEWER PLAN**

**AMENDMENT NO 2**

August 2008

**Purpose**

*The Growth Management Hearings Board identified a significant GMA compliance issue in that the City's planning for capital facilities was not adequate to demonstrate that anticipated future growth could be accommodated. An update to the Comprehensive Plan has been prepared to correct this deficiency. Projections outlined in the 2004 Plan and EIS have been changed substantially, as have the capital cost estimates. Adoption of the revised Comprehensive Plan and Capital Facilities Plan in late 2008 will meet the mandates of the Hearings Board, and ensure that the impacts of growth as projected in 2004 will be properly mitigated by a well-planned infrastructure system.*

This Amendment No 2 to the General Sewer Plan for the City documents how the sewer system will be upgraded to be consistent with the Comprehensive Plan.

**Background**

Figure S-1 shows the City sewer system as it existed in 2007.

Interceptor sewers are the principal pipes in the wastewater system. These pipes collect flow from the collector sewer mains. Sewer interceptors are summarized in Table 1.

**Table 1  
 Sewer Interceptor System**

Location	Size (in)	Length (ft)	Material	Year	Slope (ft/ft)	Capacity (GPD)
Main Street	18	750	PVC	1989	0.0022	3,100,000
	15	4300	PVC	1989	0.0022	2,800,000
	8	820	PVC	2001	0.0040	490,000
1 <sup>st</sup> Street	12	2,450	PVC	2005	0.0022	1,050,000
4 <sup>th</sup> Street	10	1350	VC	1969	0.0022	650,000
	8	2950	concrete	1969	0.0040	490,000
8 <sup>th</sup> Street	12	330	PVC	1987	0.0097	2,200,000
SR 2 West	12	2450	concrete	1969	0.0022	1,050,000
Sultan Basin	15	1100	PVC	1999	0.0097	1,300,000
	12	1350	PVC	1998	0.0110	2,400,000
	12	3500	PVC	1999	0.0022	1,050,000
Wagley's Creek	15	2650	PVC	2001	0.0018	1,700,000
	16	400	DI	2001	0.0030	2,500,000
	15	3750	PVC	2001	0.0026	2,000,000
	8	2200	PVC	2001	0.0039	480,000
Total Footage		30,350				

In addition to the Sewer Interceptor System shown in Table 1, the system has about 40,000 feet of collector sewers. Almost all collector sewers are 8-inch diameter pipe of varying age and material.

The existing sewer system has only one pump station, which is located in the Sultan River Park. Most of the existing service area drains through this pump station, which also acts as the influent pump station for the wastewater treatment facility. The pump station has two 1,500 gallons per minute (GPM) pumps with 35 horsepower motors, which is a capacity of about 2.16 million gallons per day (MGD) each. The maximum existing capacity with both pumps operating is about 3.2 MGD. Inverts for both the First Street and the Main Street interceptors are more than 20 feet below street grade as they approach the pump station.

The 10-inch force main extends about 450 feet from the pump station across the Sultan River on the State Department of Transportation bridge for US 2 into the wastewater treatment facility.

### **Goal and Policies**

Maintain and enhance the development and operation of an effective, efficient wastewater treatment plant and collection system that will meet the needs of Sultan's present and future urban service area.

#### **Policies:**

1. Require all properties that develop or redevelop within the city limits to connect to the City's sewer system.
2. Increase sewer treatment plant and collection line capacities to meet the needs of Sultan residents and land within the Urban Growth Area, as well as meet state and federal discharge standards. Service to properties in the UGA shall not occur until such properties are annexed into Sultan.
3. Increase capacity to reflect increased usage trends influenced by the City's growth and economic development.
4. Maintain an updated comprehensive sewer system plan that is coordinated with the Land Use Element so that new development is located where sufficient sewer system capacity exists or can be efficiently and logically extended.
5. Ensure that existing deficiencies in the sewer system are upgraded.
6. Encourage all non-redeveloping properties that annex into the city to phase out their septic systems and connect to the City sewer system.
7. Provide sewer services for Sultan residents and parties who annex in exchange for service. Work with Snohomish County, Washington State Department of Ecology, and other public agencies to correct failed septic problems, provided solutions do not create urban developments that are not desired or controlled by Sultan. The principal controller of urban development within the Sultan planning area is thereby the wastewater treatment capacity that is available to be allocated to undeveloped lands within corporate boundaries. Accordingly, septic tanks will not be used in development projects within the Sultan urban growth area.

8. Increase wastewater treatment plant and collection line capacity allocations to meet the needs of the Sultan future urban area. Increase capacity allocations to reflect increased usage trends caused by Sultan's continued urban intensification and economic development.
9. Increase and improve secondary treatment capacities and methods to meet state and federal discharge standards. Investigate, where appropriate, other alternative methods of treatment including tertiary systems.
10. Continue City ordinances regulating public use of the City sewer system and update as needed. These include specific prohibition of illicit connections to the sewer for storm drainage. Fats, oils, and grease will be managed through required grease traps for designated classes of connections to the sewer.
11. Consider additional incentives for water conservation, surcharge for service outside the city limits, new sources of employment, and other sewer programs with cost implications. The City currently has a rate structure defining the methodology for monthly service charge, capital facilities charges, service connection, and various other fees related to operation and maintenance of the sewer system. A rate differential exists between residential and non-residential customers, as well as for low-income and elderly.

### **Growth Management Boundary**

The growth management boundary as shown in Figure S-1 has been revised to reflect the current assignment to the City of Sultan by Snohomish County. The current boundary reflects a modest change from the 2004 boundary.

Some changes have also been made to the land use planning for the City, though these did not result in significantly different development densities than were used in the previous sewer planning efforts.

Figure S-2 shows those parcels within the existing city limits that have been developed with on-site sewage systems; and how these parcels relate to existing sewer piping.

### **Design Standards**

Standards for sewer system facilities are defined by WAC 173-240-050 and the 'Criteria for Sewerage Works Design' published by the Washington State Department of Ecology (DOE). Ecology also issues NPDES permits with requirements for wastewater effluent quality and monitoring to ensure compliance with receiving water standards. Planning, design, construction, operations, and maintenance for the City sewer system is conducted in accordance with these standards, plus the following:

- The sewer system shall be designed to contain all sewage and the extraneous flow that enters during a 10-year, 24 hour storm event.

- Sewer capacity will be calculated with the pipe flowing full at the design pipe slope under projected peak hour conditions. The minimum pipe slope shall be sufficient to maintain a velocity of 2 feet per second under flowing full conditions.
- Pumping capacity is usually designed to accommodate the peak hour flow. However, the existing pump station is also the influent pump station for the wastewater treatment facility, and the interceptor piping enters the station more than 20 feet below street level. Flow attenuation into the treatment facilities is desirable to allow cost-effective sizing of the structures. Surcharging the interceptors into the pump station is an acceptable method to achieve flow equalization. This means that under storm conditions the Main Street pipes would be full and water levels in the manholes would rise several feet, though still be several feet below the street grade.

About 409 parcels within the existing city limits have been identified by City staff as having been developed with on-site sewage systems. All developed parcels outside the city limits and within the UGA use on-site sewage systems. According to the Growth Management Act, no new on-site septic sewage systems should be allowed in the UGA as new development is intended to be at urban densities which require sewers. In addition, RCW 70.118 requires counties including Snohomish County to develop and implement management plans for on-site sewage systems, including single family homes in communities like the City of Sultan. Sewer service will be available to all parcels within the UGA by 2025.

Parcels with existing development using on-site sewage systems where a sewer is available are not required to connect to the sewer unless the on-site system fails, or the property owner wishes to connect. Determination of on-site sewage system failure is the responsibility of the Snohomish County Health Department.

Where a new sewer pipe is extended past a parcel with existing development using an on-site sewage system, the property owner will be required to pay for the benefit conferred by the sewer pipe but will not be required to actually connect and pay monthly service charges unless or until the on-site system fails, the property owner wishes to connect, or the property is sold or changes ownership, or the existing structure is remodeled under a City building permit.

Sewer extensions to some areas within the existing city limits, and other areas that are within the urban growth area, will require extremely deep sewer trenches to achieve gravity service. Local gravity sewer systems in such areas can be developed using local pump stations owned and operated by the City. Plans for such sewer systems shall be developed and approved by the City. All such facilities shall be designed and built in accordance with City standards.

Rain induced flow into the sewer system exceeds desirable rates. This problem is believed to be concentrated in the older parts of the sewer system. The City will continue to budget and implement regular rehabilitation programs to minimize the introduction of infiltration and rain induce flow into the sewer system by recognizing that such wastewater volumes take capacity in the pipe system and treatment facilities that would otherwise be available to sewer customers. Processing such extraneous flow also incurs additional costs to the system which must be included in the monthly service charges.

The City will continue to inspect and test new sewer installations to verify that construction materials and methods conform to modern standards. The resulting new sewer extensions are expected to exhibit a significantly lower influx of extraneous wastewater than the existing sewer system.

**Population Projections**

The Puget Sound Regional Council expects the Skykomish Valley area will eventually support 17,026 persons by the year 2010, 20,549 persons by the year 2020, and 23,977 persons by the year 2030. The projected Sultan population of 11,119 in 2025 would represent about half of these residents.

By the year 2012, the County’s Buildable Lands Report (BLR) expects approximately 7,300 persons will reside in the UGA of which 90% will reside in city limits. The BLR further expects the current UGA will eventually support a population of 11,119 persons at build-out in 2025. It is assumed that the entire UGA will be incorporated into the City by that time. This is an official population estimate and is used by the City for its growth and capital facilities planning.

In 2006, there were approximately 1,010 jobs located in Sultan. Snohomish County’s Buildable Lands Report and the City’s Comprehensive Plan estimate an increase to 2,000 jobs in Sultan by 2025. These projections are summarized in Table 2.

**Table 2  
Population and Development Projections**

<b>Parameter</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2010</b>	<b>2012</b>	<b>2014</b>	<b>2025</b>
City Population	4,225	4,440	4,530	5,874	6,570	7,386	11,119
UGA Population		4,785		6,066	7,300	8,028	11,119
City Housing Units		1,713	1,739	2,066	2,505	2,920	4,464
Average Household Size	2.78	2.78	2.74	2.71	2.68	2.66	2.62
Housing Vacancy Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Employment		1,010					2,000
UGA Area in Acres			2,304				2,304
Buildable			954				954
Unbuildable			1,350				1,350

**Wastewater Flow Projections**

The existing wastewater parameters have been computed in gallons per day from the flow data recorded for 2006 as reported on the Daily Monitoring Report (DMR). These results are summarized in Table 3.

**Table 3  
Existing Wastewater Flow Parameters**

Flow Component	Quantity	Units	2006 Average Day	Unit Flow	Average Day Max Month
Residents	3,440	67	230,000	67	230,000
Employees	1,010	35	35,000	35	35,000
Infiltration	312 ac	160	50,000	275	86,000
Rain Dependent II	312 ac	50	16,000	770	240,000
Totals			331,000		591,000
DMR recorded			331,000		591,000

Table 4 summarizes the projected population in future years to be served by sewers, the residential equivalent residential units (ERU), the commercial ERU, and wastewater flows based on data given in the 2006 Engineering Report. The plant capacity after Phase 1 improvements will correspond to the projected year 2017 numbers, while the plant capacity after Phase 2 improvements, to be on-line in 2017, will correspond to the projected year 2029 numbers.

**Table 4  
Projected Population, ERU, and Wastewater Flows**

Parameters	2010	2012	2017	2025	2029
Population Served by Sewers	5,492	6,495	8,624	11,119	12,540
Residential ERU	2,112	2,498	3,316	4,277	4,823
Commercial ERU	91	112	164	238	275
Wastewater Flows in MGD:					
Average dry weather	0.40	0.47	0.64	0.83	0.90
Maximum month	0.72	0.81	1.03	1.37	1.56
Peak hour	3.1	3.4	3.9	5.0	5.6

**Projected Needs Through 2025**

Figure S-3 shows the sewer extensions necessary to serve parcels throughout the UGA. Improvements to the sewer collection system fall into categories as described below:

- New Streets listed in the TIP will have a sewer main at least 8-inch diameter.
- Reconstructed Streets listed in the TIP will have a sewer main at least 8-inch in diameter, unless an adequate sewer main is already in place.
- Sewer Main Extensions in streets within UGA but not on the TIP list will be at least 8-inches in diameter.
- Replacement Pipes at least 8-inch diameter are needed in two locations where the existing sewer is under sized, obsolete material, or otherwise defective.

Table 5 summarizes the sewers to be installed concurrently with street improvements listed in the Transportation Improvement Program. Construction costs as shown for 2008 include only the sewer facilities, which include crushed backfill. Costs for street and surface improvements are in the TIP. Project costs add engineering design, permits, and construction oversight to the construction costs as well as property acquisition where appropriate.

**Table 5**

**Sewer Improvements Included with Transportation Improvements**

TIP No	Project Description	Depth	Diam	Feet of Pipe	Construction Cost	Project Cost
T-24	New east/west collector (339th SE - Sultan Basin Rd)	outside UGA				
T-25	Foundry Road (Cascade View - railroad)	served by existing sewer in Foundry Drive				
T-26	New east/west collector (339th SE - Sultan Basin Rd)	10	8	400	\$48,000	\$67,200
T-27	Extend E Main St to 149th St SE	served by existing sewer in Main Street				
T-29	Extend Kessler Dr. (Bryant Rd. - 124th St)	10	8	2,900	\$348,000	\$487,200
T-31a	New north-south arterial (US-2 - 124th St)	15	8	650	\$104,000	\$145,600
T-31c	330 Ave SE just north of US-2	served by existing sewer in Sultan Basin Road				
T-32a	Extend Rice Rd /339th (132nd to UGA boundary)	served from sewer in T-58				
T-32-b	Extend Rice Rd /339th (beyond UGA - 124th)	outside UGA				
T-33	New arterial (Old Owen Rd - Sportmans Park)	10	8	500	\$60,000	\$84,000
T-35	Cascade View Dr (US-2 - 331st)	served by existing sewer in Cascade View Drive				
T-36	138th St (Sultan Basin Rd - 339th Ave SE)	10	8	3,600	\$432,000	\$604,800
T-38	1st St (High Ave to Trout Farm Rd)	15	8	2,200	\$352,000	\$492,800
T-41	339th Ave (Sultan Startup Rd - 132nd St)	15	8	3,050	\$488,000	\$683,200
T-42	Sultan Basin Rd (138th - 124th St)	15	8	900	\$144,000	\$201,600
T-43	Walburn Road (11th St - Sultan Basin Rd)	served by existing sewer in Sultan Basin Road				
T-44	Extend Pine St (9th - Walburn)	10	8	1,600	\$192,000	\$268,800
T-45	Alder St (4th - 8th St)	served by existing sewer in Alder Street				
T-47	Trout Farm Rd (307th - 125th)	10	8	4,900	\$588,000	\$823,200
T-48	Gohr Road (1st St - 132nd SE)	15	8	1,950	\$312,000	\$436,800
T-49	Gohr Road (132nd Ave - about 128th)	10	8	1,600	\$192,000	\$268,800
T-51	3rd Street (Main - High)	served by existing sewer in 3rd Street				
T-57	132nd St. (Sultan Basin Rd - Trout Farm Rd)	10	8	2,150	\$258,000	\$361,200
T-58	132nd St SE (Rice - Sultan Basin Rd)	15	8	3,450	\$552,000	\$772,800
T-61	6th Street (Main - Birch)	served by existing sewer in 6th Street				
T-62	124th Street (Sultan Basin Rd - water treatment plant)	10	8	2,600	\$312,000	\$436,800
T-65	124th Street (water treatment plant - Trout Farm Rd)	10	8	3,400	\$408,000	\$571,200
	Subtotal			35,850	\$4,790,000	\$6,706,000

Some new sewer main extensions are planned in streets within UGA, but the streets are not on included on the TIP list. These sewer improvements are summarized in Table 6.

**Table 6  
New Sewer Extensions**

New	Project Description	Depth	Diameter	Feet of Pipe	Construction Cost	Project Cost
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City of Sultan  
General Sewer Plan Amendment 2

1	eastern city limits into SR 2	10	8	800	\$177,000	\$248,000
2	between 330th & 339th into SR 2	10	8	400	\$89,000	\$125,000
3	into 9th (T-29)	10	8	300	\$66,000	\$92,000
4	west of 339th into 132nd	10	8	900	\$199,000	\$279,000
5	west of 339th into 132nd	10	8	40	\$89,000	\$125,000
6	Skywall Drive	15	8	1,650	\$457,000	\$640,000
7	Dyer Road into 10th	20	8	2,700	\$860,000	\$1,204,000
8	north of SR 2 into Sultan Basin Rd	10	8	350	\$78,000	\$109,000
9	into T-44	10	8	300	\$66,000	\$92,000
10	into T-44	10	8	400	\$89,000	\$125,000
11	135th into Sultan Basin Rd	10	8	1,600	\$355,000	\$497,000
12	Kessler Drive	10	8	650	\$144,000	\$202,000
13	Love's Hill Drive	10	8	200	\$44,000	\$62,000
14	into 124th	10	8	200	\$44,000	\$62,000
15	into 124th	10	8	750	\$166,000	\$232,000
16	Trout Farm Rd & 125th	20	8	5,000	\$1,593,000	\$2,230,000
17	Trout Farm Rd & 125th	20	8	350	\$111,000	\$155,000
18	Trout Farm Rd west of 307th	20	8	1,050	\$334,000	\$468,000
19	307th into Trout Farm Rd	20	8	800	\$255,000	\$357,000
20	307th into Trout Farm Rd	10	8	800	\$177,000	\$248,000
21	134th into Trout Farm Rd	15	8	850	\$235,000	\$329,000
22	311th into Gohr Rd	10	8	1,500	\$332,000	\$465,000
23	Wysteria into Gohr Rd	10	8	950	\$211,000	\$295,000
24	into 4th	10	8	450	\$100,000	\$140,000
25	into High Avenue & 8th	10	8	100	\$22,000	\$31,000
26	between Birch & Cedar into 1st	10	8	200	\$44,000	\$62,000
27	Fir Avenue	10	8	1,800	\$399,000	\$559,000
28	between Birch & Cedar into 1st	10	8	250	\$55,000	\$77,000
29	from Birch into between Alder & Main	10	8	550	\$122,000	\$171,000
30	between 132nd & 138th into 339th	10	8	2,450	\$543,000	\$760,000
31	N Park into Gohr	10	8	500	\$111,000	\$155,000
	Subtotals			28,840	\$7,567,000	\$10,596,000

Several of the new sewer extensions shown in Table 6 will require local pump stations if sewer trenches are not to exceed 20 feet in depth. These pump stations and the associated force mains are summarized in Table 7.

**Table 7  
New Sewer Pump Stations and Force Mains**

Station	Project Description	Parameters		Construction Cost	Project Cost
A	Dyer Road	100 GPM	10 hp	\$225,000	\$ 434,000
	Force Main	4-inch	1,250 feet	\$ 85,000	
B	Skywall Drive	100 GPM	10 hp	\$ 225,000	\$ 553,000
	Force Main	4-inch	1,600 feet	\$ 170,000	
C	Trout Farm & 125 <sup>th</sup> Street	100 GPM	10 hp	\$ 225,000	\$ 371,000
	Force main	4-inch	400 feet	\$ 40,000	
D	Trout Farm & 303 <sup>rd</sup> Drive	100 GPM	10 hp	\$ 225,000	\$ 427,000
	Force Main	4-inch	800 feet	\$ 80,000	
E	124 <sup>th</sup> Street	100 GPM	10 hp	\$ 225,000	\$ 343,000
	Force Main	4-inch	200 feet	\$ 20,000	
Totals			3,750 feet	\$ 1,520,000	\$2,128,000

Replacement Pipes are needed where the existing sewer is under sized, obsolete material, or otherwise defective. Table 8 summarizes the only such known location.

**Table 8  
Sewer Main Replacements**

Project	Project Description	Depth	Diameter	Feet of Pipe	Construction Cost	Project Cost
1	Force Main under Sultan River	----	12	600	300,000	500,000

In addition to the sewer mains improvements listed in Tables 5, 6, 7, and 8; several other capital projects are included in the Needs Assessment to accommodate growth as projected through 2025. These projects are listed below:

- General Sewer Plan Update 2014
- General Sewer Plan Update 2024
- Ongoing infiltration/inflow rehabilitation
- Short-Term Improvements to Wastewater Treatment Facilities by 2009
- Upgrade of Wastewater Treatment Facilities with Membrane Bioreactor by 2017

General Sewer Plans are not required to be updated every six years as is the case for Water System Plans. However, capital facilities planning require periodic updating of the six-year Capital Improvement Program, which is best accomplished through periodic updates to the General Sewer Plan.

Table 9 summarizes the sewer facilities needed by 2025 and estimated costs.

**Table 9  
Needed Sewer Facilities by 2025**

<b>Improvement Category</b>	<b>Quantity</b>	<b>Construction Cost</b>	<b>Project Cost</b>
Projects in Progress (2007)	---	----	\$ 1,137,000
TIP Sewer Improvements	35,850 feet	\$ 4,790,000	\$ 6,706,000
New Sewer Extensions	28,840 feet	\$ 7,567,000	\$ 10,596,000
Pump Stations & Force Mains	5 pump stations	\$ 1,520,000	\$ 2,128,000
Replacement Sewers	600 feet	\$ 300,000	\$ 500,000
General Sewer Plan – 2014	----	----	\$ 100,000
General Sewer Plan – 2024	----	----	\$ 100,000
Ongoing I/I Rehabilitation	Typically \$100,000/yr	\$ 1,700,000	\$ 2,380,000
WWTP – Short Term	---	\$ 350,000	\$ 400,000
WWTP – Biosolids Handling	---	---	\$ 500,000
WWTP – MBR	---	\$ 17,000,000	\$ 21,700,000
Total		\$ 33,227,000	\$ 46,247,000

Costs shown are estimated in 2008 dollars. These costs will need to be escalated in some manner to reflect the costs appropriate to the dates when the projects will actually be implemented.

**Six-Year Capital Improvement Program**

In addition to the Project in Progress during 2007, the projects required during the initial six years of 2009 through 2014 are summarized in Table 10 as the capital Improvement Program (CIP).

**Table 10  
Six-Year Capital Improvement Program  
Estimated Project Costs in \$ Thousands**

<b>Project</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>Total</b>
Biosolids Handling	500						500
Short-term WWTP	400						400
Alder Street		54	400				454
132 <sup>nd</sup> Street			20	53	700		773
Rice Road			20	63	600		683
WWTP - MBR					2,000	15,150	17,150
Totals	900	54	440	116	3,300	15,150	19,960

Figure S-4 locates the projects included in the Six-Year CIP.

Financial projections indicate that the existing City sewer rate structure will be adequate to generate most of the revenue needed to implement the six-year CIP, assuming that the projected growth actually occurs. Table 11 summarizes these financial assumptions.

**Table 11**  
**Six Year Sewer Capital Improvement Revenue**  
Estimated Revenue on \$ Thousands

<b>Projects</b>	<b>GFC</b>	<b>Grant</b>	<b>Debt</b>	<b>Contributions</b>	<b>Totals</b>
Biosolids Handling			500		500
Short-term WWTP			400		400
Alder Street	454				454
132 <sup>nd</sup> Street				773	773
Rice Road				683	683
WWTP - MBR	6,800	5,000	5,350		17,150
Totals	7,254	5,000	6,250	1,456	19,960

It is possible that growth will not occur as projected, of course. In that case the sewer improvements will not be needed and the projects may be delayed until the need does exist and funding becomes available.

### Existing Sewer Rates

A progressive water rate structure has been used by the City for years. Table 12 summarizes an excerpt from the current sewer rates with 600 cubic feet (CF) included in the commercial base rate.

**Table 12**  
**Current Monthly Sewer Rates**

<b>Customer Class</b>	<b>2007 Rate</b>	<b>2008 Rate</b>	<b>2009 Rate</b>
Single Family Residence	\$56.70	\$61.74	\$64.83
Low-income Senior	\$30.25	\$30.87	\$32.41
Multi-family Unit	\$56.70	\$61.74	\$64.83
Mobile Home	\$56.70	\$61.74	\$64.83
Commercial – Base Rates			
¾-inch meter	\$56.70	\$61.75	\$64.83
1-inch meter	\$79.38	\$86.44	\$90.76
1-1/2-inch meter	\$102.06	\$111.13	\$116.69
Volume Rate / 100 CF	\$4.04	\$4.40	\$4.61

Additional sewer rates exist for larger water meter sizes.

The sewer capital facilities charge was \$10,518 per ERU as of September 2007; and became \$11,282 per ERU in January 2008.

### Financial Implications

The total estimated project cost for providing sewer service to all parcels with the GMA to be consistent with the Comprehensive Plan is about \$46.5 million in 2007 dollars, plus .

Several strategic considerations are relevant to the financial implications in funding these improvements as outlined below:

- About \$21.4 million in sewer collection facilities are identified as needed by 2025 to accommodate the projected growth within the GMA
- An additional \$22.9 million is identified as needed to expand sewer treatment plant capacity by 2025
- Existing utility rates, periodically adjusted for inflation, could generate an additional \$4.2 million during this planning period
- About \$32.8 million could be available from the system development charges as proposed in the recent rate study if the recommendations of that study are implemented after 2013 and the projected growth actually occurs

Basic Needs for the sewer utility have been defined as the improvements necessary to maintain the established level of service for existing sewer customers plus to extend sewer service to all developed parcels now using on-site septic sewage systems within the existing city limits as summarized below:

- Approximately \$6.9 million of basic needs are identified for the collection system to adequately continue serving existing customers
- About \$10.6 million would provide service to developed parcels currently using on-site sewage systems, which would financially benefit such properties
- The City financing plan includes \$4 million in City participation for sewer main extensions to encourage property owners to connect to the sewer system

*Code revisions are being proposed to clarify when and how property owners will be expected to pay fair-share costs for extension of the planned sewer and water systems.*

Additional improvements defined as 'Necessary for Development' throughout the remaining area within the existing city limits plus the UGA are summarized below:

- Estimated costs for the treatment system needed to support the planned growth are about \$22.1 million
- An additional \$10.0 million will be needed to extend sewers to the undeveloped parcels within the UGA

The City financing plan for these improvements can be summarized as follows:

- About \$32.8 million could become available from the system development charges (GFC) as proposed in the recent rate study, if the recommendations of that study are continued after 2013 development occurs as projected
- The City will continue to seek \$5 million in state financial assistance for an expansion to its sewerage treatment plant; and if are awarded, the amount of revenue needed by the city's system development charge (GFC) may be reduced or used for other system needs
- Approximately \$5.4 million is expected from developer financing as part of various street improvement projects
- About \$8.1 million may be contributed by property owners and developers towards sewer extensions to undeveloped areas within the GMA

The recommendations of the last rate study recommended setting the General Facility Charge (GFC) at \$20,086 per ERU. This amount should be reevaluated to ensure it is appropriate to long term needs of the sewer utility and particularly for financing the wastewater treatment plant improvements.

Table 13 summarizes the above described financial strategy for the sewer utility.

**Table 13**  
**Sewer System Funding Strategy**  
Finances Shown in \$ thousands

<b>Project Classes</b>	<b>GFC</b>	<b>Grants</b>	<b>Rates</b>	<b>Property Owners</b>	<b>Total</b>
Basic Needs					
I/I Rehab & Planning	2,380		200		2,580
Projects in Progress	454			683	1,137
Extension to Non-served	4,000			6,596	10,596
Replace Existing Facilities			500		500
Treatment Facilities Ph 1			400		400
Biosolids Handling	500				500
Subtotals	7,334	---	1,100	7,279	15,713
Necessary for Development					
Treatment Facilities Ph 2	16,700	5,000			21,700
Sewer Extensions	2,908			6,206	9,114
Subtotals	19,608	5,000	---	6,206	30,814
Totals	27,956	5,000	1,100	13,485	46,527

Table 12 indicates that if the planned grant for the wastewater treatment plant improvements is actually received, not all of the revenue that may be generated by the GFC rate recommended by the recent rate study may be needed. However, that possibility is totally dependent on the expected developments actually occurring and on the projected schedule. Until those projections are validated by events, it is prudent for the City to maintain the rates in accordance with the rate study recommendations.