

Appendix A

Capital Facilities Plan

CAPITAL FACILITIES PLAN 2007-2012

KITSAP COUNTY

December 2006

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Capital Facilities Plan 2007-2012

Executive Summary

The Capital Facilities Plan (CFP) is one of the elements of Kitsap County's comprehensive plan that is required by Washington's Growth Management Act (GMA). Capital facilities generally have very long useful lives, significant costs, and are not mobile.

The focus of the CFP is the planning and provision of needed public facilities for the County's unincorporated and countywide populations, regardless of the types of land use patterns authorized in the land use element of a comprehensive plan. A high priority of the CFP is to provide adequate public facilities to support the adopted level of service (LOS) for each type of capital facility. The County's population base and other demand factors, together with the adopted LOS, is the principal basis for the CFP.

This Capital Facilities Plan represents the seven-year period of 2006-2012, which includes the base year 2006, and the six-year (2007-2012) forecasted need for public facilities, along with specific capital projects expenditures and revenues.

Contents of Plan

The CFP Element of the comprehensive plan is presented in three sections:

- | | | |
|------|-------------------------|---|
| I. | Introduction | Purpose of the CFP, statutory requirements, methodology. |
| II. | Capital Improvements | List of proposed capital projects including financing plan, and reconciliation of project capacity to level of service standards. |
| III. | Implementation Programs | Summary of management tools that will be used to implement the CFP. |

Growth Assumption

This CFP is based on the following population data, as shown below:

Table ES-1. Current Year and 2007-2012 Growth Years

Year	County-Wide	Unincorporated County
2006	251,635	173,208
2007-12 Growth	23,725	16,807
2012	275,360	190,015

Note: Base year and future year estimates were derived according to the countywide constant rate of growth between the 2000 Census baseline and the 2025 forecasts in the Kitsap Countywide Planning Policies. This analysis assumes that between 2006 and 2012 the rate of growth will match the Countywide Planning Policy rate of growth with locations of growth allocated based on planned land use and land capacity.

For purposes of capital facility planning coordination, Comprehensive Plan population forecasts were projected in a range and distributed to capital facility providers throughout the county. Capital facility providers were provided year 2012 and 2025 forecasts by transportation analysis zones that could be aggregated to generally approximate service area boundaries. As planning alternatives were formulated, updated forecasts were distributed to service providers, and forecasts ranged based on different land use and growth assumptions, but on the whole were similar.

Public Facilities Costs

The cost of *County-owned and managed* capital improvements for 2007-2012 is shown below:

Table ES-2. Capital Costs of Kitsap County Public Facilities 2007-2012

SUMMARY OF CAPITAL COSTS OF COUNTY-OWNED FACILITIES (All Project Costs Are Times \$1,000)							
MAJOR FUNCTION	2007	2008	2009	2010	2011	2012	TOTAL
Public Buildings	9,100.0	0.0	7,500.0	5,000.0	0.0	35,000.0	56,600.0
Law Enforcement	0.0	0.0	0.0	0.0	0.0	10,000.0	10,000.0
Parks & Recreation	8,655.0	19,832.5	2,815.0	1,200.0	200.0	0.0	32,702.5
Sanitary Sewer	6,437.8	16,685.3	7,817.3	8,531.7	11,197.7	2,337.2	53,007.0
Solid Waste	595.0	3,825.0	20.0	125.0	20.0	20.0	4,605.0
Stormwater	832.3	1,552.8	1,453.1	1,061.4	890.5	1,130.5	6,920.7
Transportation	23,334.0	12,913.0	18,114.0	21,214.0	7,505.0	5,720.0	88,800.0
Total Costs	48,954.1	54,808.6	37,719.4	37,132.1	19,813.2	54,207.7	252,635.2

Public Facilities Financing

Pursuant to Policy CF-8 and CF-10 of this Capital Facilities Plan, the seven-year Plan will be financed within the County's financial capacity. If the projected funding is inadequate to finance needed capital facilities based on adopted level of service and forecasted growth, adjustments will be made to the level of service, the land use element, the sources of revenue, or any appropriate

combination, to achieve a balance between available revenue and needed capital facilities. This policy constitutes Kitsap County's response to the requirement of RCW 36.70A.070(3)(e).

Table ES-3 below shows the financing plan for these capital improvements, which includes a variety of revenue sources. The table shows the type of revenue source, amount of revenue to be available to pay for project costs, and the type of capital facilities projects to be financed.

Table ES-3. Financing for Kitsap County Public Facilities 2007-2012

SUMMARY OF REVENUE SOURCES FOR CAPITAL FACILITIES PROJECTS		
(All Revenue Sources Are Times \$1,000)		
REVENUE SOURCE	2007-12	MAJOR FUNCTION
<i>Existing Revenues</i>		
1st 1/4% Real Estate Excise Tax (REET 1)	38,340.0	Public Buildings
2nd 1/4% Real Estate Excise Tax (REET 2)	6,690.0	Parks & Recreation
Road Fund	2,010.0	Public Buildings
Impact Fees	2,030.0	Parks & Recreation
Impact Fees	7,067.0	Transportation
Sanitary Sewer Improvement Fund	5,743.9	Sanitary Sewer
Sewer R/R	12,806.1	Sanitary Sewer
City of Poulsbo	5,278.5	Sanitary Sewer
Revenue Bonds	27,928.5	Sanitary Sewer
Urban Local Improvement District (ULID)		
Assessments	1,250.0	Sanitary Sewer
Stormwater Utility Fees	6,920.7	Stormwater Management
Tipping Fees	4,605.0	Solid Waste
State Funding	15,843.0	Transportation
Federal Funding	9,130.0	Transportation
Local Funding	44,910.0	Transportation
Subtotal	190,552.7	
<i>New Revenues</i>		
Voted G.O. Bond Proceeds	16,250.0	Public Buildings
	10,000.0	Law Enforcement
	11,700.0	Parks & Recreation
Non-Voted G.O. Bond Proceeds	9,445.0	Transportation
State IOC Grants	7,250.0	Parks & Recreation
Salmon Grants	1,420.0	Transportation
Developer	985.0	Transportation
Private Donations	1,850.0	Parks & Recreation
Land Reconveyance	3,182.5	Parks & Recreation
Subtotal	62,082.5	
TOTAL	252,635.2	

CFP Level of Services Consequences

The CFP will enable Kitsap County to accommodate 9% growth during 2007-2012, resulting in a County-wide 2012 population of 275,360 people, while *increasing* the 2006 level of service for the following County-owned public facilities:

Table ES-5. CFP LEVEL OF SERVICE CONSEQUENCES 2006 and 2012

(1) Type of Facility	(2) LOS Units	(3) 2006 LOS	(4) CFP LOS
Sheriff Office	Sq Ft per 1,000 Population	148	266
District Courtrooms	Courtrooms per 1,000 Pop.	0.016	0.022
Open Space Lands	Acres per 1,000 Population	15.7	19.2
Trails (Paved and Unpaved)	Miles per 1,000 Population	0.14	0.28

The level of service for the following facilities will be *maintained* as a result of the CFP:

(1) Type of Facility	(2) LOS Units	(3) 2006 LOS	(4) CFP LOS
Sanitary Sewer	Gals/Day/Connection	250	250
Stormwater	N/A		
Transportation	N/A		

The level of service for the following facilities will be *reduced* as a result of the CFP:

(1) Type of Facility	(2) LOS Units	(3) 2006 LOS	(4) CFP LOS
Administration Buildings	Sq Ft per 1,000 Population	1,164	1,092
Maintenance Facilities	Sq Ft per 1,000 Population	143	130
Superior Courtrooms	Courtrooms per 1,000 Pop.	0.032	0.029
Community Centers	Sq Ft per 1,000 Population	262	239
County Jail	Beds per 1,000 Population	1.9	1.7
Work Release Facility	Beds per 1,000 Population	0.19	0.17
Juvenile Facility	Beds per 1,000 Population	0.091	0.084
Regional Parks	Acres per 1,000 Population	5.9	5.4
Community Parks	Acres per 1,000 Population	0.92	0.84
Shoreline Access	Lineal Feet per 1,000 Pop.	115	106

CFP Source Documents

The source documents used in preparing this Capital Facilities Plan (CFP) are the six-year capital improvement plans prepared routinely, and updated annually as required by the State, and that are necessary for obtaining funding from the state. These individual capital improvement plans define projects and proposed funding for those projects required first to rehabilitate existing facilities and secondly to provide level of service (LOS) capacity to accommodate new growth in the county.

Generally, the proposed new capacity, replacement, and rehabilitation capital facilities and financing for 2007-2012 reflect the general planning goals and policies, as well as land use infrastructure requirements, identified in long-range planning documents, including the Land Use Plan, Transportation Plan, Countywide Comprehensive Parks and Recreation Plan, Comprehensive Wastewater Plans for the Cities, and the Wastewater Facilities and Engineering Reports for the County Wastewater Facilities.

For example, each of the sewer areas for which the County provides facilities and services has a Wastewater Facilities Plan and Engineering Report that (1) identifies existing facilities, needs for rehabilitation and new capacity facilities, (2) evaluates alternatives to meet those needs, and (3) recommends capital facilities, and estimates costs, and funding options. Typically, these plans cover a time period of 20 years for treatment plants and 50 years for sewers.

The CFP planning process described above combined with the level of service (LOS) methodology used to identify the requirements for and affordability of future capital facilities constitutes the capital facilities planning process. This process enables the County to make more (1) informed decisions about its investment of public dollars, and (2) timely decisions about maintaining levels of service in accordance with the goals, policies, and implementation programs of this CFP.

1. INTRODUCTION

DEFINITION AND PURPOSE

The Capital Facilities Plan (CFP) represents the seven-year period of 2007-2012, which includes the base year 2006, and the 2007-2012 forecasted need for public facilities along with specific capital projects expenditures and revenues that support Kitsap County's current and future population and economy.

The capital improvements are fully funded (i.e., not a "wish list"). One of the principal criteria for identifying needed capital improvements is a standard for levels of service (LOS).

The CFP contains LOS standards for each public facility, and requires that new development be served by adequate facilities (i.e., the "concurrency" requirement). The CFP also contains broad goals and specific policies that guide and implement the provision of adequate public facilities.

The purpose of the CFP is to use sound fiscal policies to provide adequate public facilities consistent with the land use element and concurrent with, or prior to, the impacts of development in order to achieve and maintain adopted standards for levels of service, and to exceed the adopted standards, when possible.

WHY PLAN FOR CAPITAL FACILITIES?

There are at least four reasons to plan for capital facilities: (1) growth management, (2) good management, and (3) the ability to impose impact fees, (4) eligibility for grants and loans.

Growth Management

A CFP is required by the GMA. The CFP is one of six required elements of Kitsap County's comprehensive plan:

- a. Land Use
- b. Housing
- c. Transportation
- d. Utilities
- e. Rural (counties only)
- f. Capital Facilities Plan
- g. Economic Development Element (when state provides funds)
- h. Parks and Recreation Element (when state provides funds)

Capital facilities plans are required in the comprehensive plan in order to:

1. Provide capital facilities for land development that is envisioned or authorized by the land use element of the comprehensive plan.
2. Maintain the quality of life for existing and future development by establishing and maintaining standards for the level of service of capital facilities.
3. Coordinate and provide consistency among the many plans for capital improvements, including:
 - Other elements of the comprehensive plan (transportation and utilities elements),
 - Master plans and other studies of the local government,
 - Plans for capital facilities of state and/or regional significance,
 - Plans of other adjacent local governments, and
 - Plans of special districts.
4. Ensure the timely provision of adequate facilities as required in the GMA.
5. Document all capital projects and their financing (including projects to be financed by impact fees and/or real estate excise taxes that are authorized by GMA).

The CFP is the element that makes the rest of the comprehensive plan a "reality." By establishing levels of service as the basis for providing capital facilities and for achieving concurrency, the CFP determines the quality of life in the community. The requirement to fully finance the CFP (or revise the land use plan) provides a reality check on the vision set forth in the comprehensive plan. The capacity of capital facilities that are included in the CFP affects the size and configuration of the urban growth area.

Good Management

Planning for major capital facilities and their costs enables Kitsap County to:

- a. demonstrate the need for facilities and the need for revenues to pay for them;
- b. estimate future operation/maintenance costs of new facilities that will impact the annual budget;
- c. take advantage of sources of revenue (e.g. grants, impact fees, real estate excise taxes) that require a CFP in order to qualify for the revenue; and
- d. get better ratings on bond issues when the County borrows money for capital facilities (thus reducing interest rates and the cost of borrowing money).

Impact Fees

The Growth Management Act of 1990 (Chapter 17, Washington Laws, 1990, 1st Ex. Sess.) authorizes local governments in Washington to charge impact fees. RCW 82.02.050 - 82.02.090 contain the provisions of the Growth Management Act, which authorize and describe the requirements for impact fees. Two aspects of impact fees that are particularly noteworthy are: 1) the ability to charge for the cost of public facilities that are "system improvements" (i.e., that provide service to the community at large) as opposed to "project improvements" (which are "on-site" and provide service for a particular development); and 2) the ability to charge small-scale development their proportionate share, whereas SEPA exempts small developments.

Four types of public facilities can be the subject of impact fees: 1) public streets and roads; 2) publicly owned parks, open space and recreation facilities; 3) school facilities; and 4) fire protection facilities (in jurisdictions that are not part of a fire district). *RCW 82.02.050(2) and (4), and RCW 82.02.090(7)*

Grants and Loans Eligibility

Washington State's Department of Community, Trade and Economic Development (CTED) Public Works Trust Fund requires that local governments have some type of CFP in order to be eligible for loans. Some other grants and loans have similar requirements, or give preference to governments that have a CFP.

GMA STATUTORY REQUIREMENTS

The GMA requires the CFP to identify public facilities that will be required during the seven years following adoption of the new plan (2006 through 2012). The CFP must include the location and cost of the facilities, and the sources of revenue that will be used to fund the facilities.

RCW 36.70A.070(3)(d) requires the capital facilities plan to include "a six-year plan that will finance such capital facilities within projected funding capacities and clearly identifies sources of public money for such purposes." RCW 36.70A.070(3)(e) requires that all capital facilities have "probable funding" to pay for capital facility needs, or else the County must "reassess the land use element."

Since "reassessing" to increase development would only make the imbalance of funding and needs worse, the law implies that the County must plan for less development so as to match "probable funding" with needed capital improvements. The law does not preclude the County from taking other steps before "reassessing" the land use element, including reduction of level of service standards, reducing the quality of facilities that meet the quantitative standards, or reducing demand by reducing consumption.

In the event that "reassessment" is required for facilities provided by entities other than the County (i.e., fire districts, water districts, sewer districts, school districts, etc.), the County and the special district that provides the facility will collaborate in order to

develop an appropriate strategy to enable the County to serve at least the population forecast provided by the State of Washington Office of Financial Management as adopted through Countywide Planning Policies.

Other requirements of the GMA mandate forecasts of future needs for capital facilities, and the use of standards for levels of service of facility capacity as the basis for public facilities contained in the CFP (see RCW 36.70A.020 (12)). As a result, public facilities in the CFP must be based on quantifiable, objective measures of capacity, such as traffic volume capacity per mile of road, and acres of park per capita.

One of the goals of the GMA is to have capital facilities in place concurrent with development. This concept is known as concurrency (also called "adequate public facilities"). In Kitsap County, concurrency requires: (1) facilities to serve the development to be in place at the time of development (or for some types of facilities, that a financial commitment is made to provide the facilities within a specified period of time); and (2) such facilities have sufficient capacity to serve development without decreasing levels of service below minimum standards adopted in the CFP.

The GMA requires concurrency for transportation facilities. GMA also requires all other public facilities to be "adequate" (see RCW 19.27.097, 36.70A.020, 36.70A.030, and 58.17.110). Concurrency management procedures will be developed to ensure that sufficient public facility capacity is available for each proposed development.

After the CFP is completed, and adopted as part of the comprehensive plan, the County must adopt or revise development regulations to implement the plan. The CFP must also be updated regularly. (Please see CFP Implementation at the end of this document.)

CFPs vs. CIPs

Traditional capital improvements programs (CIPs) (which are often "wish lists") do not meet the GMA requirements summarized above. Table IN-1 compares traditional CIPs to the Capital Facilities Plan (CFP).

Table IN-1. Traditional CIP vs. CFP

Feature of Plan	Capital Improvement Program (CIP)	Capital Facilities Plan (CFP)
Which Facilities are Required in the Plan?	None Required	All Facilities Required
What Priorities Determine Projects?	Any or No Criteria	Level of Service Standards
Financing Requirements?	Not Required	Financing Plan Required
Implementation Requirements?	Not Required	Concurrency or "Adequate Public Services" Required for All Facilities

There are traditional and non-traditional approaches to developing CFPs. Two traditional approaches (used to develop CIPs) are: (1) needs driven, and (2) revenue-driven.

1. Needs driven: first develop needed capital projects, then try to finance them. This approach is sometimes called a "wish list."
2. Revenue-driven: first determine financial capacity, then develop capital projects that do not exceed available revenue. This approach is called "financially constrained."

Because of the non-traditional requirements of capital facilities planning under the GMA, the traditional approaches to developing capital improvements can cause problems. First, the needs-driven approach may exceed the County's capacity to pay for the projects. If the County cannot pay for the facilities it needs to achieve the level of service standards that it adopted, the County must impose a moratorium in order to comply with the concurrency requirement.

Second, the revenue-driven approach may limit the County to capital projects that provide a lower level of service than the community desires. The County may be willing to raise more revenue if it knows that the financial constraints of existing revenues limit the levels of service. A hybrid approach that overcomes these problems is: (3) scenario-driven.

3. Scenario-driven: develop two or more scenarios using different assumptions about needs (levels of service) and revenues. Use the scenarios to identify the best combination of level of service and financing plan.

The development of multiple scenarios allows the community and decision-makers to review more than one version of the County's future. Each version is like a choice on a menu in a restaurant: the most desirable choices are often the most expensive and the most affordable choices are often not as appealing.

The same is true with the County's CFP: the highest levels of service provides the best quality of life, but the greatest cost (and the greatest risk of a development moratorium if the cost is not paid), while the lowest cost provide less desirable quality of life. The scenario-driven approach enables the County to balance its desire for high levels of service with its willingness and ability to pay for those levels of service.

Other advantages of the scenario-driven approach include:

- Helping the County analyze which approach achieves the best balance among GMA goals;
- Helping prepare analyses required by SEPA (State Environmental Policy Act); and
- Evaluating scenarios for the Land Use Element.

The scenario-driven approach also provides a non-traditional method of policy development. The other approaches begin by setting policies (i.e., needs or revenues) then building a plan to implement the policies. The scenario-driven approach uses

alternative potential policy assumptions as the basis for different scenarios. The establishment of County policies is accomplished by reviewing all scenarios. Then, the Board of County Commissioners selects the preferred scenario, and then the policies are written that will implement the preferred scenario.

The scenarios are used to test alternative policies, and lead to selection of the policy that the community believes they can achieve. The formal language of policies is written after the scenarios are evaluated and the preferred scenarios (and accompanying policies) have been identified.

LEVEL OF SERVICE METHOD FOR FACILITIES ANALYSIS

Explanation for Levels of Service

Levels of service are usually quantifiable measures of the amount of public facilities that are provided to the community. Levels of service may also measure the quality of some public facilities. Typically, measures of levels of service are expressed as ratios of facility capacity to demand (i.e., actual or potential users). Table IN-2 lists examples of levels of service measures for some capital facilities.

Each of these levels of service measures needs one additional piece of information: The specific quantity that measures the current or proposed level of service. For example, the *standard* for parks might be 5 acres per 1,000 population, but the *current* level of service may be 2.68 acres per 1,000, which is less than the standard. In order to make use of the level of service method, the County selects the way in which it will measure each facility (i.e., acres, gallons, etc.), and it identifies the amount of the current and proposed (i.e., standard) level of service for each measurement.

There are other ways to measure the level of service of many of these capital facilities. The examples in Table IN-2 are provided to give greater depth to the following discussion of the use of levels of service as a method for determining the County's need for capital facilities.

Table IN-2. Sample of Level of Service Standards

Type of Facility	Sample Level of Service Standard (Measure)
Corrections	Beds per 1,000 Population
Fire and Rescue	Average Response Time
Law Enforcement	Officers per 1,000 Population
Parks	Acres per 1,000 Population
Roads and Streets	Ratio of Actual Car Trips to Road Capacity
Schools	Students per Classroom
Sewer	Gallons per customer per Day
Solid Waste	Tons (Cubic Yards) per Capita
Stormwater	Design Storm (e.g., 100-Yr Storm)
Water	Gallons per customer per Day/Water Quality

Level of Service Methodology

The level of service method answers two questions in order to develop a financially feasible CFP. The GMA requires the CFP to be based on standards for service levels that are measurable and financially feasible for the six fiscal years following adoption of the plan. The County is required to adopt its plan to meet its capital needs for the fiscal years 2006 through 2012.

There are two questions that must be answered to meet the GMA requirements:

1. What is the quantity of public facilities that will be required by the end of the 7th year?
2. Is it financially feasible to provide the quantity of facilities that are required by the end of the 7th year (i.e., 2012)?

The answer to each question can be calculated by using objective data and formulas. Each type of public facility is examined separately (i.e., roads are examined separately from parks). The costs of all the types of facilities are then added together to determine the overall financial feasibility of the CFP.

The method is shown, as follows:

Question 1. *What is the quantity of public facilities that will be required by the end of the 7th year (i.e., 2012)?*

$$\text{Formula 1.1: Demand} \quad \times \quad \text{Standard} \quad = \quad \text{Requirement}$$

Where Demand is the estimated 2012 population or other appropriate measure of need (dwelling units), and Standard is the amount of facility per unit of demand (acres of park per capita). The answer to this formula is the total amount of public facilities that are needed, regardless of the amount of facilities that are already in place and being used by the public.

$$\text{Formula 1.2: Requirement} \quad - \quad \text{Inventory} \quad = \quad \text{Surplus or} \\ \text{Deficiency}$$

Where Requirement is the result of Formula 1.1, and Inventory is the quantity of facilities available as of December 31, 2006 (the beginning of the seven years covered by the plan).

This formula uses the inventory of existing public facilities, plus facilities that were completed by December 31, 2006, to offset the total requirement of Formula 1.1. The answer to Formula 1.2 is the net surplus of public facilities, or the net deficit that must be eliminated by additional facilities before December 31, 2012. If a net deficiency exists, it represents the combined needs of existing development and anticipated new development.

Detailed analysis will reveal the portion of the net deficiency that is attributable to current development compared to the portion needed for new development (see the CFP support document "Capital Facilities Requirements" for the delineation between current development and new development).

Question 2. *Is it financially feasible to provide the quantity of facilities that are required by the end of the 7th year (i.e., 2012)?*

A "preliminary" answer to Question 2 is prepared to test the financial feasibility of tentative or proposed standards of service. The preliminary answers use "average costs" of facilities, rather than specific project costs. This approach avoids the problem of developing detailed projects and costs that would be unusable if the standard proved to be financially infeasible. If the standards are feasible at the preliminary level, detailed projects are prepared for the "final" answer to Question 2.

If, however, the preliminary answer indicates that a standard of service is not financially feasible, six options are available to the County:

1. Reduce the standard of service, which will reduce the cost, or
2. Increase revenues to pay for the proposed standard of service (higher rates for existing revenues, and/or new sources of revenue), or
3. Reduce the average cost of the public facility (e.g. alternative technology or alternative ownership or financing), thus reducing the total cost, and possibly the quality, or
4. Reduce the demand by restricting population (e.g. revise the land use element), which may cause growth to occur in other jurisdictions, or
5. Reduce the demand by reducing consumption (e.g. transportation demand management techniques, recycling solid waste, water conservation, etc.) which may cost more money initially, but may save money later, or
6. Any combination of options 1-5.

The preliminary answer to Question 2 is prepared using the following formulas (P = preliminary):

$$\text{Formula 2.1P:} \quad \text{Deficiency per Unit} \times \text{Average Cost} = \text{Deficiency Cost}$$

Where Deficiency is the result of Formula 1.2, and Average Cost/Unit is the usual cost of one unit of facility (mile of road, acre of park).

The answer to Formula 2.1P is the approximate cost of eliminating all deficiencies of public facilities, based on the use of an "average" cost for each unit of public facility that is needed.

$$\text{Formula 2.2P:} \quad \text{Deficiency Cost} - \text{Revenue} = \text{Net Surplus or Deficiency}$$

Where Deficiency Cost is the result of Formula 2.1P, and Revenue is the money currently available for public facilities.

The result of Formula 2.2P is the preliminary answer to the test of financial feasibility of the standards of service. A surplus of revenue in excess of cost means the standard of service is affordable with money remaining (the surplus), therefore the standard is financially feasible. A deficiency of revenue compared to cost means that not enough money is available to build the facilities, therefore the standard is not financially feasible. Any standard that is not financially feasible will need to be adjusted using the 6 strategies listed above.

The "final" demonstration of financial feasibility uses detailed costs of specific capital projects in lieu of the "average" costs of facilities used in the preliminary answer, as follows (F = final):

$$\text{Formula 2.1F:} \quad \text{Capacity Projects} + \text{Non-capacity Projects} = \text{Project Cost}$$

Where Capacity Projects is the cost of all projects needed to eliminate the deficiency for existing and future development (Formula 1.2), including upgrades and/or expansion of existing facilities as well as new facilities, and Non-capacity Projects is the cost of remodeling, renovation or replacement needed to maintain the inventory of existing facilities.

$$\text{Formula 2.2F:} \quad \text{Project Cost} - \text{Revenue} = \text{Net Surplus or Deficiency}$$

Where Project cost is the result of Formula 2.1F, and Revenue is the money available for public facilities from current/proposed sources.

The "final" answer to Question 2 validates the financial feasibility of the standards for levels of service that are used for each public facility in the CFP and in the other elements

of the comprehensive plan. The financially feasible standards for levels of service and the resulting capital improvement projects are used as the basis for policies and implementation programs in the final Capital Facilities Plan.

Setting the Standards for Levels of Service (LOS)

Because the need for capital facilities is largely determined by the LOS that are adopted, the key to influencing the CFP is to influence the selection of the level of service standards. Levels of service standards are measures of the quality of life of the community. Standards should be based on the community's vision of its future and its values. Traditional approaches to capital facilities planning rely on technical experts (i.e., staff and consultants) to determine the need for capital improvements. In the scenario-driven approach, these experts play an important advisory role, but they do not control the determination. Their role is to define and implement a process for the review of various scenarios, to analyze data and make suggestions based on technical considerations.

An individual has many opportunities to influence the LOS (and other aspects of both the CFP and the Comprehensive Plan). These opportunities include attending and participating in meetings, writing letters, responding to surveys or questionnaires, joining organizations that participate in the CFP process, being appointed/elected to an advisory group, making comments/presentation/testimony at the meetings of any group or government agency that influences the LOS decision and giving input during the SEPA review process.

In the future, the scenario-driven approach to developing the level of service standards will provide decision-makers and anyone else who wishes to participate with a clear statement of the outcomes of various levels of service for each type of public facility. This approach reduces the tendency for decisions to be controlled by expert staff or consultants, and opens up the decision-making process to the public and advisory groups, and places the decisions before the Board of County Commissioners.

A 10-step process should accomplish selection of a specific level of service to be the “adopted standard”:

1. Current actual level of service is calculated.
2. Departmental service providers are given national/regional standards or guidelines and examples of - LOS from other local governments.
3. Departmental service providers research local standards from County studies, master plans, ordinances and development regulations.
4. Departmental service providers recommend a standard for the County's CFP.

5. First draft of a Capital Facilities Requirements support document will forecast needed capacity and approximate costs of two levels of service (the actual LOS, and the department's recommended LOS).
6. Kitsap County Board of Commissioners (BOCC) reviews and comments on the first draft Capital Facilities Requirements report.
7. Departmental service providers prepare specific capital improvements projects to support the LOS. The LOS in the first draft CFP serves as the basis of capital projects, their costs, and a financing plan necessary to pay for the costs.
8. First draft CFP is prepared using the current LOS (unless the BOCC indicates an interest in a different LOS). The LOS in the first draft CFP serves as the basis of capital projects, their costs, and a financing plan necessary to pay for the costs.
9. Draft CFP is reviewed/discussed during BOCC-Planning Commission joint workshop(s) prior to formal reading/hearing of CFP by the BOCC.
10. BOCC formally adopts levels of services as part of the CFP.

The final standards for levels of service are adopted in Policy CF-3. The adopted standards (1) determine the need for capital improvements projects (see Policy CF-4 and the Capital Improvements section), and (2) are the benchmark for testing the adequacy of public facilities for each proposed development pursuant to the "concurrency" requirement (see Policy CF-15). The adopted standards can be amended, if necessary, once each year as part of the annual amendment of the comprehensive plan or through the budget process.

2. Capital Improvements

Introduction

Chapter 2 of the CFP presents capital improvements projects, and the financing plan to pay for those projects. It also contains the inventory of existing facilities, a list of existing and planned facilities, the level of service standard, concurrency requirements, estimates of future operating and maintenance costs of new capital projects, and non-capital alternatives to achieving the LOS standard.

Each type of public facility is presented in a separate subsection, which follows a standard format. Throughout this section, tables of data are identified with abbreviations that correspond to the type of facility: *Table PR-1* refers to *Table 1* for PR (Parks and Recreation). Each abbreviation corresponds to the name of the type of facility.

Narrative Summary

Overview of the data, with sections devoted to Current Facilities, Level of Service Capital Facilities Projects and Financing.

Inventory of Current Facilities

A list of existing capital facilities, including the name, capacity (for reference to levels of service), and location. Volume II of the Comprehensive Plan contains an environmental impact statement. That document contains maps of existing capital facilities in Section 3.3.

Level of Service Capacity Analysis

Where applicable, a table analyzing facility capacity requirements is presented for each type of public facility. The statistical table at the top calculates the amount of facility capacity that is required to achieve and maintain the standard for level of service. The capital improvement projects that provide the needed capacity are listed below the capital requirement table, and their capacities are reconciled to the total requirement in the table.

Capital Projects and Financing Plan

A list of capital improvements that will eliminate existing deficiencies, make available adequate facilities for future growth, and repair or replace obsolete or worn out facilities through December 31, 2012. Each list of capital improvements begins with a financing plan, and then itemizes the individual projects.

Financing Plan.

Specific sources and amounts of revenue are shown that will be used to pay for the proposed capital projects. The amounts of the revenue forecasts are based on data provided by Kitsap County's Department of Administration, individual County departments, and appropriate special districts within the County.

Capital Projects.

Each capital improvement project is named, and briefly described. Project locations are specified in the name or description of the project. The cost for each of the next six fiscal years (2006-2012), as well as the base year (2006) is shown in thousands of dollars (\$1,000). All cost data is in current dollars; no inflation factor has been applied because the costs will be revised as part of the regular review and update of the Capital Facilities Plan (see CFP Implementation). All capital improvements projects were prepared by the County department, or special district within the County, that provides the public facility.

Selecting Revenue Sources

One of the most important requirements of the Capital Facilities Plan is that it must be financially feasible; GMA requires a balanced capital budget. The following are excerpts from GMA pertaining to financing of capital improvements. GMA requires "a six-year plan that will finance...capital facilities within projected funding capacities and clearly identifies sources of public money for such purposes." For roads, GMA allows development when "a financial *commitment* is in place to complete the improvements...within six years" (emphasis added).

The County must be able to afford the standards of service that it adopts, or "if probable funding falls short of meeting existing needs" the County must "reassess the land use element" (which most likely will cause further limits on development). In keeping with these requirements, the County's CFP Policy CF-6 requires conservative estimates of revenues from sources that are available to the County pursuant to current statutes. The process of identifying specific revenues for the financing plan is as follows:

1. Calculate total costs for each type of public facility.
2. Match existing restricted revenue sources to the type of facility to which they are restricted.
3. Subtract existing restricted revenues from costs to identify unfunded "deficit" (item 1 minus item 2 equals item 3).
4. Apply new restricted revenues to the type of facility to which they are restricted.
5. Subtract new restricted revenues from costs to identify remaining unfunded "deficits" (item 3 minus item 4 equals item 5).
6. Allocate new unrestricted revenue to unfunded deficits. The allocation in this draft uses two relatively new unrestricted revenues as a total "package"--the second 0.25¢ real estate excise tax, and new bond issues (either legislative, or voted, or a combination). Decision-makers can choose which of the two revenue sources (REET or bonds) to assign to specific capital projects for the final CFP.

Public Buildings

Current Facilities Inventory

County public buildings include government administrative offices, maintenance facilities, courtrooms, and community centers. Table PB.1 below lists the size and location of each facility.

Table PB.1 - Current Facilities Inventory – County Public Buildings (2006)

Facility	Location	Size (Sq Ft)
Administrative Courthouse Campus	614 Division Street, Port Orchard	
Courthouse (includes 4 district and 8 superior)		105,000
Bullard Building		8,000
Law Library (Modular)		1,700
New Administration Building	619 Division Street, Port Orchard	63,000
Log Church	717 Sidney Street, Port Orchard	3,358
Other Administrative Facilities		
Child Support	730 Prospect, Port Orchard (Leased Building)	6,400
Coroner Administration and Soil Conservation	817 Sidney Avenue, Port Orchard (Leased)	2,000
Public Works Annex	8600 SW Imperial Way, Port Orchard	44,978
Kingston Precinct/Commissioners	26076 Illinois Avenue NE, Kingston (Leased)	1,200
KITZ Building - BKAT	7266 Tibardis Rd, Bremerton	2,000
Morque	704 Sidney Avenue, Port Orchard	1,200
Moderate Risk Waste	5551 SW Imperial Way, Port Orchard	3,750
Recovery Center	1975 Fuson Road, Bremerton	13,000
CenCom & DEM	5050 Linden, Bremerton	24,680
Parks and Recreation Administration Office	1201 NW Fairgrounds Road, Bremerton	10,000
Fair Administration Office	1300 NW Fairgrounds Road, Bremerton	2,560
Total Administration		292,826
Maintenance Facilities		
General Facilities Maintenance	717 Taylor Street, Port Orchard	7,900
Public Works Maintenance	Various Locations	28,028
Total Maintenance		35,928
Community Centers		
Givens Community Center	1026 Sidney Avenue, Port Orchard	46,850
Kingston Community Center	11212 State Hwy 104, Kingston	4,000
Silverdale Community Center	9729 Silverdale Way, Silverdale	15,070
Total Community Centers		65,920

Source: Kitsap County Facilities, Parks & Recreation

Level of Service Analysis

County Administration Buildings

The current 2006 LOS (Table PB.2-1) of 1,164 square feet per 1,000 populations represents the existing 2006 inventory divided by the estimated 2006 countywide population (251,635). The proposed LOS of 1,092 square feet per 1,000 population, which is 72 square feet per 1,000 population lower than the County's 2006 LOS, requires an additional 8,000 square feet of space through the year 2012.

Table PB.2-1. LOS Requirements Analysis – County Administration Buildings

CURRENT LOS = 1,164 SQUARE FEET PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) SQUARE FEET @ 1.164 PER CAPITA	(4) SQUARE FEET AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	292,825	292,825	0
2007-2012 Growth	23,725	27,609		-27,609
TOTAL AS OF 2012	275,360	320,434	292,825	-27,609
PROPOSED LOS = 1,092 SQUARE FEET PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) SQUARE FEET @ 1.092 PER CAPITA	(4) SQUARE FEET AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	276,906	292,825	17,919
2007-2012 Growth	23,725	25,919		-25,919
TOTAL AS OF 2012	275,360	300,825	292,825	-8,000
Capacity Projects:				
1. Coroner Facility			8,000	0

County Maintenance Facilities

The 2006 LOS (Table PB.2-2) of 143 square feet per 1,000 population represents the existing 2006 inventory divided by the estimated 2006 countywide population. The proposed LOS of 130 square feet per 1,000 population, which is 13 square feet per 1,000 population lower than the County's 2006 LOS, does not require any additional square feet of space through the year 2012.

Table PB.2-2 LOS Requirements Analysis - County Maintenance Facilities

CURRENT LOS = 143 SQUARE FEET PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) SQUARE FEET @ 0.143 PER CAPITA	(4) SQUARE FEET AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	35,928	35,928	0
2007-2012 Growth	23,725	3,387		-3,387
<i>TOTAL AS OF 2012</i>	275,360	39,315	35,928	-3,387
PROPOSED LOS = 130 SQUARE FEET PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) SQUARE FEET @ 0.130 PER CAPITA	(4) SQUARE FEET AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	32,832	35,928	3,096
2007-2012 Growth	23,725	3,096		-3,096
<i>TOTAL AS OF 2012</i>	275,360	35,928	35,928	0

County District Courtrooms

The 2006 LOS (Table PB.2-3) of 0.016 per 1,000 population represents the existing 2006 inventory divided by the estimated 2006 countywide population. The proposed LOS of 0.022 courtrooms per 1,000 population is higher than the County's current 2006 LOS, and requires an additional two courtrooms through the year 2012.

Table PB.2-3. LOS Requirements Analysis - County District Courtrooms

CURRENT LOS = 0.016 COURTROOMS PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) COURTROOMS @ 0.000016 PER CAPITA	(4) COURTROOMS AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	4	4	0
2007-2012 Growth	23,725	0		0
<i>TOTAL AS OF 2012</i>	275,360	4	4	0
PROPOSED LOS = 0.022 COURTROOMS 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) COURTROOMS @ 0.000022 PER CAPITA	(4) COURTROOMS AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	5	4	-1
2007-2012 Growth	23,725	1		-1
<i>TOTAL AS OF 2012</i>	275,360	6	4	-2
Capacity Projects:				
1. District Courtrooms			2	0

County Superior Courtrooms

The 2006 LOS (Table PR.2.4) of 0.032 courtrooms per 1,000 population represents the existing 2006 inventory divided by the estimated 2006 countywide population. The 2012 proposed LOS of 0.029 courtrooms per 1,000 population, is slightly lower than the County's 2006 LOS, and does not require any additional courtrooms through the year 2012.

Table PB.2-4. LOS Requirements Analysis - County Superior Courtrooms

CURRENT LOS = 0.032 COURTROOMS PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) COURTROOMS @ 0.000032 PER CAPITA	(4) COURTROOMS AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	8	8	0
2007-2012 Growth	23,725	1		-1
<i>TOTAL AS OF 2012</i>	275,360	9	8	-1
PROPOSED LOS = 0.029 COURTROOMS PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) COURTROOMS @ 0.000029 PER CAPITA	(4) COURTROOMS AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	7	8	1
2007-2012 Growth	23,725	1		-1
<i>TOTAL AS OF 2012</i>	275,360	8	8	0

County Community Centers

The 2006 LOS (Table PR.2-5) of 262 square feet per 1,000 population represents the existing 2006 inventory divided by the estimated 2006 countywide population.

The proposed LOS of 239 square feet per 1,000 population, which is lower than the County's 2006 LOS, does not require any additional square feet of space through the year 2012.

Table PB.2-5 LOS Requirements Analysis - County Community Centers

CURRENT LOS = 262 SQUARE FEET PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) SQUARE FEET @ 0.262 PER CAPITA	(4) SQUARE FEET AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	65,920	65,920	0
2007-2012 Growth	23,725	6,215		-6,215
<i>TOTAL AS OF 2012</i>	275,360	72,135	65,920	-6,215
PROPOSED LOS = 239 SQUARE FEET PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) SQUARE FEET @ 0.239 PER CAPITA	(4) SQUARE FEET AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	60,240	65,920	5,680
2007-2012 Growth	23,725	5,680		-5,680
<i>TOTAL AS OF 2012</i>	275,360	65,920	65,920	0

Capital Facilities Projects and Financing: 2007-2012

The County's administrative and maintenance facilities include seven capital projects at a cost of \$56,000,000. The proposed financing plan is shown in Table PB.3.

Table PB.3. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

COSTS/REVENUES	PUBLIC BUILDINGS							TOTAL
	2007	2008	2009	2010	2011	2012		
<i>COUNTY ADMINISTRATION</i>								
<i>Capacity Projects:</i>								
1. New Coroner Building (8,000 sf)								
Cost	3,100.0							3,100.0
Rev - REET 1	3,100.0							3,100.0
Subtotal	3,100.0	0.0	0.0	0.0	0.0	0.0	0.0	3,100.0
<i>Non-Capacity Projects:</i>								
2. Kitsap County Courthouse Building Improvements								
Cost	3,000.0							3,000.0
Rev - REET 1	3,000.0							3,000.0

PUBLIC BUILDINGS

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
3. Public Works Building Weatherization							
Cost	3,000.0						3,000.0
Rev - REET 1	990.0						990.0
Rev - Road Fund	2,010.0						2,010.0
Subtotal	6,000.0	0.0	0.0	0.0	0.0	0.0	6,000.0

LAW & JUSTICE

Capacity Projects:

4. New District/Superior Court Facility North Kitsap (+ 1 Courtroom)							
Cost			5,000.0				5,000.0
Rev - REET 1			1,250.0				1,250.0
Rev - Voted G.O. Bond Issue			3,750.0				3,750.0

5. New District Court Facility Central Kitsap (+ 1 Courtroom)							
Cost				5,000.0			5,000.0
Rev - REET 1				1,250.0			1,250.0
Rev - Voted G.O. Bond Issue				3,750.0			3,750.0

6. Kitsap County Courthouse Replacement Building (105,000 sf)							
Cost						35,000.0	35,000.0
Rev - REET 1						26,250.0	26,250.0
Rev - Voted G.O. Bond Issue						8,750.0	8,750.0
Subtotal	0.0	0.0	5,000.0	5,000.0	0.0	35,000.0	45,000.0

7. Completion of Central Kitsap Campus - Purchase (+ 6,250 sf)							
Cost -			2,500.0				2,500.0
Rev - REET 1			2,500.0				2,500.0
Subtotal	0.0	0.0	2,500.0	0.0	0.0	0.0	2,500.0

SUMMARY: COSTS AND REVENUES

COSTS:

Capacity Projects	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
County Administration	3,100.0	0.0	0.0	0.0	0.0	0.0	3,100.0
Law & Justice	0.0	0.0	5,000.0	5,000.0	0.0	35,000.0	45,000.0
Community Facilities/Libraries	<u>0.0</u>	<u>0.0</u>	<u>2,500.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>2,500.0</u>
Subtotal	3,100.0	0.0	7,500.0	5,000.0	0.0	35,000.0	50,600.0
Non-Capacity Projects	<u>6,000.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>6,000.0</u>
Subtotal	6,000.0	0.0	0.0	0.0	0.0	0.0	6,000.0
Total Costs	9,100.0	0.0	7,500.0	5,000.0	0.0	35,000.0	56,600.0

PUBLIC BUILDINGS

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
EXISTING REVENUES							
Rev -REET 1 (1st 1/4%)	7,090.0	0.0	3,750.0	1,250.0	0.0	26,250.0	38,340.0
Rev -Road Fund	<u>2,010.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>2,010.0</u>
Subtotal	9,100.0	0.0	3,750.0	1,250.0	0.0	26,250.0	40,350.0
NEW REVENUES							
Rev - Voted G.O. Bond Issue	<u>0.0</u>	<u>0.0</u>	<u>3,750.0</u>	<u>3,750.0</u>	<u>0.0</u>	<u>8,750.0</u>	<u>16,250.0</u>
Subtotal	0.0	0.0	3,750.0	3,750.0	0.0	8,750.0	16,250.0
Total Revenues	9,100.0	0.0	7,500.0	5,000.0	0.0	35,000.0	56,600.0
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Fire Protection

Kitsap County is served by Central Kitsap Fire and Rescue (CKFR), Poulsbo Fire Department, Fire District 2, North Kitsap Fire and Rescue (NKFR), and South Kitsap Fire and Rescue (SKFR). The City of Bremerton has its own fire department. The cities of Port Orchard, Bainbridge Island and Poulsbo, as well as unincorporated areas within the County receive fire protection from South Kitsap Fire and Rescue (SKFR), Fire District 2, and Poulsbo Fire Department, respectively.

Fire district mergers have been occurring since 1978 to improve fire protection efficiency within the County. The latest merger took place on January 1, 2003, whereby Fire District 12 became a part of CKF&R. There are a total of 41 fire stations in the County, of which 20 are staffed with career personnel. An additional seven fire stations are located on military installations within the County under the jurisdiction of Puget Sound Federal Fire. The fire districts and departments within the County have a mutual aid agreement.

Background

Each city and fire protection district is assigned a numerical fire protection rating (a Class 1 rating is the best) by the Washington Surveying and Ratings Bureau. Insurance companies fund the Bureau to perform on-site inspections of fire districts to determine the rating. The Bureau analyzes five main areas: average response time, water supply, communication network, schedule of fire inspections, and existing condition of fire stations. Fire station evaluations focus on age of vehicles, amount of personnel training, and whether the facilities are staffed or not. Insurance companies use the fire protection rating to help determine insurance rates on all fire insurance policies. Quality of fire service can have a significant impact on fire insurance rates, with the greatest impact experienced by commercial occupancies.

County Fire Protection Districts

Fire protection districts in Kitsap County have entered into agreements with Washington State Department of Natural Resources (DNR) to jointly fight fires on state-owned land and private forestland. DNR has no responsibility or authority in incorporated areas of the County. Each municipality is responsible for all fires within its boundaries. For the unincorporated lands, DNR and some fire districts have split up fire protection and suppression responsibility through creation of a fire protection zone (FPZ). DNR has protection responsibility within an FPZ. The fire district protects everything else as well as structures within the FPZ. DNR policy is that they will not fight structure fires. Any structure within a fire district's boundaries is the responsibility of the district. DNR also protects certain state land parcels regardless of location. DNR is a signatory on the countywide mutual aid agreement and will respond as mutual aid when requested.

Current Facilities Inventory

Table FP.1-1 summarizes the capital facilities for each fire district. It also includes each district's fire rating and service area population.

Table FP.1-1 Kitsap County Fire Protection Facilities Inventory (2006)

Fire Protection Provider	Number of Stations	Fire Rating	Fire Units ³	EMS Services	Service Area Population (2006)
CKF&R (Service areas include FPD ¹ No. 1, 12, and 15) ²	12	4	37	Yes	83,302
South Kitsap Fire and Rescue (Includes FPD No. 7 and City of Port Orchard)	16	5	34	Yes	76,307
NKFR (Service area also includes FPD No.14)	3	5	15	Yes	23,441
Poulsbo Fire Department (Service area includes FPD No. 18 and City of Poulsbo)	4	4 – Within City Limits 5 – Outside City Limits	15	Yes	25,112

Source: Individual fire districts.

1. FPD = Fire Protection District

2. Data provided are based upon the Kitsap County 2003 Traffic Analysis Zones within CKF&R

3. A unit is the combination of vehicle and equipment that responds to a fire or EMS situation, including engines, ladder trucks, water tenders, rescue units, aid cars and ambulances, and rehabilitation units, but not including staff or miscellaneous vehicles.

Central Kitsap Fire and Rescue (formerly Fire Districts 1, 12, and 15)

Central Kitsap Fire and Rescue, located in the central portion of the County, is one of the largest fire service providers in Kitsap County. Within its boundaries and contracted areas, CKF&R provides Fire and Emergency Medical Services (EMS) response to approximately 115 square miles of land and services an estimated 2005 population of approximately 83,300 citizens based on 2003 Traffic Analysis Zones information provided by Kitsap County. In addition, CKF&R is the County's fastest growing fire agency as a result of a series of mergers, consolidations, and contracts for fire and EMS protection services. The most recent merger, whereby Fire District 12 merged into CKF&R, occurred January 1, 2003, and resulted in an increase of from 103 square miles of coverage to the present 115 square miles. Because of its location, CKF&R has a significant amount of waterfront—40 miles of tidal waterfront with adjacent saltwater area, and numerous small lakes and ponds. See DEIS Figure 3.3-2 for a map of district boundaries. The District's boundaries are described as follows:

Beginning at the Mason County line and Hood Canal, North along the water through Holly, Seabeck, and Olympic View to Subase Bangor, then East along Mountain View road to Port Orchard Narrows at Naval Undersea Warfare Center (NUWC), then South through Brownsville, Illahee, Illahee State Park, to Enetai Beach and Bremerton City limits, then Northwest along Bremerton City limits along Petersville Road, then West along Riddell Road, then South along

the eastern side past Roswell Drive, then West to Pine Road, and meandering South to Bremerton City limits near Lions Field, then Northwest along East side of Dyes Inlet through Tracyton up to Silverdale, then South along the west side to Jackson Park Naval, then South along Lakehurst drive to Kitsap Way and then West through the Gold Mountain area, then meandering West and South to the Mason County line, and then West to Hood Canal.

Communities recognized within CKF&R are Silverdale, Olympic View, Seabeck, Lake Symington, Lake Tahuya, Island Lake, Ridgetop, Crosby, Hintzville, Holly, Brownsville, Gilberton, Meadowdale, North Perry, Illahee, Tracyton, Chico, Wildcat Lake, Kitsap Lake, and Erlands Point.

The larger water purveyors in CKF&R are Silverdale Water District, North Perry Water District, Public Utility District #1, and Bremerton Water Department. There are many smaller water systems throughout the district that typically serve the daily domestic needs of residential subdivisions (many of which are not capable of providing adequate quantities of water for fire flow or are not designed with fire hydrants for fire-fighting needs).

Central Kitsap Fire and Rescue operates at 12 fire stations throughout the District. The fire stations are organized into three geographical area descriptions:

- Division 41 (east of Ridgetop area including fire stations 41, 42, 44, and 45, of which Stations 41 and 45 are staffed with career personnel);
- Division 51 (central Silverdale core including fire stations 51 and 52, of which Station 51 is staffed with career personnel); and
- Division 56 (west to Hood Canal and Mason County including fire stations 53, 54, 55, 56, 64, and 65, of which Station 56 is staffed with career personnel).

Additional facilities within the fire district are its Administrative Facility and Vehicle Maintenance Facility (both facilities are co-owned and -staffed with Silverdale Water District), Central Supply facility, Facilities Maintenance facility, and the former Fire Station 43 (no longer used as a fire station).

Central Kitsap Fire and Rescue equipment includes the following:

- 14 fire engines (1,000 to 1,500-gpm [gallons per minute] pump capacity and 750- to 1,000-gallon tank capacity),
- 2 brush engines,
- 1 ladder truck (50-foot Quint),
- 6 water tenders (five 3,000-gallon tank capacity tenders and one 1,250-gallon tank capacity tender),
- 2 rescue units
- 10 medical units (3 –advanced life support [ALS] and 7 basic life support [BLS]),
- 2 emergency scene rehabilitation units,

- 1 17-foot rescue boat, and
- 20 miscellaneous vehicles (e.g., staff, utility, delivery).

Central Kitsap Fire and Rescue is referred to as a “combination” Fire District that uses both career and volunteer personnel. Five Fire Commissioners, 21 administrative and support personnel, 66 career line personnel, and approximately 80 volunteer personnel make up its membership. The Fire District currently has 18 of its line personnel trained to a Paramedic level with the remainder of the line personnel and some administrative personnel trained as Emergency Medical Technicians (EMTs).

The District provides EMS through three advanced life support (ALS) medical units and seven basic life support (BLS) medical units.

South Kitsap Fire and Rescue (formerly Fire Protection District # No. 7)

South Kitsap Fire and Rescue (SKFR) is located in the southern portion of Kitsap County. SKFR covers 150 square miles of land area and serves an estimated 2005 population of approximately 76,300. There are 22 miles of tidal waterfront with adjacent saltwater area, plus numerous small lakes and ponds. SKFR also covers a considerable amount of Washington State Department of Natural Resources (DNR) land on a contractual basis.

SKFR serves the City of Port Orchard and the Port of Bremerton’s Airport and Olympic View Industrial Park under a contractual agreement. Fourteen percent of the water for fire fighting is provided by a number of water districts and systems. Fire district tenders provide water for fire fighting in the remaining 86 percent of the district.

The major water purveyors in South Kitsap are the Annapolis Water District; the Manchester Water District; the City of Port Orchard; Bremerton Water; and privately owned water systems such as Harbor Water, Crown Properties Incorporated, Long Lake View Estates, McCormick Woods Water Company, Rainier View Water, Sunnyslope Water, and Watauga Beach Community Water.

South Kitsap Fire and Rescue responds to all types of fire, medical and related emergency situations from 16 stations throughout the district. Six stations are staffed with career employees 24 hours/day while ten stations are not staffed with career employees 24 hours/day.

South Kitsap Fire and Rescue equipment includes the following:

- 17 fire engines,
- 8 water tenders,
- 8 EMS ambulances, and
- 1 ladder truck.

South Kitsap Fire and Rescue staff comprises 85 career employees and 30 volunteers.

North Kitsap Fire and Rescue (formerly Fire Protection Dist. 10) – Kingston

North Kitsap Fire and Rescue covers an area of approximately 30 square miles and serves an estimated 2005 population of approximately 23,400. The District serves the communities of Kingston, Indianola, and Suquamish. North Kitsap Fire and Rescue also provides ALS for the S'Klallam Indian Tribe at Little Boston and for Fire Protection District No.14. See DEIS Figure 3.3-2 for a map of district boundaries.

During 2001, NKFR constructed three fire new stations (26642 Miller Bay Road NE, 232260 South Kingston Road NE, and 4911 NE Twin Spits Road). As a result, NKFR improved its service area coverage by providing one staffed fire station for every 12.5 square miles of service area and an average response time of 6 minutes district-wide.

This adds another approximate 30 square miles to the District's coverage area. The major equipment located at the stations are the following:

- 4 fire engines (1 engine in reserve),
- 1 85-foot ladder truck,
- 2 3,000 gallon water tenders,
- 4 staff vehicles,
- 4 aid or medic units (2 units in reserve),
- 1 MCI unit (mass casualty),
- 1 brush unit,
- 1 mobile shop maintenance truck,
- 3 maintenance vehicles (1 vehicle can deliver fuel), and
- 1 27-foot rescue boat (in water at Kingston Marina).

North Kitsap Fire and Rescue has a total of 72 members, 36 of whom are career staff, and includes the following:

- 1 Chief*,
- 2 Assistant Chiefs*,
- 3 Captains*,
- 3 Paramedics*,
- 3 Lieutenants (1 Acting Lieutenant)*,
- 15 full-time Firefighters*,
- 1 Community Service Specialist*,
- 2 full-time Mechanics*,
- 1 part-time Mechanic*,

- 2 Support Lieutenants*,
- 3 Office Staff*,
- 9 Resident Volunteer Firefighters,
- 9 Resident Volunteer Firefighters in Training,
- 15 Volunteers of Various Types (e.g., FF, EMS, Tender Drivers), and
- 3 Volunteer Chaplains.

* Paid Positions

Poulsbo Fire Department (Fire Protection Dist.18 and City of Poulsbo)

The Poulsbo Fire Department is a joint operation of the City of Poulsbo and Kitsap County Fire Protection District No.18. The Department covers an estimated 50 square miles (3 square miles within incorporated city limits and 47 miles of unincorporated County) and encompasses an estimated 2005 population of approximately 25,100. District No. 18 extends north of Poulsbo to Port Gamble, west to Bangor Naval Base/Clear Creek Road, and south to Mountain View Road. The eastern boundary is approximately 3 miles east of Poulsbo. See DEIS Figure 3.3-2 for a map of district boundaries. The Fire Department has four fire stations.

District No. 18 equipment is listed below:

- 5 engines,
- 2 water tenders,
- 6 medic units,
- 2 (4 x 4) rescue units,
- 5 staff vehicles, and
- 9 (4 x 4) Suburban Command units.

District No. 18 staff includes 22 paid positions, eight resident apprentices (unpaid positions that receive a stipend), and 50 to 60 volunteers.

Level of Service Analysis

Two methods generally used in determining level of service for fire districts are fire units per capita and response time. Since many districts operate using a level of service (LOS) tied to response time, it is included in this discussion; however, for capital facilities forecasting, the per capita method provides a more quantifiable LOS that can be easily related to cost.

Fire Units Per Capita

Determination of a LOS using the fire units per capita method is calculated by dividing the number of fire units operated in a district by the district's population. Multiplying the established

LOS by future population projections is a proven method for reasonably predicting growth-related fire and emergency service capital facilities requirements.

This method uses only fire/emergency units (e.g., fire engines, water tenders, and medic units). Fire stations are included in the Capital Facilities Needs section of this document; however, they are not included in the LOS calculation. Although personnel is an integral component to the operation of any fire district, personnel is not considered a capital facility item under the requirements of the Growth Management Act (GMA).

Response Time

Response time can be defined as the amount of time that elapses between the initial call for assistance and arrival of the first emergency unit on site. A five-minute response time in urban areas and a ten-minute response time in rural areas is a level of service goal that several districts try to meet. Fire stations in rural areas tend to be staffed primarily by volunteers, which generally results in a longer response time.

Planning for fire protection and medical services facilities that use this method is often tied to a geographic distribution of stations and the equipment housed at each facility. Stations should be located within a five-mile radius of each other to provide blanket coverage throughout the county. With this method, a population increase does not have as direct an effect on fire protection facility needs as it would on other types of capital facilities, such as water systems and schools. Population increases will more directly affect the number of emergency service calls that a district receives, which in turn affects the number of personnel and amount of equipment needed to maintain an adequate response time.

Current Levels of Service

Tables FP.2-1 through FP.2-4 show the current levels of service for each fire district (fire units per 1,000 population) and an accompanying analysis of fire units required during 2007 to 2012 to maintain the current level of service.

Proposed Levels of Service

The 2012 proposed levels of service for each of the Kitsap County fire districts are also based on fire units per 1,000 population. The County-adopted levels of service and corresponding capital facility requirements through the year 2012 are as follows:

Central Kitsap Fire and Rescue.

Table FP.2-1 shows that the County-proposed LOS equates to 0.41 fire units in service per 1,000 population.

This LOS does not require any additional fire/emergency units through the year 2012.

Table FP.2-1. LOS Requirements Analysis – Central Kitsap Fire & Rescue

CURRENT LOS = 0.44 FIRE UNITS PER 1,000 POPULATION				
(1) TIME PERIOD	(2) DISTRICT SERVICE AREA POPULATION	(3) FIRE UNITS @ 0.00044 PER CAPITA	(4) FIRE UNITS AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	83,302	37	37	0
2007-2012 Growth	6,800	3		-3
<i>TOTAL AS OF 2012</i>	90,102	40	37	-3
PROPOSED LOS = 0.41 FIRE UNITS PER 1,000 POPULATION				
(1) TIME PERIOD	(2) DISTRICT SERVICE AREA POPULATION	(3) FIRE UNITS @ 0.00041 PER CAPITA	(4) FIRE UNITS AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	83,302	34	37	3
2007-2012 Growth	6,800	3		-3
<i>TOTAL AS OF 2012</i>	90,102	37	37	0

South Kitsap Fire and Rescue.

The County-proposed LOS equates to 0.41 fire units in service per 1,000 population. This LOS will not require any additional fire or emergency units through the year 2012 (Table FP.2-2)

Table FP.2-2. LOS Requirements Analysis – South Kitsap Fire & Rescue

CURRENT LOS = 0.45 FIRE UNITS PER 1,000 POPULATION				
(1) TIME PERIOD	(2) DISTRICT SERVICE AREA POPULATION	(3) FIRE UNITS @ 0.00045 PER CAPITA	(4) FIRE UNITS AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	76,307	34	34	0
2007-2012 Growth	7,161	3		-3
<i>TOTAL AS OF 2012</i>	83,468	37	34	-3
PROPOSED LOS = 0.41 FIRE UNITS PER 1,000 POPULATION				
(1) TIME PERIOD	(2) DISTRICT SERVICE AREA POPULATION	(3) FIRE UNITS @ 0.00041 PER CAPITA	(4) FIRE UNITS AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	76,307	31	34	3
2007-2012 Growth	7,161	3		-3
<i>TOTAL AS OF 2012</i>	83,468	34	34	0

North Kitsap Fire & Rescue

The County-proposed LOS equates to 0.59 fire units in service per 1,000 population.

This LOS will not require any additional fire or emergency units through the year 2012 (Table FP.2-3).

Table FP.2-3. LOS Requirements Analysis - North Kitsap Fire & Rescue

CURRENT LOS = 0.64 FIRE UNITS PER 1,000 POPULATION				
(1) TIME PERIOD	(2) DISTRICT SERVICE AREA POPULATION	(3) FIRE UNITS @ 0.00064 PER CAPITA	(4) FIRE UNITS AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	23,441	15	15	0
2007-2012 Growth	2,1624	1		-1
<i>TOTAL AS OF 2012</i>	25,603	16	15	-1
PROPOSED LOS = 0.59 FIRE UNITS PER 1,000 POPULATION				
(1) TIME PERIOD	(2) DISTRICT SERVICE AREA POPULATION	(3) FIRE UNITS @ 0.00059 PER CAPITA	(4) FIRE UNITS AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	23,441	13	15	1
2007-2012 Growth	2,1624	1		-1
<i>TOTAL AS OF 2012</i>	25,603	15	15	0

Poulsbo Fire Department

The County-proposed LOS equates to 0.54 fire units in service per 1,000 population.

This LOS will not require any additional fire or emergency units through the year 2012 (Table FP.2-4).

Table FP.2-4. LOS Requirements Analysis – Poulsbo Fire Department

CURRENT LOS = 0.60 FIRE UNITS PER 1,000 POPULATION				
(1) TIME PERIOD	(2) DISTRICT SERVICE AREA POPULATION	(3) FIRE UNITS @ 0.00060 PER CAPITA	(4) FIRE UNITS AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	25,112	15	15	0
2007-2012 Growth	2,465	1		-1
<i>TOTAL AS OF 2012</i>	27,577	16	15	-1
PROPOSED LOS = 0.54 FIRE UNITS PER 1,000 POPULATION				
(1) TIME PERIOD	(2) DISTRICT SERVICE AREA POPULATION	(3) FIRE UNITS @ 0.00054 PER CAPITA	(4) FIRE UNITS AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	25,112	14	15	1
2007-2012 Growth	2,465	1		-1
<i>TOTAL AS OF 2012</i>	27,577	15	15	0

Capital Facilities Projects and Financing: 2007-2012

Each fire district's proposed level of service (LOS) is dependent upon the funding and implementation of its six-year capital facilities plan (CFP) for 2007-2012. Each fire district's CFP is shown in this section of the Kitsap County Capital Facilities Plan.

Central Kitsap Fire and Rescue

Fire protection facilities include fourteen "non-capacity" capital projects at a cost of \$1,137,000. The proposed financing plan is shown on Table FP.3-1.

South Kitsap Fire & Rescue

Fire protection facilities include two "non-capacity" capital projects at a cost of \$3,150,000. The proposed financing plan is shown on Table FP.3-2.

North Kitsap Fire & Rescue

Fire protection facilities include three "non-capacity" capital projects at a cost of \$5,150,000. The proposed financing plan is shown on Table FP.3-3.

Poulsbo Fire Department

Fire protection facilities include seven "non-capacity" capital projects at a cost of \$1,460,000. The proposed financing plan is shown on Table FP.3-4.

Table FP.3-1. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

FIRE PROTECTION -- CENTRAL KITSAP FIRE & RESCUE							
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<i>Non-Capacity Projects:</i>							
<hr/>							
1. Pump Test Pit Vehicle Maintenance							
Cost	27.0						27.0
Rev - Fire District Tax Levy	27.0						27.0
<hr/>							
2. Video Conferencing System							
Cost	142.1						142.1
Rev - Fire District Tax Levy	142.1						142.1
<hr/>							
3. Station 41 Repaint Interior & Exterior							
Cost				37.0			37.0
Rev - Fire District Tax Levy				37.0			37.0
<hr/>							
4. Station 44 Reroof							
Cost	30.6						30.6
Rev - Fire District Tax Levy	30.6						30.6
<hr/>							
5. Station 45 Reroof							
Cost	34.6						34.6
Rev - Fire District Tax Levy	34.6						34.6
<hr/>							
6. Station 51 Kitchen Upgrade							
Cost	141.7						141.7
Rev - Fire District Tax Levy	141.7						141.7
<hr/>							

FIRE PROTECTION -- CENTRAL KITSAP FIRE & RESCUE

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<i>Non-Capacity Projects:</i>							
7. Station 51 Upgrade Alert							
Cost	32.4						32.4
Rev - Fire District Tax Levy	32.4						32.4
8. Station 51 Repaint Interior & Exterior							
Cost				35.0			35.0
Rev - Fire District Tax Levy				35.0			35.0
<i>Non-Capacity Projects:</i>							
9. Station 51 Reroof							
Cost				151.2			151.2
Rev - Fire District Tax Levy				151.2			151.2
10. Station 52 Raise Roof & Earthquake Proof							
Cost	60.7						60.7
Rev - Fire District Tax Levy	60.7						60.7
11. Station 53 Raise Roof & Earthquake Proof							
Cost	81.1						81.1
Rev - Fire District Tax Levy	81.1						81.1
12. Station 56 Paint Interior & Exterior							
Cost		31.0					31.0
Rev - Fire District Tax Levy		31.0					31.0
13. Station 56 Sewer Project							
Cost				280.7			280.7
Rev - Fire District Tax Levy				280.7			280.7
14. Station 56 Floor Repair							
Cost		52.9					52.9
Rev - Fire District Tax Levy		52.9					52.9
Subtotal	550.2	83.9	0.0	503.9	0.0	0.0	1,137.9
<i>SUMMARY: COSTS AND REVENUES</i>							
COSTS:							
Capacity Projects:	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FIRE PROTECTION -- CENTRAL KITSAP FIRE & RESCUE

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<i>Non-Capacity Projects:</i>							
Non-Capacity Projects							
Fire Facilities Improvements	<u>550.2</u>	<u>83.9</u>	<u>0.0</u>	<u>503.9</u>	<u>0.0</u>	<u>0.0</u>	<u>1,137.9</u>
Subtotal	550.2	83.9	0.0	503.9	0.0	0.0	1,137.9
Total Costs	550.2	83.9	0.0	503.9	0.0	0.0	1,137.9
EXISTING REVENUES							
Rev - Fire District Tax Levy	<u>550.2</u>	<u>83.9</u>	<u>0.0</u>	<u>503.9</u>	<u>0.0</u>	<u>0.0</u>	<u>1,137.9</u>
Subtotal	550.2	83.9	0.0	503.9	0.0	0.0	1,137.9
NEW REVENUES							
Rev -	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Revenues	550.2	83.9	0.0	503.9	0.0	0.0	1,137.9
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table FP.3-2. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

FIRE PROTECTION -- SOUTH KITSAP FIRE & RESCUE							
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<i>Non-Capacity Projects:</i>							
1. Fire Station Remodeling - Station 16 Gorst Expansion							
Cost				150.0			150.0
Rev - Fire District Tax Levy				150.0			150.0
2. Fire Station Construction -- Sunnyslope Station Replacement							
Cost				3,000.0			3,000.0
Rev - G.O. Bond Proceeds				3,000.0			3,000.0
Subtotal	0.0	0.0	0.0	3,150.0	0.0	0.0	3,150.0
<i>SUMMARY: COSTS AND REVENUES</i>							
COSTS:							
Capacity Projects:	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-Capacity Projects							
Fire Facilities Improvements	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>3,150.0</u>	<u>0.0</u>	<u>0.0</u>	<u>3,150.0</u>
Subtotal	0.0	0.0	0.0	3,150.0	0.0	0.0	3,150.0
Total Costs	0.0	0.0	0.0	3,150.0	0.0	0.0	3,150.0
EXISTING REVENUES							
Rev - Fire District Tax Levy	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>150.0</u>	<u>0.0</u>	<u>0.0</u>	<u>150.0</u>
Subtotal	0.0	0.0	0.0	150.0	0.0	0.0	150.0
NEW REVENUES							
Rev - G.O. Bond Proceeds	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>3,000.0</u>	<u>0.0</u>	<u>0.0</u>	<u>3,000.0</u>
Subtotal	0.0	0.0	0.0	3,000.0	0.0	0.0	3,000.0
Total Revenues	0.0	0.0	0.0	3,150.0	0.0	0.0	3,150.0
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table FP.3-3. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

FIRE PROTECTION -- NORTH KITSAP FIRE & RESCUE							
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<i>Non-Capacity Projects</i>							
1. Replace Fire Engines							
Cost	450.0		450.0		450.0		1,350.0
Rev - Fire District Tax Levy	450.0		450.0		450.0		1,350.0
2. Replace Aid Units							
Cost	200.0	200.0		200.0		200.0	800.0
Rev - Fire District Tax Levy	200.0	200.0		200.0		200.0	800.0
3. Replace Fire Station							
Cost				3,000.0			3,000.0
Rev - G.O. Bond Proceeds				3,000.0			3,000.0
Subtotal	650.0	200.0	450.0	3,200.0	450.0	200.0	5,150.0
<i>SUMMARY: COSTS AND REVENUES</i>							
COSTS:							
Capacity Projects:	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-Capacity Projects							
Fire Facilities Improvements	<u>650.0</u>	<u>200.0</u>	<u>450.0</u>	<u>3,200.0</u>	<u>450.0</u>	<u>200.0</u>	<u>5,150.0</u>
Subtotal	650.0	200.0	450.0	3,200.0	450.0	200.0	5,150.0
Total Costs	650.0	200.0	450.0	3,200.0	450.0	200.0	5,150.0
EXISTING REVENUES							
Rev - Fire District Levy	<u>650.0</u>	<u>200.0</u>	<u>450.0</u>	<u>200.0</u>	<u>450.0</u>	<u>200.0</u>	<u>2,150.0</u>
Subtotal	650.0	200.0	450.0	200.0	450.0	200.0	2,150.0
NEW REVENUES							
Rev - G.O. Bond Proceeds	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>3,000.0</u>	<u>0.0</u>	<u>0.0</u>	<u>3,000.0</u>
Subtotal	0.0	0.0	0.0	3,000.0	0.0	0.0	3,000.0
Total Revenues	650.0	200.0	450.0	3,200.0	450.0	200.0	5,150.0
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table FP.3-4. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

FIRE PROTECTION -- POULSBO FIRE DEPARTMENT							
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<i>Non-Capacity Projects:</i>							
<hr/>							
1. Brush Truck Replacement							
Cost	100.0						100.0
Rev - Fire District Tax Levy	100.0						100.0
<hr/>							
2. Staff Vehicles Replacement							
Cost		30.0					30.0
Rev - Fire District Tax Levy		30.0					30.0
<hr/>							
3. Minor Capital Expenditures							
Cost	50.0	50.0	50.0	50.0	50.0	50.0	300.0
Rev - Fire District Tax Levy	50.0	50.0	50.0	50.0	50.0	50.0	300.0
<hr/>							
4. Medic Unit Replacement							
Cost	150.0				175.0		325.0
Rev - Fire District Tax Levy	150.0				175.0		325.0
<hr/>							
5. Medic Unit Refurbishment							
Cost		90.0		90.0			180.0
Rev - Fire District Tax Levy		90.0		90.0			180.0
<hr/>							
6. Fire Engine Replacement							
Cost			425.0				425.0
Rev - Fire District Tax Levy			425.0				425.0
<hr/>							
7. Fire Engine Refurbishment							
Cost				100.0			100.0
Rev - Fire District Tax Levy				100.0			100.0
<hr/>							
Subtotal	300.0	170.0	475.0	240.0	225.0	50.0	1,460.0
<hr/>							
<i>SUMMARY: COSTS AND REVENUES</i>							
COSTS:							
Capacity Projects:	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-Capacity Projects							
Fire Facilities Improvements	<u>300.0</u>	<u>170.0</u>	<u>475.0</u>	<u>240.0</u>	<u>225.0</u>	<u>50.0</u>	<u>1,460.0</u>
Subtotal	300.0	170.0	475.0	240.0	225.0	50.0	1,460.0

Total Costs	300.0	170.0	475.0	240.0	225.0	50.0	1,460.0
EXISTING REVENUES							
Rev - Fire District Tax Levy	<u>300.0</u>	<u>170.0</u>	<u>475.0</u>	<u>240.0</u>	<u>225.0</u>	<u>50.0</u>	<u>1,460.0</u>
Subtotal	300.0	170.0	475.0	240.0	225.0	50.0	1,460.0
NEW REVENUES							
Rev - G.O. Bond Proceeds	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Revenues	300.0	170.0	475.0	240.0	225.0	50.0	1,460.0
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Current Facilities Inventory

The Kitsap County Sheriff’s Department serves unincorporated Kitsap County. The major responsibilities of the Sheriff’s Department are law enforcement, maintenance of order, crime investigation and prevention, traffic control, marine enforcement, process and service of civil papers for the courts, service of criminal warrants, and other emergency services.

Background

The sheriff’s main office facility located in Port Orchard houses the Sheriff, Undersheriff, records, detectives, patrol, patrol chief, administration, corrections, and the evidence/storage rooms. The central office located in Silverdale houses a patrol division, while the patrol chief maintains his administrative office at the courthouse. The Silverdale office space includes the patrol captain, reception area, civil and records extension, patrol shift supervisor offices, and the deputies’ report/meeting room. The north office located in Kingston and the west office located in Camp Union are satellite stations for patrol units.

Current Facilities Inventory

Law enforcement facilities include sheriff administration and operations offices (25,600 square feet), corrections facility (472 beds), work release facility (48 beds), and juvenile facility (23 beds). Table LE.1 lists the facilities along with their current capacity and location.

Table LE.1. Current Facilities Inventory – Law Enforcement

Name	Location	Size (Sq Ft) Quantity
Sheriff		
Main Office	614 Division Street, Port Orchard, WA	16,000 sq ft
Central Office	3951 Randall Way, Silverdale, WA	5,800 sq ft
North Office	26076 Illinois Street, Kingston, WA	1,200 sq ft
Silverdale Training Room and Office (Loaned to Sheriff by County Parks Department)	Training Room, Eagle’s Nest, Silverdale	2,600 sq ft
Total: Sheriff		25,600 sq ft
Corrections		
Jail (lease)	614 Division Street, Port Orchard	472 beds
Work Release Facility (lease)	Courthouse Campus, Port Orchard	48 beds
Juvenile Facility (lease)	1338 Old Clifton Road, Port Orchard	23 beds
Total Corrections		543 beds

Source: Henderson Young and Company

Level Of Service Analysis

Sheriff Offices

The current LOS of 148 square feet per 1,000 population (Table LE.2-1) is based on the existing inventory divided by the 2006 estimated unincorporated County population (173,208). The proposed LOS of 266 square feet per 1,000 population, is higher than County's current LOS, and requires an additional 25,000 square feet of space through the year 2012.

Table LE.2-1. LOS Requirements Analysis - Sheriff Offices

CURRENT LOS = 148 SQUARE FEET PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP UNINCORPORATED COUNTY POPULATION	(3) SQUARE FEET @ 0.148 PER CAPITA	(4) SQUARE FEET AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	173,208	25,600	25,600	0
2007-2012 Growth	16,807	2,484		-2,484
<i>TOTAL AS OF 2012</i>	190,015	28,084	25,600	-2,484
PROPOSED LOS = 266 SQUARE FEET PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP UNINCORPORATED COUNTY POPULATION	(3) SQUARE FEET @ 0.266 PER CAPITA	(4) SQUARE FEET AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	173,208	46,124	25,600	-20,524
2007-2012 Growth	16,807	4,476		-4,476
<i>TOTAL AS OF 2012</i>	190,015	50,600	25,600	-25,000
Capacity Projects:				
1. New Precinct Facilities (2)			25,000	0

County Jail

The current LOS of 1.8 beds per 1,000 population (Table LE.2-2) is based on the existing inventory divided by the 2006 estimated unincorporated population. The proposed LOS of 1.7 beds per 1,000 population is lower than the County's current LOS, and does not require any additional beds through 2012. The sheriff's Department maintains a reserve capacity of 172 beds that are obligated by contractual agreements to provide jail beds to other regional jurisdictions.

Table LE.2-2. LOS Requirements Analysis - County Jail

CURRENT LOS = 1.9 BEDS PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) BEDS @ 0.001876 PER CAPITA	(4) BEDS AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	472	472	0
2007-2012 Growth	23,725	45		-45
<i>TOTAL AS OF 2012</i>	275,360	517	472	-45
PROPOSED LOS = 1.7 BEDS PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) BEDS @ 0.001714 PER CAPITA	(4) BEDS AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	431	472	41
2007-2012 Growth	23,725	41		-41
<i>TOTAL AS OF 2012</i>	275,360	472	472	0

Work Release Facility

The current LOS of 0.20 beds per 1,000 population (Table LE.2-3) is based on the existing inventory divided by the 2006 estimated countywide population.

The proposed LOS of 0.17 beds per 1,000 population, which is lower than the County's current LOS, does not require any additional beds through 2012.

Table LE.2-3. LOS Requirements Analysis – Work Release Facility

CURRENT LOS = 0.19 BEDS PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) BEDS @ 0.000191 PER CAPITA	(4) BEDS AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	48	48	0
2007-2012 Growth	23,725	-5		-5
<i>TOTAL AS OF 2012</i>	275,360	53	48	-5
PROPOSED LOS = 0.17 BEDS PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) BEDS @ 0.000174 PER CAPITA	(4) BEDS AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	44	48	4
2007-2012 Growth	23,725	4		-4
<i>TOTAL AS OF 2012</i>	275,360	48	48	0

Juvenile Facility

The current LOS of 0.09 beds per 1,000 population (Table LE.2-4) is based on the existing inventory divided by the 2006 Countywide population.

The proposed LOS of 0.08 beds per 1,000 population is lower than the County's current LOS, and does not require any additional beds through the year 2012.

Table LE.2-4. LOS Requirements Analysis - Juvenile Facility

CURRENT LOS = 0.091 BEDS PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) BEDS @ 0.000091 PER CAPITA	(4) BEDS AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	23	23	0
2007-2012 Growth	23,725	2		-2
<i>TOTAL AS OF 2012</i>	275,360	25	23	-2
PROPOSED LOS = 0.084 BEDS PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) BEDS @ 0.000084 PER CAPITA	(4) BEDS AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	21	23	2
2007-2012 Growth	23,725	2		-2
<i>TOTAL AS OF 2012</i>	275,360	23	23	0

Capital Facilities Projects and Financing: 2007-2012

The County's Sheriff facilities include two capital projects at a cost of \$10,000,000. The proposed financing plan is shown in Table LE.3.

Table LE.3. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

LAW ENFORCEMENT – COUNTY SHERIFF FACILITIES							
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<i>SHERIFF FACILITIES</i>							
<i>Capacity</i>							
<i>Projects:</i>							
1. Sheriff Precinct Facility – Central Kitsap (12,500 sf)							
						5,000.0	
Cost						3,100.0	5,000.0
Rev – Voted							
G.O. Bond Issue						5,000.0	
						3,100.0	5,000.0
2. Sheriff Precinct Facility – North Kitsap (12,500 sf)							
						5,000.0	
Cost						3,100.0	5,000.0
Rev - Voted							
G.O. Bond Issue						5,000.0	
						3,100.0	5,000.0
<i>SUMMARY: COSTS AND REVENUES</i>							
<i>COSTS:</i>							
Capacity Projects – Sheriff Facilities	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>10,000.0</u>	<u>10,000.0</u>
<i>NEW REVENUES</i>							
Rev - Voted							
G.O. Bond Issue	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>10,000.0</u>	<u>10,000.0</u>
BALANCE	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>

Parks and Recreation

Background

Parks and recreation facilities within Kitsap County are provided by a variety of public agencies and private organizations. Currently, approximately 25,623 acres of various types of parkland are provided countywide by city, school, state, and federal agencies and include wildlife habitat refuges, commercial timber land, highway transportation corridors, utility transportation corridors, fish hatcheries, stormwater retention systems, and educational facilities.

Current Facilities Inventory

This section provides details of the parkland and recreation facilities inventory owned, operated, and maintained by the Kitsap County government.

Parklands (Acres)

As shown in Table PR.1, the County owns and manages 5,692.8 acres of land for the purposes of calculating levels of service based on key categories of parks and open space acreage as shown in the 2006 park plan inventories. The majority of park and open space acreage consist of open space (70%), regional parks, (26%) and community parks (4%) and are used by all county residents, regardless of the local jurisdiction in which they reside.

Of these regional sites, some have been developed for active uses (including Givens Community Center in South Kitsap). Out-of-county populations and out-of-State visitors and tourists also use a significant portion of these regional sites and facilities. The County's inventory of 5,692.8 acres represents 23% of the countywide inventory.

It should be noted that the 2006 current inventory of park and open space lands included in this CFP represents acreage that was reclassified in the 2006 parks plan. The 2005 parks inventory shown in the County's 10-Year Update Volume II: Draft and Final Environmental Impact Statement was based on a different aggregation of parklands categories. As a result, the EIS Report and this CFP show different inventories within different park land categories, as well as some differences in levels of service.

Table PR.1 Current Facilities Inventory – County Owned Parks, Shoreline Access, and Trails

Type of Park	Capacity
Open Space	3,960
Regional Parks	1,502
Community Parks	230.8
Total Acres	5,692.8
Shoreline Access	29,051 Lineal Feet
Trils (Paved and Unpaved)	34.0 Miles

Active and Passive Recreation Facilities (Units)

The inventory of active recreation facilities (Table PR.1-2) shows a wide variety of facilities owned and managed by the County, and shows a relatively high use of baseball/softball fields, little league facilities, soccer fields, and horseshoe pits. As shown in Table PR.1-3 the County owns and manages a significant inventory of miles of trails and playgrounds located throughout the County.

Table PR.1-2. Current Facilities Inventory – County Owned Active Recreation Facilities (Units)

Type of Active Recreation Facility	Number
Baseball Fields	2
Baseball/Softball	20
Baseball (Little League)	6
Gym	1
Basketball	7
Volleyball	5
Soccer	18
Tennis Courts	6
Horseshoe Pits	32
BMX Track	1
Skate Park	2

Table PR.1-3. Current Facilities Inventory – County Owned Passive Recreation Facilities (Units)

Type of Passive Recreation Facility	Number
Theater	1
Playgrounds	13
Garden features	1
Off-leash areas	2
Trails	
Trails (Paved)	1
Trails (Unpaved)	33
Total trails (mi)	34

Other Recreation Facilities by Category (Units)

A majority of the facilities listed in Table PR.1-4 can be grouped in to 2 major categories: beach and water activities, and community centers. It should be noted that the County's inventory of linear feet of saltwater (24,362 linear feet or 4.6 miles) and freshwater (950 linear feet or 0.18 miles) represents 45% and 12%, respectively, of the total countywide inventory.

Table PR.1-4. Current Facilities Inventory – County Owned Facilities by Category (Units)

Category	Number
Community centers	4
Boat launches – motorized	2
Boat launches – non-motorized	4
Docks	1
Floats	0
Piers	3
Picnic tables	15
Benches	21
Barbeques	7
Shelters	5
Shore access points	15
Saltwater shoreline	24,362 linear feet
Freshwater shoreline	950 linear feet
Showers	8
Restrooms	14
Garbage cans	17
Drinking fountains	11
Parking spaces	42

Level of Service Analysis

Current Level of Service

The current LOS provided by the County’s park system represents only the current inventory of County-owned park acres divided by the 2006 countywide population. This equates to 15.7 acres per 1,000 population for open space lands (Table PR.2-1), 5.9 acres for regional parks (Table PR.2-2), 0.92 acres for community parks (Table PR.2-3), 115 lineal feet for shoreline access (Table PR.2-4), and 0.14 miles for trails (Table PR.2-5).

Proposed Level of Service

The County's proposed LOS of 19.2 acres per 1,000 population for open space requires acquisition of an additional 1,324 acres through 2012 (Table PR.2-1). This need will decrease in future years, as the land acquisitions identified have been completed, and expenditures will then be concentrated in the development of parkland.

The County’s proposed LOS for regional parks is 5.4 acres per 1,000 population (Table PR.2-2), and will not require any additional parkland through 2012. The proposed LOS for community parks is 0.84 acres per 1,000 (Table PR.3-3) and will also not require any additional land through

2012, and the proposed LOS for shoreline access is 106 lineal feet per 1,000 population (Table PR.2.4) and will not require any additional shoreline access through 2012.

Finally, the proposed LOS for trails is 0.028 miles per 1,000 (Table PR.2-5), which is twice as high as the current LOS, and will require an additional 43.1 miles of trails during 2007-2012.

Table PR.2-1. LOS Requirements Analysis – Open Space

CURRENT LOS = 15.7 ACRES PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) ACRES @ 0.01574 PER CAPITA	(4) ACRES AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	3,960.0	3,960.0	0.0
2007-2012 Growth	23,725	373.4		373.4
<i>TOTAL AS OF 2012</i>	275,360	4,333.4	3,960.0	-373.4
PROPOSED LOS = 19.2 ACRES PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) ACRES @ 0.01919 PER CAPITA	(4) ACRES AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	3,960	3,960.0	-868.7
2007-2012 Growth	23,725	455.3		-455.3
<i>TOTAL AS OF 2012</i>	275,360	5,284.0	3,960.0	-1,324.0
Capacity Projects:				
1. Fairgrounds Land Acquisition			40.0	-1,284.0
2. Hansville Greenway Acquisition			180.0	-1,104.0
3. North Kitsap Heritage Park - Phase II			380.0	-724.0
4. Newberry Hill Acquisition			450.0	-274.0
5. Miller Lake Acquisition			254.0	-20.0
6. Lost Continent - Phase II			20.0	0.0

Table PR.2-2. LOS Requirements Analysis - Regional Parks

CURRENT LOS = 5.9 ACRES PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) ACRES @ 0.00597 PER CAPITA	(4) ACRES AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	1,502.0	1,502.0	0.0
2007-2012 Growth	23,725	141.6		-141.6
<i>TOTAL AS OF 2012</i>	275,360	1,643.6	1,502.0	-141.6
PROPOSED LOS = 5.4 ACRES PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) ACRES @ 0.00545 PER CAPITA	(4) ACRES AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	1,372.6	1,502.0	129.4
2007-2012 Growth	23,725	129.4		-129.4
<i>TOTAL AS OF 2012</i>	275,360	1,502.0	1,502.0	0.0

Table PR.2-3. LOS Requirements Analysis - Community Parks

CURRENT LOS = 0.92 ACRES PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) ACRES @ 0.00092 PER CAPITA	(4) ACRES AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	230.8	230.8	0.0
2007-2012 Growth	23,725	21.8		-21.8
<i>TOTAL AS OF 2012</i>	275,360	252.5	230.8	-21.8
PROPOSED LOS = 0.84 ACRES PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) ACRES @ 0.00084 PER CAPITA	(4) ACRES AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	210.9	230.8	19.9
2007-2012 Growth	23,725	19.9		-19.9
<i>TOTAL AS OF 2012</i>	275,360	230.8	230.8	0.0

Table PR-2.4. LOS Requirements Analysis – Shoreline Access

CURRENT LOS = 115 LINEAL FEET PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) LINEAL FEET @ 0.1154 PER CAPITA	(4) LINEAL FEET AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	29,051.0	29,051.0	0.0
2007-2012 Growth	23,725	2,739.0		-2,739.0
<i>TOTAL AS OF 2012</i>	275,360	31,790.0	29,051.0	-2,739.0
PROPOSED LOS = 106 LINEAL FEET PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) LINEAL FEET @ 0.1055 PER CAPITA	(4) LINEAL FEET AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	26,547.9	29,051.0	2,503.1
2007-2012 Growth	23,725	2,739.0		-2,503.1
<i>TOTAL AS OF 2012</i>	275,360	329,051.0	29,051.0	0.0

Table PR.2-5. LOS Requirements Analysis – Trails

CURRENT LOS = 0.14 MILES PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) MILES @ 0.00014 PER CAPITA	(4) MILES AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	34.0	34.0	0.0
2007-2012 Growth	23,725	3.2		-3.2
<i>TOTAL AS OF 2012</i>	275,360	37.2	34.0	-3.2
PROPOSED LOS = 0.28 MILES PER 1,000 POPULATION				
(1) TIME PERIOD	(2) KITSAP COUNTYWIDE POPULATION	(3) MILEST @ 0.00028 PER CAPITA	(4) MILES AVAILABLE	(5) NET RESERVE OR DEFICIENCY
2006 Actual	251,635	70.4	34.0	-36.4
2007-2012 Growth	23,725	6.7		-6.7
<i>TOTAL AS OF 2012</i>	275,360	77.1	34.0	-43.1
Capacity Projects:				
1. Hansville Greenway Trail			10.0	-33.0
2. Carpenter Lake Creek Trail			1.5	-32.0
3. North Kitsap Heritage Park Trails			5.0	-27.0
4. Unidentified Multi-Use Trails			22.6	-4.1
5. Mosquito Fleet Trail -- Off-Road/Multi-Use			4.1	0.0

Capital Facilities Projects and Financing: 2007-2012

The County's parks and recreational facilities include thirty capital projects at a cost of \$32,702,500. The proposed financing plan is shown in Table PR.3

Table PR.3. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

PARKS, RECREATION, AND OPEN SPACE								
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>	
<i>CRITICAL OPEN SPACE LAND</i>								
<i>Capacity Projects:</i>								
<hr/>								
1. Fairgrounds Expansion (40 ac)								
Cost		1,000.0					1,000.0	
Rev - REET 2		400.0					400.0	
Rev - Reconveyance		600.0					600.0	
<hr/>								
2. Hansville Greenway (180 ac)								
Cost	500.0	700.0					1,200.0	
Rev - REET 2	250.0	350.0					600.0	
Rev - IOC Grants	250.0	350.0					600.0	
<hr/>								
3. North Kitsap Heritage Park Phase II (380ac)								
Cost		2,232.5					2,232.5	
Rev - IOC Grants		1,000.0					1,000.0	
Rev - REET 2		400.0					400.0	
Rev - Land Reconveyance		832.5					832.5	
<hr/>								
4. Newberry Hill (450 ac)								
Cost		1,750.0					1,750.0	
Rev - Reconveyance (State)		1,750.0					1,750.0	
<hr/>								
5. Miller Lake (254 ac)								
Cost	2,000.0						2,000.0	
Rev - IOC Grants	2,000.0						2,000.0	
<hr/>								
6. Lost Continent - Phase II (20 ac)								
Cost	510.0						510.0	
Rev - IOC Grants	510.0						510.0	
	Subtotal	3,010.0	5,682.5	0.0	0.0	0.0	0.0	8,692.5
<hr/>								
<i>REGIONAL PARKS/SPORTS COMPLEXES DEVELOPMENT</i>								
<i>Capacity Projects:</i>								
<hr/>								
7. Fairgrounds/Gordo Field								
Cost	2,000.0						2,000.0	
Rev - Grants	600.0						600.0	
Rev - Donations	600.0						600.0	
Rev - REET 2	800.0						800.0	

PARKS, RECREATION, AND OPEN SPACE

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
8. North Kitsap Heritage							
Cost	500.0	1,900.0					2,400.0
Rev - Grant	500.0						500.0
Rev - REET 2		1,900.0					1,900.0
9. South Kitsap Athletic Complex (1,195ac)							
Cost	940.0	1,500.0					2,440.0
Rev - REET 2	690.0						690.0
Rev -Impact Fees		1,500.0					1,500.0
Rev - IOC Grants	250.0						250.0
Subtotal	3,440.0	3,400.0	0.0	0.0	0.0	0.0	6,840.0

COMMUNITY PARK DEVELOPMENT

Capacity Projects:

10. Kingston Village Greens (3.0 ac)							
Cost			2,000.0				2,000.0
Rev - REET 2			500.0				500.0
Rev - Voted G.O. Bond Issue			1,000.0				1,000.0
Rev - IOC Grants			500.0				500.0
Subtotal	0.0	0.0	2,000.0	0.0	0.0	0.0	2,000.0

PARK FACILITIES RENOVATION

Non-Capacity Projects:

11. Island Lake Improvements							
Cost				500.0			500.0
Rev - Voted G.O. Bond Issue				500.0			500.0
12. Howe Farm Development							
Cost	250.0	100.0					350.0
Rev - REET 2	100.0	100.0					200.0
Rev - IOC Grants	50.0						50.0
Rev - Donations	100.0						100.0
13. Illahee Preserve Enhancements							
Cost	100.0	50.0					150.0
Rev - REET 2	100.0	50.0					150.0

PARKS, RECREATION, AND OPEN SPACE

COSTS/REVENUES	2007	2008	2009	2010	2011	2012	TOTAL
14. Wynn Jones Improvements							
Cost		200.0					200.0
Rev - REET 2		200.0					200.0
15. Village Greens Development							
Cost		100.0					100.0
Rev - REET 2		100.0					100.0
16. Forbes Landing Improvements							
Cost		1,000.0					1,000.0
Rev - IOC Grants		500.0					500.0
Rev - Donations		500.0					500.0
17. Anderson Landing Development							
Cost	50.0	250.0					300.0
Rev - REET 2	50.0						50.0
Rev - Voted G.O. Bond Issue		250.0					250.0
18. Horsehoe Lake Improvements							
Cost			250.0	250.0			500.0
Rev - Voted G.O. Bond Issue			250.0	250.0			500.0
Subtotal	400.0	1,700.0	250.0	750.0	0.0	0.0	3,100.0
19. Fairgrounds Complex Improvements							
Cost	1,000.0	1,000.0					2,000.0
Rev - REET 2	400.0						400.0
Rev - Donations	100.0						100.0
Rev - Voted G.O. Bond Issue		1,000.0					1,000.0
Rev - IOC Grants	500.0						500.0
20. North Kitsap Events Center							
Cost	300.0						300.0
Rev - REET 2	300.0						300.0
21. South Kitsap Community Center							
Cost		2,500.0					2,500.0
Rev - Voted G.O. Bond Issue		2,500.0					2,500.0
22. North Kitsap Community Center							
Cost		2,500.0					2,500.0
Rev - Voted G.O. Bond Issue		2,500.0					2,500.0

PARKS, RECREATION, AND OPEN SPACE

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<hr/>							
23. Central Kitsap Community Center							
Cost		2,500.0					2,500.0
Rev - Voted G.O. Bond Issue		2,500.0					2,500.0
Subtotal	1,300.0	8,500.0	0.0	0.0	0.0	0.0	9,800.0
<hr/>							
<i>REGIONAL TRAILS DEVELOPMENT</i>							
<i>Capacity Projects</i>							
<hr/>							
24. Hansville Greenway (10 mi)							
Cost	100.0	100.0	100.0				300.0
Rev - Donations	100.0	100.0	100.0				300.0
<hr/>							
25. Carpenter Lake Creek Trail (1.5 mi)							
Cost	240.0						240.0
Rev - Grants	240.0						240.0
<hr/>							
26. North Kitsap Heritage Park Trails (5 mi)							
Cost	50.0	50.0	50.0	50.0	50.0		250.0
Rev - Donations	50.0	50.0	50.0	50.0	50.0		250.0
<hr/>							
27. Unidentified Multi-Use Trails (22.6 mi)							
Cost		200.0	200.0	200.0	150.0		750.0
Rev - Voted G.O. Bond Issue		200.0	200.0	200.0	150.0		750.0
<hr/>							
28. Mosquito Fleet Trail -- Off-Road/Multi-Use (4 mi)							
Cost		100.0	100.0				200.0
Rev - Voted G.O. Bond Issue		100.0	100.0				200.0
Subtotal	390.0	450.0	450.0	250.0	200.0	0.0	1,740.0
<hr/>							
<i>RECREATION COURTS/FACILITIES DEVELOPMENT</i>							
<i>Capacity Projects</i>							
<hr/>							
29. Basketball Courts (3)							
Cost	15.0		15.0				30.0
Rev - Impact Fees	15.0		15.0				30.0
<hr/>							
30. Playground Equipment (4)							
Cost	100.0	100.0	100.0	200.0			500.0
Rev - Impact Fees	100.0	100.0	100.0	200.0			500.0
Subtotal	115.0	100.0	115.0	200.0	0.0	0.0	530.0

PARKS, RECREATION, AND OPEN SPACE

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<i>SUMMARY: COSTS AND REVENUES</i>							
COSTS:							
Capacity Projects:							
Land Acquisition/Development	<u>6,955.0</u>	<u>9,632.5</u>	<u>2,565.0</u>	<u>450.0</u>	<u>200.0</u>	<u>0.0</u>	<u>19,802.5</u>
Subtotal	6,955.0	9,632.5	2,565.0	450.0	200.0	0.0	19,802.5
Non-Capacity Projects							
Parks/Facilities Improvements	<u>1,700.0</u>	<u>10,200.0</u>	<u>250.0</u>	<u>750.0</u>	<u>0.0</u>	<u>0.0</u>	<u>12,900.0</u>
Subtotal	1,700.0	10,200.0	250.0	750.0	0.0	0.0	12,900.0
Total Costs	8,655.0	19,832.5	2,815.0	1,200.0	200.0	0.0	32,702.5
EXISTING REVENUES							
Rev - REET 2	2,690.0	3,500.0	500.0	0.0	0.0	0.0	6,690.0
Rev - Impact Fees	<u>115.0</u>	<u>1,600.0</u>	<u>115.0</u>	<u>200.0</u>	<u>0.0</u>	<u>0.0</u>	<u>2,030.0</u>
Subtotal	2,805.0	5,100.0	615.0	200.0	0.0	0.0	8,720.0
NEW REVENUES							
Rev - Voted G.O. Bond Issue	0.0	9,050.0	1,550.0	950.0	150.0	0.0	11,700.0
Rev - IOC Grants	4,900.0	1,850.0	500.0	0.0	0.0	0.0	7,250.0
Rev - Donations	950.0	650.0	150.0	50.0	50.0	0.0	1,850.0
Rev - Land Reconveyance	<u>0.0</u>	<u>3,182.5</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>3,182.5</u>
Subtotal	5,850.0	14,732.5	2,200.0	1,000.0	200.0	0.0	23,982.5
Total Revenues	8,655.0	19,832.5	2,815.0	1,200.0	200.0	0.0	32,702.5
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Sanitary Sewer

There are a total of 13 wastewater collection systems and 10 wastewater treatment facilities in Kitsap County, which serve approximately 40% of the total County population. The majority of the population uses septic systems.

Background

Several agencies within the County provide sanitary sewer services:

1. *Kitsap County* manages five wastewater collection systems: Central Kitsap, Kingston, Manchester, Navy Yard City, and Suquamish, and four treatment plants servicing Central Kitsap, Manchester, Suquamish and Kingston;
2. The *City of Bremerton* maintains a collection system and operates Westside and Eastside Treatment Plants;
3. The *City of Poulsbo* maintains a collection system and contracts with the County to dispose of city wastewater at the Central Kitsap Treatment Plant in Brownsville;
4. The *City of Port Orchard and Karcher Creek Sewer District* independently operate their respective collection systems and jointly manage the treatment facility at Annapolis. Karcher Creek Sewer District is responsible for daily operation of the treatment plant;
5. The *Port Gamble/S'Klallam Tribe* owns and operates a small collection system and treatment facility that serves the community east of Port Gamble Bay. Pope Resources owns and operates a collection system and secondary treatment plant serving the Port Gamble townsite and millsite;
6. The *Port of Bremerton* owns and operates a collection and treatment system that serves the commercial development on Port property;
7. The *U.S. Navy* manages wastewater collection systems on federal reservations and contracts with Kitsap County and the City of Bremerton to treat its effluent. It is a major contributor to several wastewater treatment plants in Kitsap County, with the Central Kitsap plant receiving the most; and
8. *Kitsap County* completed construction of a new wastewater treatment facility at Kingston in 2005 and has prepared plans and cost estimates to expand the Kingston and Central Kitsap treatment plants. Financing and construction of the elements in these plans will rehabilitate the existing facilities to provide for continuing service to existing customers and provide capacity for the projected new populations within the designated urban growth boundaries, as well as for vested development projects outside the Urban Growth Area (UGA).

Current Facilities Inventory

An inventory of the existing municipal, county and private wastewater facilities located in Kitsap County is presented in this section. This inventory is summarized in Table SS.1. Columns (4) – (6) show the LOS mgd flow design capacity, 2005 existing flow capacity, and corresponding 2005 flow capacity surpluses or deficits for each of the 10 major wastewater management systems in the County. Column (7) shows the existing populations served within each wastewater system.

Table SS.1 Kitsap County Public Sewer System Inventory

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Name	Collection System		Treatment Plant			Service Area		
	Miles of Pipe (1)	Collection System Existing Conditions	Existing Flow, mgd (1)	Design Flow, mgd (1)	Surplus/Deficit, (mgd)	2005 Population Served	Existing Connections (ERU)	Surplus/Deficit ERU (3)
CITY SEWER SYSTEMS								
City of Bremerton	145 gravity 21 force main	Completed improvements to reduce overflows to one event per year, per outfall on 5-year avg. during design storm, in all but two drainage basins. Minor overflows to be reduced to one event/yr in 5 years.	7.7	10.1	2.4	37,259	9,956	13,102

NOTE: Eastside Treatment Plant (wet weather facility) went on-line in December 2001. CSO reduction construction is nearly complete, with the remaining two basins to be in compliance by 2009. Wet weather upgrades are slated for the Westside Treatment Plant in 2007.

City of Port Orchard	98	Mains east of Blackjack Creek, Sidney Ave, Tremont St branches expected t50% of capacity. One sewer main may approach capacity north of Lippert St.	1.0			8,250	4,406	
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NOTE: Treatment plant is jointly owned by the City and Sewer District No. 5. Sewer District No. 5 is responsible for daily operation of the plant.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Name	Collection System		Treatment Plant			Service Area		
	Miles of Pipe (1)	Collection System Existing Conditions	Existing Flow, mgd (1)	Design Flow, mgd (1)	Surplus/ Deficit, (mgd)	2005 Population Served	Existing Connections (ERU)	Surplus/ Deficit ERU (3)
City of Poulsbo	31	The City currently pumps sewage for Central Kitsap Wastewater Plant. City's system is heavily impacted by infiltration inflow.	0.64	1.3	0.66	7,450	2,540	3,750

NOTE: Rain water/inflow needs to be separated to extend the capacity of the current discharge amount agreed upon with Kitsap County limits Poulsbo to 1.3 mgd ADF City of Poulsbo currently removes infiltration and inflow.

KITSAP COUNTY SYSTEMS

Central Kitsap Wastewater Facilities	155	Some pumping stations undersized for existing flows. 63 projects identified to improve collection system to 2012.	5.4	6.0	0.6	32,480	12,992	2,200
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NOTE: Central Kitsap treatment plant is contracted to receive sewage from US Navy at Bangor and Keyport and also from City of Poulsbo.

Kingston Sewer Facilities	11.3	Wastewater collection system has sufficient capacity for projected future flows.	0.164	0.292	0.128	1,900	760	1,280
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NOTE: Treatment plant expanded to 0.292 mgd.

Suquamish Sewer System	10	No critical pipe flow problems identified. Some segments under capacity that can cause odor/ maint. problems.	0.35	0.40	0.05	2,248	899	500
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Name	Collection System		Treatment Plant			Service Area		
	Miles of Pipe (1)	Collection System Existing Conditions	Existing Flow, mgd (1)	Design Flow, mgd (1)	Surplus/ Deficit, (mgd)	2005 Population Served	Existing Connections (ERU)	Surplus/ Deficit ERU (3)

NOTE: Treatment plant expanded to 0.40 mgd.

Manchester Sewer Facilities	12.3	Facility Plan does not address existing conditions of the collection system.	0.32	0.46	0.14	2,193	877	1,400
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NOTE: Treatment plant expanded to 0.46 mgd

Navy Yard City (Sewer Dist. #1)	9.2	Significant amount of I/I identified in the older sewers in this service area.		0.40 (see notes)		2,947	1,291	-2,400
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NOTE: Current discharge contract with the City of Bremerton limits flows to 0.40 mgd ADF.

Karcher Creek Sewer District	45	Upgraded to replace mains with insufficient capacity. Can meet current community needs.	2.2	4.2	2.0	23,500	9,400	11,000
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NOTE: Treatment plant is jointly owned by Port Orchard and the District. The District is responsible for operation of the plant. The plant capacity has been increased.

Port of Bremerton Industrial Area	1.6		10,000-15,000 gpd	72,500 gpd	57,000-62,500 gpd	400	160	1000
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Notes:

mgd = million gallons per day

1. Based on the average day flow during the peak flow month (ADF: basis of National Pollutant Discharge Elimination System [NPDES] permits)
2. Calculations based on City of Port Orchard/Karcher Creek Sewer District combined totals.
3. Residential connections assume 100 gallons per capita per day and an average of 2.5 persons per residence (250 gpd/eru).
4. See Karcher Creek Sewer District.

City of Bremerton Sewer Facilities.

The City of Bremerton maintains, and operates a wastewater collection and treatment system that provides service to West Bremerton, East Bremerton, and surrounding areas of unincorporated Kitsap County.

The system also accepts wastewater flows from the Puget Sound Naval Shipyard (PSNS), other U.S. Navy facilities, and Kitsap County Sewer District No. 1 (KCSD No. 1) in West Bremerton. Other than the U.S. Navy, the system does not provide sewer service for any significant industrial dischargers. The components of the City's sewer system are listed below:

- 15 sewer drainage basins,
- Combined sanitary and stormwater sewers,
- Gravity sewers,
- Gravity-pressure sewers,
- Sanitary sewer pump stations and force mains,
- Combined sewer overflow (CSO) structures,
- Wet weather treatment facility,
- Conventional wastewater treatment facilities, and
- Odor control stations.

Since a portion of the City of Bremerton sanitary sewer collection system is composed of combined sewers, flows are derived from the following types of sources:

- Conventional wastewater and sanitary sewage,
- Stormwater inflow, and
- Groundwater infiltration, including rainfall-induced infiltration.

The City of Bremerton currently operates two wastewater treatment facilities. The Westside Wastewater Treatment Plant (WWTP) in West Bremerton provides secondary wastewater treatment for the entire service area and discharges to Sinclair Inlet. Biosolids produced at the Westside Plant are treated through anaerobic digestion, dewatered by centrifuge, transported and applied to permitted forestland owned by the City. The Eastside Treatment Facility provides treatment for combined wet weather and sewer flows in the Pine Road Basin of East Bremerton and discharges to Port Washington Narrows.

A network of gravity sanitary sewer pipelines, pump stations, and force mains delivers flows from the collection system to these treatment facilities. The various East Bremerton collection facilities deliver combined sanitary sewer flows to the East Bremerton beach main. During normal dry weather operations East Bremerton flows are delivered from the East Bremerton beach main to West Bremerton through 16 and 24-inch inverted siphons.

The wastewater is then pumped into the Crosstown Pipeline force main and gravity-pressure sewer main system by pump station CE-1, along with flows from various West Bremerton basins. The Crosstown Pipeline delivers these pumped flows to the Westside WWTP. Wastewater from the remaining West Bremerton service areas is delivered to the WWTP via gravity sewer mains and pump stations.

During wet-weather conditions the East Bremerton beach main is pressurized by pump station EB-2 to increase peak flow capacity and most of the combined sewage flow is diverted to the Eastside Treatment Facility. The flow is treated at the facility and discharged to Port Washington Narrows.

The hydraulic capacity of the city's combined wastewater collection system and associated components is adequate to convey dry weather wastewater flows to the Westside WWTP for treatment. However, during extreme wet weather storm events, combined wet weather and wastewater flows can exceed the hydraulic capacity of the city's existing conveyance and Westside/Eastside treatment systems. When this occurs, excess untreated combined sanitary sewer flows have historically been allowed to overflow to receiving waters of Puget Sound. As a result of increasing water quality and environmental mandates, federal and state regulations have been developed to limit the occurrence of untreated CSOs.

As detailed in the City of Bremerton CSO Reduction Plan Update (dated October 2000), the city is currently taking steps to comply with these requirements and is implementing a number of efforts to reduce the occurrence of untreated CSOs to less than one per year per outfall, in compliance with WAC 173-245. These steps include the following:

1. Separation projects to reduce the stormwater inflow component of flows in the sanitary sewer system by providing separate collection and conveyance systems for sanitary sewage and stormwater. Sanitary sewer rehabilitation and repair projects to reduce and eliminate infiltration sources within the collection system. Construction projects of new storage facilities;
2. Sanitary sewer improvements to redirect existing flows, increase combined sewer conveyance capacity, and reduce the system hydraulic capacity limitations that can result in untreated CSOs within the collection system;
3. A wet weather treatment facility to provide appropriate treatment of combined sanitary sewer flows before they are released to Puget Sound receiving waters, reducing the occurrence of untreated CSOs; and
4. Developing ordinances requiring separation of private property stormwater systems from the sanitary sewer system, as well as required repair and maintenance of private service laterals to reduce infiltration from private property sources.

The Eastside Treatment Facility has been designed to provide treatment for the East Bremerton sewer flows during wet weather storm events to meet Puget Sound water quality standards. The Eastside Treatment Facility was functional in December 2001 and completed in 2002. Additional system improvements are being implemented to increase combined sanitary sewer conveyance capacity to the city's WWTP and Eastside Treatment Facility for treatment prior to discharge. As Table SS.1 (Column 9) shows, the Bremerton wastewater system has a current (2005) surplus of 13,102 ERUs (32,755 additional people) which has more than enough capacity accommodate the 2012 growth population needs for the City and Eastside and Westside UGAs.

The city updated the Combined Sewer Overflow (CSO) Reduction Plan for Bremerton's drainage basins with a series of documents, including a CSO Reduction Facility Plan Update dated October 2000. The CSO reduction improvements generally use all system capacity. Basin-specific analysis and CSO Reduction Plan amendments have been submitted to Washington State Department of Ecology (Ecology) for review/approval.

The city produces a CSO report that is submitted to Ecology on an annual basis. This report shows that the CSO reduction program has been very successful in reducing total overflow volume and frequency, with a volume reduction of 99.7% and a frequency reduction of 97.2%. The city has completed improvements to reduce overflows to one event per year, per outfall, on a 5 year average during a design storm, in all but two sewer drainage basins. Overflows from these basins are minor and will be reduced to one event per year within the next 5 years. See the Bremerton Comprehensive Plan, Wastewater Comprehensive Plan Update, and Capital Improvement Plan for further details.

City of Poulsbo Sewer Facilities

The current sanitary sewer service area for the City of Poulsbo is primarily within the city limits. The city contracts with Kitsap County for wastewater treatment at the Central Kitsap Treatment Plant. The city and county are currently planning and implementing improvements to both the City and County's existing systems to eliminate infiltration and inflow and to increase the capacity of the conveyance system. As Table SS.1 (Column 9) shows, the City of Poulsbo wastewater system has a current (2005) surplus of 3,750 ERUs (9,375 additional people) which has more than enough capacity accommodate the 2012 growth population for the City of Poulsbo.

City of Port Orchard Sewer Facilities

The City of Port Orchard maintains, and operates a wastewater collection and treatment system that provides service to the City of Port Orchard, Utilities Local Improvement District (ULID) #6 UGA, and the Sidney Glen Elementary School, located outside the existing urban growth area. The collection system serving the ULID #6 UGA is a septic tank effluent pumping (STEP) system where effluent is pumped from conventional septic tanks to a sewer main located in the street.

The City of Port Orchard and Karcher Creek Sewer District jointly own the Wastewater Treatment Facility located east of Port Orchard along the south shore of Sinclair Inlet. The facility treats wastewater from the service areas of both Karcher Creek and the City of Port Orchard totaling approximately 23,500 people, and discharges to Sinclair Inlet. The district and the city jointly manage the facility; however, the Karcher Creek Sewer District is responsible for daily operation. The facility was recently expanded increasing its capacity from 2.8 mgd to 4.2 mgd. Along with the expansion, the treatment process was upgraded and can now produce Class A reclaimed water and Class A biosolids, which can be used for revegetation of commercial/industrial areas and as composting cover for tree farms. New residential development is occurring primarily in the center of the city, and in McCormick Woods subdivision with the city's UGA.

Karcher Creek Sewer District

Karcher Creek Sewer District serves the Port Orchard Urban Growth Area east of the city. The district also provides sewer service in the rural area along Beach Drive to Watauga Beach to resolve a health issue caused by failing drain fields. The current service area is approximately 5 square miles. The collection system consists of 11 pumping stations and about 45 miles of pipeline. The maximum capacity of the conveyance system is estimated to be 6.0 million gallons per day (mgd), which is keeping pace with the population growth. As Table SS.1 (Column 9) shows, the joint Karcher Creek-Port Orchard wastewater system has a current (2005) surplus of 11,000 ERUs (27,500 additional people) which has more than enough capacity accommodate the combined 2012 growth population of Port Orchard and Karcher Creek.

Port of Bremerton Sewer Facilities

The Port of Bremerton operates a public wastewater treatment plant located in the Olympic View Industrial Park on State Route 3 west of Gorst. The service area encompasses the port's 1,800 acres, which includes the Bremerton National Airport and the Olympic View Industrial Park.

Constructed in the 1970s and expanded in the mid-1980s, the plant serves the vast majority of businesses at the airport and industrial park. A few older business locations operate septic tank and drainfield systems. Ecology has designated the plant as a municipal plant and has rated the plant capacity at 72,500 gallons per day (average daily flow). The plant uses a combination gravity and pump station collection system with aeration lagoons and settling ponds for treatment and drainfields for disposal.

The plant is currently treating between 10,000 and 15,000 gallons per day depending on weather and business cycles and serving approximately 400 persons. Typical levels of sewage generation for light industrial business activity are 25 to 35 gallons of wastewater per day per person. The plant serves two commercial/industrial areas (the airport and industrial park) that have been designated for business, industrial, and airport activity since the first County comprehensive plan was developed in the 1970s.

Kitsap County Sanitary Sewer Facilities

Central Kitsap Wastewater Facilities

Kitsap County owns and operates conveyance and treatment facilities in the Central Kitsap service area. This service area is the largest system in Kitsap County and includes the naval facilities at Bangor, Keyport, and the City of Poulsbo along with developed areas in the Silverdale and Central UGAs. The service area extends northerly from Waaga Way along Silverdale Way to include the Ridgetop area. To the east, the service area includes much of the existing urban areas located south of Waaga Way and north of Bremerton. The plant also treats septic tank waste hauled to the plant.

The Central Kitsap collection system consists of approximately 127 miles of gravity sewer mains ranging in size from 6 to 18 inches in diameter. Forty-four pump stations and approximately 28 miles of force mains ranging from 2 to 24 inches in diameter serve the Central Kitsap area. In

1997, Pump Stations 3, 4, 12, 13, and 17 were converted from gaseous chlorine to sodium hypochlorite for odor control. In 2003, gaseous chlorine was also removed from the Johnson Road Chlorine Station and replaced with sodium hypochlorite.

Flows from the City of Poulsbo enter the northern portion of the collection system via a gravity siphon crossing from Lemolo to Keyport, across the mouth of Liberty Bay. Collection and transfer systems serving the Meadowdale areas, downtown Silverdale, and a majority of the northern portion of the Central Kitsap collection system are undersized for existing wastewater flows. A phased expansion of the conveyance and treatment facilities is planned to repair and replace worn facilities, and to extend service to surrounding areas. Modifications to accommodate current flows are included in the design phase.

Treatment facilities at the Central Kitsap WWTP are currently rated for an Average Daily Flow (ADF) of 6.0 mgd. The plant utilizes an activated sludge/solids contact process for secondary treatment of wastewater and an ultraviolet light disinfecting system. The County plans to expand the plant based on the extent of growth predicted within the existing sewer service area. The second phase of construction at the plant will upgrade to 10.6 mgd ADF. The existing 68-acre site is expected to accommodate layout of facilities for capacity in excess of 25 mgd ADF. Table SS.2 shows the 2012 and 2025 population allocations for the areas served by Central Kitsap wastewater facilities.

Treated wastewater from the Central Kitsap WWTP is discharged into the northern portion of Port Orchard Bay in Puget Sound. The outfall pipe has a maximum hydraulic capacity of approximately 31 mgd. The diffuser has a maximum hydraulic capacity of 16 mgd. Future extension of the existing diffuser is expected to provide sufficient dilution for the increased flow. The Central Kitsap Treatment Plant treats an average of 3.6 million gallons of sewage per day¹. The effluent is discharged approximately 3,200 feet offshore at a depth of 46 feet below mean low water.

The Central Kitsap WWTP is the regional sludge treatment center for all County-owned treatment plants and septage from on-site treatment systems. Approximately 30 to 40 % of the solids treated at the Central Kitsap WWTP are derived from septage or sludge from other plants. Sludge treatment facilities at the Central Kitsap WWTP include gravity thickening and dewatering. Currently, dewatered sludge is hauled to South Sound Soils in Tenino for composting.

Kingston Wastewater Facilities

Sewer service in the Kingston area is owned and maintained by Kitsap County. The Kingston collection system consists of approximately 38,300 feet of gravity sewer pipe ranging in size from 8 to 12 inches in diameter and approximately 21,650 feet of force main ranging from 4 to 6 inches in diameter. Five pump stations serve the Kingston area. With the scheduled completion of

¹ For treatment capacity planning purposes, the average day flow is determined for the peak flow month rather than an annualized average. See Table SS.1

the new Kingston High School in 2006, an additional pump station and force main pipe will be added to the system.

Completed in May 2005, the new Kingston wastewater treatment facility is designed to treat an average daily flow of 292,000 gallons per day. This is a 95% increase in capacity from the previous facility, and will accommodate residential and commercial growth in the Kingston area for the next 20 years. The plant utilizes an oxidation ditch, with two rotating stainless steel brushes, for biological treatment. Two oxidation ditches were constructed; one for current flows and one to accommodate future growth (500,000 gallons per day). Only the active ditch contains rotating brushes.

Built in conjunction with the new treatment plant and located on the old plant grounds, Pump Station #71 pumps all of the sewage generated in Kingston approximately 1.8 miles to the new plant.

Construction of a new outfall into Puget Sound was included in the improvements. Since the previous outfall was damaged during dredging operations by the State ferry system, the new pipe was located well outside the ferry corridor and extended to 165 feet below sea level to limit impacts on shellfish harvesting areas. Waste sludge from the Kingston WWTP is currently trucked to the Central Kitsap WWTP for digestion and treatment.

As Table SS.1 (Column 9) shows, the Kingston wastewater system has a current (2005) surplus of 1,280 ERUs (2,925 additional people) which has enough capacity to accommodate the projected 2012 growth population.

Suquamish Wastewater Facilities

Kitsap County owns and operates the Suquamish wastewater conveyance and treatment facilities that provide sewer service to approximately 1,600 residents in the Suquamish area. The existing Suquamish ULID service area covers about 214 acres; however, sewer service has been extended to three areas lying outside the ULID.

The first of these areas covers about 44 acres and is located in the northwest corner of the growth study area. The second area is the Suquamish Shores residential development located in Port Madison. Suquamish Shores covers about 42 acres. The newest extension of the existing service area covers about 37 acres and lies west of Urban Avenue between Geneva Street and South Street. The plant serves the Suquamish Tribal Casino. The Tribal Casino pump station and collection system consist of approximately 48,200 linear feet of pipeline.

The McKinstry Street pumping station and the Division Street pump station are the pumping stations in the collection system. All wastewater in the system flows by gravity to these stations for transfer to the Suquamish WWTP. Existing sewers are sufficient to accommodate additional growth within the existing service area.

The Suquamish WWTP is a secondary plant with an ADF capacity of 0.4 mgd. The U.S. Environmental Protection Agency (EPA) is responsible for issuing the required National Pollutant Discharge Elimination System (NPDES) permit since the treatment plant is located

within the Port Madison Tribal Reservation boundary. The County upgraded the existing facilities in 1997, expanding the plant from 0.2 to 0.4 mgd ADF capacity. Sludge from the plant is hauled for further treatment at the Central Kitsap WWTP.

Manchester Wastewater Facilities

Kitsap County owns and operates a small sewer collection and treatment system in Manchester. This system serves a population of approximately 1,000 people and treats an average flow of 0.19 mgd. The Manchester collection system consists of five pumping stations and approximately 60,000 linear feet of pipeline. Public sewers now serve approximately 25% of the land within the LAMIRD boundary, although the remaining area is subdivided into smaller parcels and much of it is built out.

The current service area includes the EPA laboratory at Clam Bay and the Manchester Naval Fuel Depot. Waste flows from the Manchester Naval Fuel Depot originate from ships discharging sewage at the facility. Kitsap County has an agreement with the Navy that requires the County to be notified when the Navy plans to discharge wastewater to the County's system. The Navy has storage facilities at the depot to allow holding of wastewater if the County does not permit immediate discharge.

The plant provides for an ADF capacity of 0.46 mgd. Secondary treatment capabilities using an activated sludge process were installed in 1998. Sludge from the Manchester WWTP is thickened, temporarily stored on the plant site and then hauled to the Central Kitsap WWTP for treatment. The outfall provides good dilution and has sufficient capacity for discharge of the projected future wastewater flows.

Navy Yard City Sanitary Sewer Facilities (Sewer District 1)

Kitsap County owns and maintains a sewage collection system in the area commonly referred to as Navy Yard City within the Bremerton West UGA. The collection system consists of two pump stations and 9.2 miles of pipeline and serves approximately 970 residential and commercial units.

The collection system is very old and is currently being upgraded as funding allows. Pump Station 76 located along Charleston Beach Road has recently been upgraded in conjunction with City of Bremerton work to upgrade that road.

Private Sanitary Sewer Facilities

Port Gamble/S'Klallam Tribe Reservation Sewer Facilities

The Port Gamble/S'Klallam reservation is located along the northeast shore of Port Gamble. Failing septic drainfields and concern for the environment of Port Gamble Bay have prompted the Port Gamble/S'Klallam Tribe to construct wastewater collection and secondary treatment facilities. The collection system uses gravity sewers and septic tank effluent pumping (STEP) systems to convey wastewater to a recirculating sand filter for secondary treatment and subsurface disposal of the liquid effluent.

Four lift stations and associated pipeline are constructed along Little Boston Road. Solids accumulating in the septic tanks continue to require removal and hauling to a regional plant that accepts such wastes (e.g., Central Kitsap WWTP). Treatment facilities are designed for an initial average design flow capacity of 0.05 mgd with ultimate expansion to 0.1 mgd to serve a projected population of 1,565 people.

Port Gamble Sewer Facilities

Pope Resources (Olympic Resource Management) owns and operates the sewer collection and treatment system in Port Gamble. This system is a small, prefabricated plant, serving approximately 40 homes for Port Gamble residents, the former mill site, nursery, and commercial offices. The total wastewater plant capacity is approximately 25,000 gpd and current flows are approximately 13,000 gpd.

The outfall is located in relatively shallow water in Hood Canal. Pope Resources also provides potable water and solid waste removal services for this area. Any changes or upgrades to the Port Gamble system will be subject to conditions in the operating permit. No upgrades or changes are currently known at this time. However, no development shall be allowed unless adequate infrastructure, including but not limited to sewer and water service, is available.

Sewer Facilities Needs Forecast

The purpose of the Sewer Facilities Plan of the Capital Facility Element is to ensure there are adequate facilities for sewer service as the population increases in the County. This plan addresses existing and future facility needs, and provides a financial plan to indicate revenue sources for funding the increase in County services. Facilities and financial planning for sewer service purveyors other than Kitsap County Department of Public Works (e.g. cities, tribes, private districts) are described in each of the City's and district's Capital Facility Plans.

Sewer system planning is based on the assumption that sewer service will only be provided in areas located within UGA boundaries or Limited Areas of More Intense Rural Development (LAMIRD) except where a significant threat to human and/or environmental health is identified. All projects planned in the 6-year CFP result in service only to areas within UGA or LAMIRD boundaries. Most of these projects are physically located within UGA boundaries, or are associated with existing facilities located outside UGA boundaries (e.g., improvements to the Central Kitsap WWTP). Sewer projects planned for 2006 to 2012 focus on providing service to customers located within (1) existing sewer districts (i.e., in-fill), and (2) UGAs (i.e., extensions).

Level of Service

The adequacy of existing sewer facilities to meet present and future needs is based on the estimated gallons per day of wastewater for the current sewered population and for the projected future sewered population. It is also based on an assumed existing and planned Level of Service (LOS) for sewer service. There is an average of 2.5 people per household in Kitsap County. Current wastewater flow data indicates that an average of 100 gallons per capita per day (GPCD) is used. With an average of 2.5 people per dwelling unit, a residential connection will generate a

demand for treatment of 250 gallons per day. These characteristics serve as a planning standard or LOS for sewer service during the next 20-year planning period. Based on this standard and sewer population allocation, it is possible to identify future deficiencies in various sewer systems and the capital projects necessary to correct those deficiencies.

Sewer Systems Population Allocation

Table SS.2 shows forecasted populations for the sewer service areas, which are defined on the proposed land use plan (FEIS Preferred Alternative) and overall population allocation determined by the Kitsap County Regional Coordinating Council. The forecast provides sewer purveyors with a population to plan for during the 20-year planning period determine future demand for sewer facilities and capital improvement costs. Wastewater systems expansions for the UGAs to accommodate 2025 growth can be accomplished through a combination of additional ULIDs, UGA wastewater management agreements, and other infrastructure financing alternatives.

Note that not all residents located within sewer district boundaries will be sewer. This is consistent with the current practice and practices in other communities. In general, the unsewered population as a percentage of the total population decreases over time.

Table SS.2 Kitsap County Sewer Systems Population Allocation

SEWER FACILITIES	2003	2012	2025
<u>Central Kitsap Service Area</u> ⁽¹⁾			
Sewered	27,898	49,324	65,406
Unsewered ⁽³⁾	15,074	11,305	7,537
<u>Kingston Service Area</u>			
Sewered	1,530	2,162	4,342
Unsewered ⁽³⁾	1,105	829	622
<u>Suquamish Service Area</u>			
Sewered	2,025	2,748 ⁽²⁾	3,435
Unsewered ⁽³⁾	1,893	1,420	946
<u>Manchester Service Area</u>			
Sewered	4,413	4,441	5,470
Unsewered ⁽³⁾	183	183	915
<u>Navy Yard City Service Area</u>			
Sewered	2,683	2,925	3,136
Unsewered ⁽³⁾	239	179	120

⁽¹⁾ Includes Bangor/Keyport/City of Poulsbo and Central Kitsap Area.

Bangor/Keyport = 8,600 equivalent people, Poulsbo = 7,563 people. Assumes new people are served by sewer.

⁽²⁾ Includes 500 population equivalents for Suquamish Tribal Reservation.

⁽³⁾ Estimate that as density increases and septic systems fail, one quarter of existing septic systems in UGA/LAMIRD's will connect to sewer by 2012 and one quarter by 2025.

Capital Facilities Projects and Financing

2006 Capital Improvement Projects

Several key capacity and non-capacity sewer capital improvement projects have already been initiated during 2006 and/or scheduled for 2007-2012. Two major projects undertaken during 2006 include Central Kitsap Collection System connection improvements, and Gorst Sewer Extensions, both of which are briefly described below:

Central Kitsap Collection System: Clear Creek Connector Sewers: Phase I/II (2006)

The extension of a 12-inch sewer main and additional piping will be required in response to WSDOT plans for improving the SR 3/SR 303 interchange, and accompanying County plans for road extensions to serve commercial development along Clear Creek and Old Frontier Roads. The project consists of two phases:

- Phase I – Extension of a 12-inch diameter sewer main from the northwest corner of the Silverdale Home Depot under SR 3, then along SR 303 to its intersection with Clear Creek Road NW. Installation of the pipeline under SR 303 will be accomplished using the horizontal directional boring technique. The remainder of the installation will use conventional cut and cover methods. This phase of the project will provide an additional 830 L.F. of 12-inch diameter HDPE pipe, 630 L.F. of 12-inch diameter PVC pipe, and 5 manholes.
- Phase II – Installation of sewer pipe north along Clear Creek Road, the new Clear Creek Connector Road, and extension of the sewer along Old Frontier Road NW north from Anderson Hill Road. Approximately 4,650 L.F. of 10-inch diameter PVC pipe, 4,100 L.F. of 10-inch diameter PVC pipe and 29 manholes will be installed.

Gorst Sewer Extensions (2006)

In 1996, the Bremerton-Kitsap County Health District (now Kitsap County Health District) published a study “Gorst Area On-site Sewage Systems Sanitary Sewer Project,” that concluded that 14 percent of the Gorst septic systems had failed (49 failures out of 341 systems surveyed) and that 81 percent had either failed or were in danger of failing in the near future (277 out of 341). By 1998 the Health District had declared Gorst and the surrounding area a “severe public health hazard” and defined an LID boundary that encompassed only those properties that had on-site system failures or the potential for failure. This project will construct a sewer collection system for Gorst to connect to an existing treatment plant, or allow for construction of a satellite treatment facility should that prove to be technically and financially feasible.

2007-2012 Capital Improvement Projects

The County's sanitary sewer facilities improvements for the next six years include 13 capital projects at a cost of \$53,007,000. Key capital project improvements are summarized below, and the proposed schedule, costs, and financing plan is shown in Table SS.3-1.

CFP Project No.1 - Central Kitsap Conveyance System: Pump Station #7 Upgrade

Proposed development of properties adjacent to and within the basin tributary to Pump Station #7 is driving the requirement for prompt action. A recent report developed by Berryman & Henigar outlined a two-phase approach to increase capacity and reliability, Installation of a parallel 16-inch diameter force main actuated by an automatic valve will significantly reduce system head loss resulting in an increase in efficiency of the existing pumps and increase in flow capacity. Installation of a larger generator and improvements to the electrical system will further increase reliability of the station. Replacement of the existing submersible and two drywell pumps with pumps, drives, and electrical equipment of greater capacity are also included in the work. It is anticipated that preliminary work on this project will begin in the summer of 2006.

CFP Project No.2 - Central Kitsap Conveyance: Silverdale Force Main Upgrades

In July 2003 a broken fitting for an air/vacuum release assembly on the force main from Pump Station #3 resulted in a 2,500-gallon sewage spill into the Washington Street storm drain system in Silverdale. The force main has three such assemblies that were installed in 1978, all containing fittings of dissimilar metals that corrode over time. Under this project all three air/vacuum release assemblies will be replaced. In addition, one 14-inch in-line stop valve and two 14-inch in-line gate valves will be installed to isolate flow.

CFP Project No.3 - Central Kitsap Conveyance System Pump Station Upgrades

After more than twenty years of service, the pumps and motors at many of the pump stations in the Central Kitsap service area are reaching the end of their anticipated mechanical life span. Routine maintenance costs are steadily increasing and pump reliability is declining, and the County must begin replacing the pumps, drives, and related electrical and electronic equipment for many of its pump stations. The County plans to upgrade two to three pump stations each year over a three-year span. A priority system will be devised to insure that the pump stations most susceptible to failure are upgraded first. Additional station capacity will be achieved by increasing motor and pump impeller sizes. Wherever feasible, pump around valves and piping will be installed in conjunction with the upgrades to facilitate future internal valve replacements in the pump stations. In 2005 Pump Stations 5, 10 and 12 were upgraded. Pump stations 3, 20, and 23 will be upgraded in 2007. Pump Stations 31, 41 and 65 will be upgraded in 2008.

CFP Project No.4 - Central Kitsap Wastewater Treatment Plant, Phase IIA Expansion

The required upgrade and expansion work at the CKWWTP has been divided into four separate projects due to the need to match the outlay of capital costs with the timing of revenue generation from new sewer connections and monthly sewer revenues. The projects are described as follows:

The Phase IIA expansion includes the following:

- Headworks and Primary Sedimentation.
- Aeration and Secondary Sedimentation.
- Solids Handling.
- Support and Site Facilities.
- Outfall Modifications.

CFP Project No.5 - Manchester Sewer Extensions

In response to community petitions, two sewer extensions are planned along the beach in Manchester. The initial extensions will occur south along Colchester and Miracle Mile (LID #8) and farther along Colchester and Yukon Harbor Drive (LID #9). Other extensions may occur west of these areas and will require the construction of a sewage pump station. Formation of Utility Local Improvement Districts (ULIDs) will be required to finance these improvements.

CFP Project No.6 - South Central Conveyance System Central Valley/Fairgrounds Road Force Main And Gravity Sewer Replacement

Approximately 4,650 feet of 12-inch diameter asbestos concrete force main pipe conveys sewage along Central Valley Road from Pump Station #34 to a manhole located at the intersection of Central Valley and Fairgrounds Roads. Originally used as a water main by the city of Bremerton, this force main was given to the County in 1988. Since then the force main has experienced several leaks, with three occurring since 2000, allowing sewage spills into Mosher Creek. The Phase IIB Improvements generally are associated with increasing plant capacity and consist of the following work elements:

- Primary clarifiers
- New aeration blower
- Secondary clarifiers
- Mixed liquor distribution channels
- Mixed liquor pumping facilities
- Septage facilities
- Truck scale
- Dissolve air floatation thickeners
- Centrifuge No. 2
- Process water (3WHP) system

This project is designed to increase the capacity of the wastewater conveyance system from the City of Poulsbo to the Central Kitsap Wastewater Treatment Plant. The system does not have capacity to convey the projected higher sewage flows that will occur in the winter periods from Poulsbo to the Central plant. The City of Poulsbo needs capacity for new development approved through the Growth Management Process. In October 2002 the western of two siphons failed a pressure test and requires repair before returning it to service. This project includes replacement of approximately 300' of Class 50 ductile iron pipe from the flow divider manhole in Lemolo to the beach for the western siphon. In 2007 both siphons will be sliplined to ensure capacity or future Poulsbo flows.

CFP Project No.9 - Navy Yard City Collection System Charleston Beach Sewer Replacement

Starting in December of 2003, the sewer main along Charleston Beach Road is being replaced incrementally in conjunction with the phasing of the City of Bremerton's "Gateway" project. Under an Interlocal Agreement with the City, portions of the sewer main will be replaced with each phase of the project. Due to extremely flat slopes the exiting pipes have deteriorated from hydrogen sulfide induced corrosion necessitating replacement. The existing concrete pipe will be replaced with PVC pipe, which is immune to corrosion.

CFP Project No.10 - South Central Conveyance System Techite Force Main Replacement

Installed in the late 1970's, the portion of force main serving the South Central conveyance system from NE Paulson road to the Central Kitsap Wastewater Treatment Plant was constructed with Techite, a brand of reinforced plastic mortar pipe manufactured by Amoco Reinforced Plastics Co. Subsequent to that time similar Techite pipe installations in Alaska, Oregon, and California have suffered catastrophic failures due to strain corrosion. Although the existing force main has not suffered any similar failures, it is felt that such an event is likely to occur during a significant earthquake. Since the pipe lies close to a recently identified fault line, replacement of the pipe has become more important. The existing 30" diameter Techite pipe will be replaced with approximately 6,100 feet of either 30" diameter cement lined Ductile Iron Pipe (DIP) or 34" diameter High Density Polyethylene (HDPE) pipe.

CFP Project No.11 - South Central Conveyance System Pump Station #6 Force Main Relocation

In order to increase capacity and improve hydraulic conditions at Pump Station #6, we plan on constructing a new force main from the pump station north along Conifer Drive to the existing manhole H17-4009 on Old Military Road. Routed primarily along existing easements and road right-of-way, the alignment will provide continuous uphill grade. The County will need to obtain an easement across private property to extend the force main from Conifer Drive to Cimeron Court. By relocating the connection point along Old Military Road, the project will also improve pumping conditions at Pump Station #7. The project will include the installation of approximately 2,800 feet of 12" diameter pipe, one pump around with vault and associated valves, and pavement and landscaping restoration.

Table SS.3-1. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

SANITARY SEWER -- KITSAP COUNTY SYSTEMS							
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<i>Capacity Projects</i>							
1. Central Kitsap Conveyance System - Pump Station #7 Upgrade							
Cost	1,200.0						1,200.0
Rev - Sewer R/R	840.0						840.0
Rev - SS Improvement Fund	360.0						360.0
2. Central Kitsap Conveyance System - Silverdale/Lemolo Forcemain Air/Vac Upgrades							
Cost	50.0						50.0
Rev - City of Poulsbo	50.0						50.0
3. Central Kitsap Conveyance System - Pump Stations & Forcemain Upgrades							
Cost		500.0	500.0	500.0	500.0	500.0	3,000.0
Rev - Sewer R/R		500.0	500.0	500.0	500.0	500.0	3,000.0
4. Central Kitsap Wastewater Treatment Plant - Phase II-A Expansion							
Cost	1,255.0	12,290.0	4,612.0				18,157.0
Rev - Revenue Bonds	1,066.8	10,446.5	3,920.2				15,433.5
Rev - City of Poulsbo	188.2	1,843.5	691.8				2,723.5
5. Manchester Sewer Extensions							
Cost	1,250.0						1,250.0
Rev - ULID (8 & 9)	1,250.0						1,250.0
6. South Central Conveyance System - Central Valley/Fairgrounds Road Force Main and Gravity Sewer Replacement							
Cost		861.0					861.0
Rev - Sewer R/R		602.7					602.7
Rev - SS Improvement Fund		258.3					258.3
7. Central Kitsap Wastewater Treatment Plant Phase II-B							
Cost				6,300.0	8,400.0		14,700.0
Rev - Revenue Bonds				5,355.0	7,140.0		12,495.0
Rev - City of Poulsbo				945.0	1,260.0		2,205.0
Subtotal	4,255.0	13,651.0	5,112.0	6,800.0	8,900.0	500.0	39,218.0
<i>Non-Capacity Projects</i>							
8. Lemolo Siphons Repair and Sliplining							
Cost	150.0	150.0					300.0
Rev - City of Poulsbo	150.0	150.0					300.0

SANITARY SEWER -- KITSAP COUNTY SYSTEMS

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
9. Navy Yard City Collection System - Charleston Beach Sewer Mains Replacement							
Cost	448.0						448.0
Rev - Sewer R/R	448.0						448.0
10. South Central Conveyance System - Techite Force Main Replacement							
Cost		1,252.0	1,024.0				2,276.0
Rev - Sewer R/R		1,252.0	1,024.0				2,276.0
11. South Central Conveyance System - Pump Station #6 Forcemain Relocation							
Cost					514.0		514.0
Rev - Sewer R/R					514.0		514.0
12. Capital Administration							
Cost	1,584.8	1,632.3	1,681.3	1,731.7	1,783.7	1,837.2	10,251.0
Rev - SS Improvement Fund	792.4	816.1	840.7	865.9	891.9	918.6	5,125.6
Rev - Sewer R/R	792.4	816.2	840.6	865.8	891.8	918.6	5,125.4
Subtotal	2,182.8	3,034.3	2,705.3	1,731.7	2,297.7	1,837.2	13,789.0
<i>SUMMARY: COSTS AND REVENUES</i>							
COSTS:							
Capacity Projects:							
System Upgrades/Extensions	4,255.0	13,651.0	5,112.0	6,800.0	8,900.0	500.0	39,218.0
Subtotal	4,755.0	13,651.0	5,112.0	6,800.0	8,900.0	500.0	39,218.0
Non-Capacity Projects							
System Replacement/Relocation	2,182.80	3,034.30	2,705.30	1,731.70	2,297.70	1,837.20	13,789.00
Subtotal	2,182.80	3,034.30	2,705.30	1,731.70	2,297.70	1,837.20	13,789.00
Total Costs	6,437.80	16,685.30	7,817.30	8,531.70	11,197.70	2,337.20	53,007.00
EXISTING REVENUES							
Rev - SS Improvement Fund	1,152.40	1,074.40	840.70	865.90	891.90	918.60	5,743.90
Rev - Sewer R/R	2,580.40	3,170.90	2,364.60	1,365.80	1,905.80	1,418.60	12,806.10
Rev - City of Poulsbo	388.2	1,993.5	691.8	945.0	1,260.0	0.0	5,278.5
Rev - Revenue Bonds	1,066.80	10,446.50	3,920.20	5,355.00	7,140.00	0.00	27,928.50
Rev - ULID Assessments	1,250.00	0.00	0.00	0.00	0.00	0.00	1,250.00
Subtotal	6,437.80	16,685.30	7,817.30	8,531.70	11,197.70	2,337.20	53,007.00
Total Revenues	6,937.80	16,685.30	7,817.30	8,531.70	11,197.70	2,337.20	53,007.00
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table SS.3-2. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

SANITARY SEWER -- CITY OF PORT ORCHARD							
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<i>Non-Capacity Projects</i>							
1. Marina Pumps 1 and 2 Rebuilds							
Cost	15.0	15.0					30.0
Rev - Sewer System Fees	15.0	15.0					30.0
2. Marina Pumps 3 and 4 Replacement							
Cost			25.0	25.0			50.0
Rev - Sewer System Fees			25.0	25.0			50.0
3. Cost-To-Coast Pumps 1 and 2 Rebuild							
Cost		5.0		5.0			5.0
Rev - Sewer System Fees		5.0		5.0			5.0
4. Canyon Court Subdivision Pumps, 1, 2, and 3 Replacement							
Cost	15.0						15.0
Rev - Sewer System Fees	15.0						15.0
5. Harrison Hospital Pumps 1 and 2 Replacement							
Cost		15.0	15.0				30.0
Rev - Sewer System Fees		15.0	15.0				30.0
6. Sedgwick (Bravo Terrace) Pumps 1 and 2 Replacement							
Cost				15.0	15.0		30.0
Rev - Sewer System Fees				15.0	15.0		30.0
7. Tremont place Pumps 1 and 2 Replacement							
Cost						20.0	20.0
Rev - Sewer System Fees						20.0	20.0
8. McCormick Woods #1 Pumps 1 and 2 Replacement							
Cost			50.0	50.0			100.0
Rev - Sewer System Fees			50.0	50.0			100.0
9. McCormick Woods #2 Pumps 1 and 2 Replacement							
Cost					50.0	50.0	100.0
Rev - Sewer System Fees					50.0	50.0	100.0
Subtotal	30.0	35.0	90.0	95.0	65.0	70.0	380.0

SANITARY SEWER -- CITY OF PORT ORCHARD

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<i>SUMMARY: COSTS AND REVENUES</i>							
COSTS:							
Capacity Projects:							
	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0
 Non-Capacity Projects:							
Pump Rebuilds and Replacements							
	<u>30.0</u>	<u>35.0</u>	<u>90.0</u>	<u>95.0</u>	<u>65.0</u>	<u>70.0</u>	<u>380.0</u>
Subtotal	30.0	35.0	90.0	95.0	65.0	70.0	380.0
 Total Costs	 30.0	 35.0	 90.0	 95.0	 65.0	 70.0	 380.0
 EXISTING REVENUES							
Rev - Sewer System Fees	<u>30.0</u>	<u>35.0</u>	<u>90.0</u>	<u>95.0</u>	<u>65.0</u>	<u>70.0</u>	<u>380.0</u>
Subtotal	30.0	35.0	90.0	95.0	65.0	70.0	380.0
 NEW REVENUES							
Rev -	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0
 Total Revenues	 30.0	 35.0	 90.0	 95.0	 65.0	 70.0	 380.0
 BALANCE	 0.0	 0.0	 0.0	 0.0	 0.0	 0.0	 0.0

Table SS.3-3. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

SANITARY SEWER -- CITY OF POULSBO							
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<i>Non-Capacity Projects</i>							
1. Ninth Ave Pump Station Improvements							
Cost	162.0						162.0
Rev - System Utility Fees	162.0						162.0
2. Telemetry Systems and Control Improvements							
Cost			75.0				75.0
Rev - System Utility Fees			75.0				75.0
3. Marine Science Center Pump Station Upgrade							
Cost			50.0				50.0
Rev - System Utility Fees			50.0				50.0
4. Sixth Ave Pump Station Upgrade							
Cost	116.0						116.0
Rev - System Utility Fees	116.0						116.0
5. Sixth Ave Force Main Replacement							
Cost				75.0			75.0
Rev - System Utility Fees				75.0			75.0
6. Central Poulsbo Basin (Collection System Improvements)							
Cost						512.0	512.0
Rev - System Utility Fees						512.0	512.0
7. Ninth Ave Basin System Improvements							
Cost				350.0	593.0		943.0
Rev - System Utility Fees				350.0	593.0		943.0
8. Annual Sewer System Miscellaneous Upgrades							
Cost	50.0	50.0	50.0	50.0	50.0	50.0	200.0
Rev - System Utility Fees	50.0	50.0	50.0	50.0	50.0	50.0	200.0
Subtotal	328.0	50.0	175.0	475.0	643.0	562.0	2,133.0
<i>SUMMARY: COSTS AND REVENUES</i>							
COSTS:							
Non-Capacity Projects							
	<u>328.0</u>	<u>50.0</u>	<u>175.0</u>	<u>475.0</u>	<u>643.0</u>	<u>562.0</u>	<u>2,133.0</u>
Subtotal	328.0	50.0	175.0	475.0	643.0	562.0	2,133.0
Total Costs	328.0	50.0	175.0	475.0	643.0	562.0	2,133.0

SANITARY SEWER -- CITY OF POULSBO

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
EXISTING REVENUES							
Rev - System Utility Fees	<u>328.0</u>	<u>50.0</u>	<u>175.0</u>	<u>475.0</u>	<u>643.0</u>	<u>562.0</u>	<u>2,133.0</u>
Subtotal	328.0	50.0	175.0	475.0	643.0	562.0	2,133.0
NEW REVENUES							
Rev -	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Revenues	328.0	50.0	175.0	475.0	643.0	562.0	2,133.0
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Background

The purpose of the schools section of the Capital Facilities Plan is to ensure that adequate educational facilities will be available to serve the increasing population in Kitsap County. This section evaluates the four school districts that serve unincorporated Kitsap County: North Kitsap, Central Kitsap, South Kitsap, and Bremerton. Two districts were excluded: Bainbridge Island Schools because the entire district is located in the City of Bainbridge Island, and the North Mason School District because it does not have schools or facilities located in Kitsap County and serves only a very small area in the southwestern corner of the County.

Enrollment and Capacity Data

The enrollment and school capacity data deserve some explanation. First, the data are measured by full-time equivalent (FTE) students, rather than “head count” (the total number of students enrolled). Students who attend only half- or part-time in the preschool programs, alternative schools, or in kindergarten are counted in relationship to a full school day. FTE numbers are lower than head counts and better represent the actual impact on facilities.

Second, the inventories and analyses of capacity requirements are presented two ways: with interim (i.e., portable) facilities and without interim facilities. The districts’ capital improvement projects are based on the capacity without portables because they have significant limitations in such areas as heating, ventilation, noise, security, restrooms, storage cupboards, and intercom communications. For these reasons, portables are not considered permanent capacity either by the state or by the districts. The capacity of portable rooms is presented to show the interim facilities the districts use (1) to meet short-term enrollment fluctuations, or (2) to serve as temporary facilities until permanent facilities are built.

Finally, capacity figures are generally based on teacher-to-student ratios (expressed as students per classroom) that the school district determines to be most appropriate to accomplish its educational program. These ratios are often contained in employment agreements between districts and their teachers. The State of Washington uses a different basis to distribute capital facilities money to school districts. The state uses square feet of space per student (see the space allocations criteria established in WAC 180-30-110).

Current Facilities Inventory

Inventories of the school districts’ existing facilities located in Kitsap County are presented in this section. The inventories are summarized in Tables SC.1-1 through SC.1-4.

North Kitsap School District

North Kitsap School District is located at the north end of the Kitsap Peninsula and is almost completely surrounded by water. To the west, the district is bordered by Hood Canal and includes the Port Gamble Inlet. To the north and east, Puget Sound borders the district. Port Madison and Liberty Bay surround the district on its southernmost borders. North Kitsap Schools are generally clustered around the City of Poulsbo and the unincorporated community of Kingston. The district currently uses the following grade level configurations: K–6 housed in elementary schools, 7–9 housed in junior high schools, and 10–12 housed in senior high schools.

The district will change its configuration in the fall of 2007 with the opening of Kingston High School, which is now under construction. Kingston High School will open with a student capacity of 800 students and is designed for expansion to 1,200 students in the future. Beginning in the fall of 2007, the district grade configuration will be as follows: K–5 housed in elementary schools, 6–8 housed in the district’s two middle schools, and 9–12 housed in two senior high schools. Table SC.1-1 lists North Kitsap Schools and their enrollment capacity.

Table SC.1-2. North Kitsap School District Current Enrollment Capacity

School	Current Enrollment Capacity
Elementary Schools (K-6)	
Breidablik	356
Gordon	401
Pearson	334
Poulsbo	423
Suquamish	378
Vinland	512
Wolfe	423
Total Elementary Permanent Facilities	2,827
Total Elementary Interim (Portables) Facilities	250
Total Elementary Permanent and Interim Facilities	3,077
Junior High Schools (7-9)	
Kingston	850
Poulsbo	750
Total Junior High Permanent Facilities	1,600
Total Junior High Interim (Portables) Facilities	100
Total Junior High Permanent and Interim Facilities	1,700
Senior High Schools (10-12)	
North Kitsap	1,250

School	Current Enrollment Capacity
Kingston	800
Spectrum	120
Total Senior High Permanent Facilities	2,170
Total Senior High Interim (Portables) Facilities	0
Total Senior High Permanent and Interim Facilities	2,170

Source: North Kitsap School District

Central Kitsap School District

Central Kitsap School District is located on the Kitsap Peninsula, surrounding Dyes Inlet and extending west to the Hood Canal. Currently, there are 14 elementary schools, three junior high schools, one 7–12 secondary school, and two senior high schools in the District. The district also provides alternative junior high and high school programs. The grade configuration is based on grades K–6, elementary; grades 7–9, junior high; and 10–12, senior high school. Table SC.1-2 presents the schools of Central Kitsap and their enrollment capacity.

Table SC.1-2. Central Kitsap School District Current Enrollment Capacity

School	Current Enrollment Capacity
Elementary Schools (K–6)	
Brownsville	445
Clear Creek	513
Cottonwood	469
Cougar Valley	416
Emerald Heights	498
Esquire Hills	475
Green Mountain	385
Jackson Park	373
Pinecrest	518
Seabeck	384
Silverdale	488
Silver Ridge	437
Tracyton	416
Woodlands	467
Total Elementary Permanent Facilities	6,282
Total Elementary Interim (Portables) Facilities	59

School	Current Enrollment Capacity
Total Elementary Permanent and Interim Facilities	6,341
Junior High Schools (7–9)	
Central Kitsap	770
Fairview	759
Ridgetop	819
New Frontiers	0
Off-Campus	0
Total Junior High Permanent Facilities	2,348
Total Junior High Interim (Portables) Facilities	20
Total Junior High Permanent and Interim Facilities	2,368
Senior High Schools (10–12)	
Central Kitsap	1,055
Olympic	1,061
West Alternative	58
East Alternative	0
Klahowya	915
Total Senior High Permanent Facilities	3,088
Total Senior High Interim (Portables) Facilities	35
Total Senior High Permanent and Interim Facilities	3,123

Source: Central Kitsap School District

South Kitsap School District

South Kitsap School District is located in the southern portion of Kitsap County. Pierce County and Mason County border the District to the south and west. To the north and east, the District is bordered by the Sinclair Inlet, Rich Passage, Colvos Passage, and Puget Sound. The district includes 10 elementary schools, three junior high schools, and one alternative and one comprehensive high school. The majority of the schools are located throughout the southern portion of unincorporated Kitsap County, while South Kitsap High School and Cedar Heights Junior High School are located within the Port Orchard city limits. The grade configuration is based on grades K–6, elementary; grades 7–9, junior high; and grades 10–12, senior high school. Table SC.1-3 lists the schools of the South Kitsap School District and their enrollment capacity.

Table SC.1-3. South Kitsap School District Current Enrollment Capacity

School	Current Enrollment Capacity
Elementary Schools (K–6)	
Burley-Glenwood	552
East Port Orchard	504
Hidden Creek	480
Manchester	504
Mullenix Bridge	480
Olalla	480
Orchard Heights	695
Sidney Glen	480
South Colby	312
Sunnyslope	504
Total Elementary Permanent Facilities	4,991
Total Elementary Interim (Portables) Facilities	600
Explorer Alternative Program – Interim (Portable) Facilities	48
Total Elementary Permanent and Interim Facilities	5,639
Junior High Schools (7–9)	
Cedar Heights	598
John Sedgwick	780
Marcus Whitman	780
Total Junior High Permanent Facilities	2,158
Total Junior High – Interim (Portable) Facilities	546
Explorer Alternative Program – Interim (Portable) Facilities	26
Total Junior High Permanent and Interim Facilities	2,730
Senior High Schools (10–12)	
South Kitsap	1,949
Alternative	168
Total Senior High Permanent Facilities	2,117
Total Senior High Interim (Portables) Facilities	230
Explorer Alternative Program – Interim (Portable) Facilities	26
Total Senior High Permanent and Interim Facilities	2,373

Source: South Kitsap School District

Bremerton School District

Bremerton School District is located on the Kitsap Peninsula between Port Orchard Bay, Dyes Inlet, and Sinclair Inlet. The district is adjacent to the PSNS, and its enrollment is directly related

to the military base. The school district serves the City of Bremerton and unincorporated areas adjacent to the city.

The Bremerton School District comprises six elementary schools, one middle school, one junior high school, one traditional high school, and one alternative high school. The district also administers a vocational skills center that serves other school districts. The current grade configuration in the district is based on grades K–5, elementary; grades 6–7, middle school; grades 8–9, junior high; and grades 10–12, high school. Collective bargaining agreements concerning maximum class size normally keep classrooms from being used to full capacity. Table SC.1-4 lists the schools of Bremerton School District and their enrollment capacity.

Table SC.1-4. Bremerton School District Current Enrollment Capacity

School	Current Enrollment Capacity
Elementary Schools (K–6)	
Amin Jahr	481
Crown Hill	528
Kitsap Lake	528
Naval	484
View Ridge	528
West Hills	528
Total Elementary Permanent Facilities	3,077
Total Elementary Interim (Portables) Facilities	780
Total Elementary Permanent and Interim Facilities	3,857
Junior High Schools (7–9)	
Mountain View Middle	900
Bremerton	1,115
Total Junior High Permanent Facilities	2,015
Total Junior High Interim (Portables) Facilities	120
Total Junior High Permanent and Interim Facilities	2,135
Senior High Schools (10–12)	
Bremerton	1,200
Total Senior High Permanent Facilities	1,200
Total Senior High Interim (Portables) Facilities	120
Total Senior High Permanent and Interim Facilities	1,320

Source: Bremerton School District

Capital Facilities Projects and Financing: 2007-2012

Central Kitsap School District's 2007-2012 CFP for capital improvement projects includes sources of public money within projected funding capacities that constitute the probable funding of the District's capital improvement projects.

The District anticipates continued eligibility for Federal Heavy Impact Fees as levy measures pass, and anticipates going before the voters for a capital levy or bond issue during this period. The District is currently undertaking an in-depth site specific study and survey looking at infrastructure issues, and uses staff, consultants, and a citizens review committee to identify capital projects for recommendation to the district's Board of Directors. The District's school facilities include 23 capital projects at a cost of \$86,695.1. The proposed financing plan is shown in Table SC.3-1.

North Kitsap School District's CFP includes 2 capacity capital projects at a cost of \$39,200,000. The proposed financing plan is shown in Table SC.3-2.

South Kitsap School District's Six-Year Plan for Capital Improvement Projects (**Table SC-3.3**) includes sources of public money within projected funding capacities that constitute the probable funding of the District's Capital Improvement Projects. The District used a facilities planning task force to identify future capital projects for recommendation to the Board of Directors. The Board of Directors has authorized a bond funding program, which ultimately has to be approved by the voters. Table SC.3-3 assumes the passage of a bond in the year 2007. The District's school facilities includes six major capital projects at a total cost of \$182,600,000. The proposed financing plan is shown in Table SC.3-3.

Bremerton School District's CFP includes 4 capacity and 5 non-capacity capital projects at a cost of \$54,400,000. The proposed financing plan is shown in Table SC.3-4.

Table SC.3-1. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

SCHOOLS -- CENTRAL KITSAP							
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
ELEMENTARY SCHOOLS							
Non-Capacity Projects							
1. Clear Creek Elementary: Construct Site Improvements; Upgrade Multi-Media Connectivity System.							
Cost	77.5						77.5
Rev - Federal Impact Funds	77.5						77.5
2. Cougar Valley Elementary: Upgrade HVAC, Electrical Service, Emergency Generator, Exterior Lighting, and Multi-Media Connectivity System; and Replace Fire Alarm System.							
Cost			548.3				548.3
Rev - Capital Projects Bond			548.3				548.3
3. Emerald Heights Elementary: Upgrade Data Distribution System.							
Cost		67.0					67.0
Rev - Capital Projects Bond		67.0					67.0
4. Esquire Hills Elementary: Site/Seismic Improvements; Upgrade Emergency Lighting, Multi-Media Connectivity. Modernization Design/Construction							
Cost	198.5				436.0	3,270.0	3,904.5
Rev - Capital Projects Bond					436.0	3,270.0	3,706.0
Rev - Federal Impact Funds	198.5						198.5
5. Green Mountain Elementary: Upgrade Heating and Ventilation Units.							
Cost			226.0				226.0
Rev - Capital Projects Bond			226.0				226.0
6. Jackson Park Elementary: Construct Replacement School							
Cost		327.0	2,543.0	13,130.0			16,000.0
Rev - State OSPI Funds				3,800.0			3,800.0
Rev - Capital Projects Bond		327.0	2,543.0	9,330.0			12,200.0
7. Silver Ridge Elementary: Upgrade Architectural Finishes, HVAC System and Data Distribution System.							
Cost		303.0					303.0
Rev - Capital Projects Bond		303.0					303.0
8. Tracyton Elementary: Seismic Improvements; Repair Boiler; Upgrade Emergency Lighting & Multi-Media Connectivity System.							
Cost		236.0					236.0
Rev - Capital Projects Bond		236.0					236.0
9. Silverdale Elementary: Modernization Design/Construction							
Cost				435.0	3,270.0	7,630.0	11,335.0
Rev - Capital Projects Bond				435.0	3,270.0	2,830.0	6,535.0
Rev - State OSPI Funds						4,800.0	4,800.0

SCHOOLS -- CENTRAL KITSAP

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<u>10. Woodlands Elementary: Upgrade File Server Mechanical System Room, Emergency Lighting and Multi-Media Connectivity.</u>							
Cost	80.0						80.0
Rev - Federal Impact Funds	80.0						80.0
Subtotal	356.0	933.0	3,317.3	13,565.0	3,706.0	10,900.0	32,777.3
<u>SECONDARY SCHOOLS</u>							
<u>12. Olympic High School: Seismic Improvements; Install Operable Double Pane Windows; Replace Corridor Flooring and Fire Alarm System; Upgrade HVAC System, HVAC Controls, Electrical Service and Distribution System; Provide Multi-Media Connectivity</u>							
Cost		3,223.0					3,223.0
Rev - Capital Projects Bond		3,223.0					3,223.0
<u>13. Klayhowya Secondary School: Playfield Drainage Improvements; Auxiliary Gymnasium Addition.</u>							
Cost		400.0	2,598.4				2,998.4
Rev - Capital Projects Bond		400.0	2,598.4				2,998.4
<u>14. Alternative High School: Building Exterior Repairs, Upgrade Data System, and Upgrade Technology Connectivity System.</u>							
Cost		62.0					62.0
Rev - Capital Projects Bond		62.0					62.0
<u>15. Junior High School: Design Replacement School and Replacement Construction</u>							
Cost			265.0	2,330.0	30,585.0		33,180.0
Rev - Capital Projects Bond			265.0	2,330.0	22,535.0		25,130.0
Rev - State OSPI Funds					8,050.0		8,050.0
<u>16. Ridgetop Junior High School: Construct ADA & Site Improvements; Repair Building Exterior and Roof; Construct Seismic Improvements; Upgrade Heating and Ventilation Units; Upgrade Multi-Media Connectivity System.</u>							
Cost			847.7				847.7
Rev - Capital Projects Bond			847.7				847.7
<u>17. Central Kitsap High School: Construct ADA, Site and Seismic Improvements; Replace Corridor Flooring, HVAC System, HVAC Controls, Intercom and Clock Systems; Upgrade Data and Multi-Media Connectivity System.</u>							
Cost	4,031.0						4,031.0
Rev - Federal Impact Funds	4,031.0						4,031.0
Subtotal	4,031.0	3,685.0	3,711.1	2,330.0	30,585.0	0.0	44,342.1
<u>SUPPORT FACILITIES</u>							
<u>18. Transportation: Construct Replacement Facility</u>							
Cost	400.0	4,750.0					5,150.0
Rev - State OSPI Funds		4,150.0					4,150.0
Rev - Federal Impact Funds	400.0	600.0					1,000.0

SCHOOLS -- CENTRAL KITSAP

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
19. Jenne Wright Administrative Building: Upgrade HVAC System and Electrical Distribution System							
Cost		147.8					147.8
Rev - Capital Projects Bond		147.8					147.8
20. Professional/Technical - Implement Site Improvements							
Cost				62.8			62.8
Rev - Capital Projects Bond				62.8			62.8
21. Special Services/Food Services/Warehouse - Implement Building Envelope Improvements; Upgrade HVAC, Electrical System							
Cost				344.1			344.1
Rev - Capital Projects Bond				344.1			344.1
22. Maintenance Facility: Seismic Upgrade							
Cost			245.7				245.7
Rev - Capital Projects Bond			245.7				245.7
Subtotal	400.0	4,897.8	245.7	406.9	0.0	0.0	5,950.4
MISCELLANEOUS							
24. District-Wide: Study & Survey, Portable Relocation, Flooring Projects, and Project Management							
Cost	519.0	578.0	548.0	687.9	701.5	591.0	3,625.4
Rev - Federal Impact Funds	519.0						519.0
Rev - Capital Projects Bond		578.0	548.0	687.9	701.5	591.0	3,106.4
Subtotal	519.0	578.0	548.0	687.9	701.5	591.0	3,625.4
SUMMARY: COSTS AND REVENUES							
COSTS:							
Capacity Projects:							
	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-Capacity Projects							
	<u>5,306.0</u>	<u>10,093.8</u>	<u>7,822.1</u>	<u>16,989.8</u>	<u>34,992.5</u>	<u>11,491.0</u>	<u>86,695.1</u>
Subtotal	5,306.0	10,093.8	7,822.1	16,989.8	34,992.5	11,491.0	86,695.1
Total Costs	5,306.0	10,093.8	7,822.1	16,989.8	34,992.5	11,491.0	86,695.1
EXISTING REVENUES							
Rev - State OSPI Funds	<u>0.0</u>	<u>4,150.0</u>	<u>0.0</u>	<u>3,800.0</u>	<u>8,050.0</u>	<u>4,800.0</u>	<u>20,800.0</u>
Subtotal	0.0	4,150.0	0.0	3,800.0	8,050.0	4,800.0	20,800.0
NEW REVENUES							
Rev - Capital Projects Bond	0.0	5,343.8	7,822.1	13,189.8	26,942.5	6,691.0	59,989.1

SCHOOLS -- CENTRAL KITSAP							
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
Rev - Federal Impact Funds	<u>5,306.0</u>	<u>600.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>5,906.0</u>
Subtotal	5,306.0	5,943.8	7,822.1	13,189.8	26,942.5	6,691.0	65,895.1
Total Revenues	5,306.0	10,093.8	7,822.1	16,989.8	34,992.5	11,491.0	86,695.1
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table SC.3-2. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

SCHOOLS -- NORTH KITSAP							
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<i>Capacity Projects</i>							
1. New Kingston High School - Phase II (+400 students)							
Cost				14,000.0			14,000.0
Rev - Voted G.O. Bond Issue				14,000.0			14,000.0
2. New Middle School 3 (+600 Students)							
Cost			25,200.0				25,200.0
Rev - Voted G.O. Bond Issue			25,200.0				25,200.0
Subtotal	0.0	0.0	25,200.0	14,000.0	0.0	0.0	39,200.0

SUMMARY: COSTS AND REVENUES

COSTS:									
Capacity Projects:			<u>0.0</u>	<u>0.0</u>	<u>25,200.0</u>	<u>14,000.0</u>	<u>0.0</u>	<u>0.0</u>	<u>39,200.0</u>
Subtotal			0.0	0.0	25,200.0	14,000.0	0.0	0.0	39,200.0
Non-Capacity Projects:			<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal			0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Costs			0.0	0.0	25,200.0	14,000.0	0.0	0.0	39,200.0
EXISTING REVENUES									
Rev -			<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal			0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEW REVENUES									
Rev - Voted G.O. Bond Issue			<u>0.0</u>	<u>0.0</u>	<u>25,200.0</u>	<u>14,000.0</u>	<u>0.0</u>	<u>0.0</u>	<u>39,200.0</u>
Subtotal			0.0	0.0	25,200.0	14,000.0	0.0	0.0	39,200.0
Total Revenues			0.0	0.0	25,200.0	14,000.0	0.0	0.0	39,200.0
BALANCE			0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table SC.3-3. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

SCHOOLS – SOUTH KITSAP							
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<i>Capacity Projects</i>							
1. New Portable Classrooms							
Cost	400.0	600.0	800.0	800.0	800.0	800.0	4,200.0
Rev - Impact Fees	400.0	600.0	800.0	800.0	800.0	800.0	4,200.0
2. New High School + Land							
Cost	66,100.0	63,000.0			8,200.0		137,300.0
Rev - Bonds	66,100.0	63,000.0					129,100.0
Rev - State OSPI Match					8,200.0		8,200.0
Subtotal	66,500.0	63,600.0	800.0	800.0	9,000.0	800.0	141,500.0
<i>Non-Capacity Projects</i>							
3. Tech/Electrical Upgrades							
Cost	1,000.0	3,100.0					4,100.0
Rev - Local Funds		500.0					500.0
Rev - Bonds	1,000.0	2,100.0					3,100.0
Rev - Federal Impact Funds		500.0					500.0
4. Replace So. Colby Elem School							
Cost	12,000.0	12,000.0			3,000.0		27,000.0
Rev - Bonds	12,000.0	12,000.0					24,000.0
Rev - State OSPI Match					3,000.0		3,000.0
5. Facilities Mech. Upgrades							
Cost	1,250.0	1,250.0	1,250.0	1,250.0	1,000.0	1,000.0	7,000.0
Rev - Bonds	750.0	750.0	750.0	750.0	500.0	500.0	4,000.0
Rev - Local Funds	500.0	500.0	500.0	500.0	500.0	500.0	3,000.0
6. Athletic Facilities Upgrades							
Cost	3,000.0						3,000.0
Rev - Bonds	3,000.0						3,000.0
Subtotal	17,250.0	16,350.0	1,250.0	1,250.0	4,000.0	1,000.0	41,100.0
<i>SUMMARY: COSTS AND REVENUES</i>							
COSTS:							
Capacity Projects:	<u>66,500.0</u>	<u>63,600.0</u>	<u>800.0</u>	<u>800.0</u>	<u>9,000.0</u>	<u>800.0</u>	<u>141,500.0</u>
Subtotal	66,500.0	63,600.0	800.0	800.0	9,000.0	800.0	141,500.0
Non-Capacity Projects	<u>17,250.0</u>	<u>16,350.0</u>	<u>1,250.0</u>	<u>1,250.0</u>	<u>4,000.0</u>	<u>1,000.0</u>	<u>41,100.0</u>
Subtotal	17,250.0	16,350.0	1,250.0	1,250.0	4,000.0	1,000.0	41,100.0
Total Costs	83,750.0	79,950.0	2,050.0	2,050.0	13,000.0	1,800.0	182,600.0
EXISTING REVENUES							
Rev - Local Funds	500.0	1,000.0	500.0	500.0	500.0	500.0	3,500.0
Rev - State OSPI Match	0.0	0.0	0.0	0.0	11,200.0	0.0	11,200.0
Rev - Impact Fees	<u>400.0</u>	<u>600.0</u>	<u>800.0</u>	<u>800.0</u>	<u>800.0</u>	<u>800.0</u>	<u>4,200.0</u>
Subtotal	900.0	1,600.0	1,300.0	1,300.0	12,500.0	1,300.0	18,900.0
NEW REVENUES							
Rev - Bonds	82,850.0	77,850.0	750.0	750.0	500.0	500.0	163,200.0
Rev - Federal Impact Funds	<u>0.0</u>	<u>500.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>500.0</u>
Subtotal	82,850.0	78,350.0	750.0	750.0	500.0	500.0	163,700.0
Total Revenues	83,750.0	79,950.0	2,050.0	2,050.0	13,000.0	1,800.0	182,600.0
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table SC.3-4. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

SCHOOLS -- BREMERTON							
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<i>Capacity Projects</i>							
1. Olympic View Elementary School Replacement							
Cost			500.0	4,500.0			5,000.0
Rev - GO Bond			500.0	4,500.0			5,000.0
2. Mountain View Middle School Addition							
Cost	12,000.0						12,000.0
Rev - GO Bond	12,000.0						12,000.0
3. Bremerton Junior High School (Replacement with Middle School)							
Cost			500.0	4,500.0	15,000.0		20,000.0
Rev - GO Bond			500.0	4,500.0	15,000.0		20,000.0
4. Bremerton High School Addition							
Cost	8,000.0						8,000.0
Rev - GO Bond	5,000.0						5,000.0
Rev - State Match	3,000.0						3,000.0
Subtotal	20,000.0	0.0	1,000.0	9,000.0	15,000.0	0.0	45,000.0
<i>Non-Capacity Projects:</i>							
5. Maintenance and Technology Building (Junior High Building Conversion)							
Cost			1,000.0				1,000.0
Rev - GO Bond			1,000.0				1,000.0
6. Transportation and Warehouse Building Replacement							
Cost			1,500.0				1,500.0
Rev - GO Bond			1,500.0				1,500.0
7. Bremerton High School Auto Shop Modernization							
Cost				2,000.0			2,000.0
Rev - GO Bond				2,000.0			2,000.0
8. West Sound Technical Skill Center Modernization							
Cost	300.0		300.0		300.0		900.0
Re - State Capital Funds	300.0		300.0		300.0		900.0
9. Miscellaneous Schools/Facilities Modernization Projects							
Cost		3,000.0				1,000.0	4,000.0
Rev - GO Bond		3,000.0				1,000.0	4,000.0
Subtotal	300.0	3,000.0	2,800.0	2,000.0	300.0	1,000.0	9,400.0

SCHOOLS -- BREMERTON

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<i>SUMMARY: COSTS AND REVENUES</i>							
COSTS:							
Capacity Projects:							
	<u>20,000.0</u>	<u>0.0</u>	<u>1,000.0</u>	<u>9,000.0</u>	<u>15,000.0</u>	<u>0.0</u>	<u>45,000.0</u>
Subtotal	20,000.0	0.0	1,000.0	9,000.0	15,000.0	0.0	45,000.0
Non-Capacity Projects							
	<u>300.0</u>	<u>3,000.0</u>	<u>2,800.0</u>	<u>2,000.0</u>	<u>300.0</u>	<u>1,000.0</u>	<u>9,400.0</u>
Subtotal	300.0	3,000.0	2,800.0	2,000.0	300.0	1,000.0	9,400.0
Total Costs	20,300.0	3,000.0	3,800.0	11,000.0	15,300.0	1,000.0	54,400.0
EXISTING REVENUES							
Re - State Capital Funds							
	<u>300.0</u>	<u>0.0</u>	<u>300.0</u>	<u>0.0</u>	<u>300.0</u>	<u>0.0</u>	<u>900.0</u>
Subtotal	300.0	0.0	300.0	0.0	300.0	0.0	900.0
NEW REVENUES							
Rev - GO Bond							
	17,000.0	3,000.0	3,500.0	11,000.0	15,000.0	1,000.0	50,500.0
Re - State Match							
	<u>3,000.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>3,000.0</u>
Subtotal	20,000.0	3,000.0	3,500.0	11,000.0	15,000.0	1,000.0	53,500.0
Total Revenues	20,300.0	3,000.0	3,800.0	11,000.0	15,300.0	1,000.0	54,400.0
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Background

State law (RCW 70.95.010) requires counties to plan an integrated solid waste management system that emphasizes waste reduction and recycling. Management of solid waste that cannot be recycled or managed alternatively can be incinerated, placed in a landfill, or a combination of the two.

Kitsap County Public Works/Solid Waste Division is the lead planning agency for solid waste management in Kitsap County. The Comprehensive Solid Waste Management Plan specifies the management actions that will be taken over a 6-year (detailed) and 20-year (general) time period. The plan is developed with participation from the cities, tribes, and the Navy, as well as a solid waste advisory committee. Through this planning process, counties are encouraged to allow private industry to provide services as much as possible (RCW 70.95.020). The Kitsap County solid waste system is a combination of private companies and public agencies. Components of an integrated solid waste management program are as follows:

- System planning, administration, and enforcement,
- Collection, transfer, and disposal of solid waste,
- Collection and processing of recyclables, and
- Moderate risk waste transfer and collection programs.

Current Facilities Inventory

Service boundaries differ among components of the solid waste system. Capital facilities are an integral part of several solid waste system components and are owned and operated by a variety of entities. See Table SW.1-1 below.

Table SW.1-1. Current Facilities Inventory – Solid Waste

Name	Owner	Operator	Location
Disposal			
Olympic View Transfer Station (OVTS)	Kitsap County Public Works (KCPW)	Waste Management Washington, Inc. (WMWI)	South Kitsap
Solid Waste Collection			
Olalla Drop-Box	Kitsap County	(WMWI)	South Kitsap
Hansville Drop-Box	Kitsap County	Kitsap County	North Kitsap
Silverdale Drop-Box	Kitsap County	(WMWI)	Central Kitsap

Name	Owner	Operator	Location
Bainbridge Island Drop-Box	City of Bainbridge Island (COBI)	Bainbridge Disposal	Bainbridge Island
Household Hazardous Waste Collection Facility	Kitsap County	Kitsap County	South Kitsap
Residential Recyclables Collection			
OVTS Drop-Box	(KCPW)	(WMWI)	South Kitsap
Olalla Drop-Box	Kitsap County	(WMWI)	South Kitsap
Hansville Drop-Box	Kitsap County	Kitsap County	North Kitsap
Silverdale Drop-Box	Kitsap County	(WMWI)	Central Kitsap
Bainbridge Island Drop-Box	Kitsap County	Bainbridge Disposal	Bainbridge Island
Poulsbo Recycle Center	(KCPW)	(WMWI)	North Kitsap
Peninsula Recycling MR	Peninsula	Peninsula	South Kitsap
Bangor Recycling Station	Navy	Navy	Central Kitsap

Source: Kitsap County Solid Waste Division

Administration and Enforcement

Kitsap County Public Works/Solid Waste Division with input from all affected jurisdictions meets solid waste planning requirements. The Bremerton-Kitsap County Health District has responsibility for enforcement of solid waste regulations.

Collection and Disposal

The Washington Utilities and Transportation Commission (WUTC) regulates solid waste collection in the unincorporated County through issuance of certificates to qualified companies. As a result, residential solid waste collection is available to every dwelling in the County via private haulers. Waste Management of Washington, operates under W.U.T.C. franchises for garbage collection in the unincorporated county.

The County owns four solid waste drop-box facilities, for solid waste and recycling, three of which are operated by contractors, and the other drop-box is operated by the County in Hansville.

There are no active landfills in Kitsap County. A regional transfer and waste export station, the Olympic View Transfer Station opened in 2002, has served as the disposal system for all jurisdictions in Kitsap County when the last operating landfill closed. The cities, Tribes, and federal facilities worked with the County to procure services to build and operate this regional transfer station. Waste Management operates the Olympic View Transfer Station through a contract with Kitsap County. The County's solid waste generation rate (garbage and recyclables) for projecting demand is 6.4 pounds per capita per day.

The County's Solid Waste division is responsible for a number of closed landfills which are regulated by the Health District or the Department of Ecology. The County collects a user service fee, which is part of the disposal fee at the Olympic View Transfer Station. It also depends on Ecology grant monies and some small EPA grants to augment the fees charged on solid waste tonnage.

Collection and Processing of Recyclables

The Waste Not Washington Act of 1989 mandated that each local jurisdiction develops recycling services. RCW 70.95.092 states that:

“Levels of service shall be defined in the waste reduction and recycling element of each local comprehensive solid waste management plan and shall include the services set forth in RCW 70.95.090. In determining which service level is provided to residential and nonresidential waste generators in each community, counties and cities shall develop clear criteria for designating areas as urban and rural. In designating urban areas, local governments shall consider the planning guidelines adopted by the department, total population density, and any applicable land use or utility service plans.”

Residential Recyclables Collection

The Solid Waste Division used Ecology's *Guidelines for the Development of Local Solid Waste Management Plans* (March 15, 1990) to determine recycling service level areas. The initial designation of the Level 1 (urban and suburban) and Level 2 (rural) areas was based on the County's land use maps. Ecology's "common sense" guideline and a visual inspection of the designated service level areas were also used to determine if the boundaries made sense in terms of physical surroundings and collection routes.

All incorporated areas of the county are considered Level 1 service areas and receive curbside collection of residential recyclables. Kitsap County Ordinance No. 157-1993 establishes service levels for residential recyclables collection in unincorporated Kitsap County as follows:

- Level 1 service areas: curbside collection for all single-family dwellings and multi-family complexes in unincorporated Kitsap County; and
- Level 2 service areas: drop-off collection available for every 5,000 to 10,000 people in Level 2 areas.

Private service providers collect recyclables within unincorporated Kitsap County through a service agreement with Waste Management, which provides collection services with oversight from W.U.T.C..

Household Hazardous Waste

The County owns and operates a Household Hazardous Waste Facility that supports a program for household hazardous waste accepted from the general public and small businesses. Hazardous waste materials such as antifreeze, motor oil, auto and household batteries, are accepted at “satellite” drop-box stations extend the availability hazardous waste services throughout the county.

Level of Service

The existing level of service for solid waste is calculated based on 2006 estimated countywide population, and the average per capita generation rates for solid waste and recycling, as shown in Table SW.2-1.

Table SW.2-1. LOS Requirements Analysis (2006) – Kitsap Solid Waste System

Countywide Population	SW Generation Rate ² (lbs/cap/day) (1)	SW Tons Generated per Year (2)	SW Recycling Rate (lbs/cap/day) (3)	Recycled Tons per Year
251,635	6.4	293,910	1.0	45,923

⁽¹⁾ SW Generation rate shown is calculated from SW produced within Kitsap County, and does not include SW brought in for disposal or recycling from other states.

⁽²⁾ SW generated does not include recycled waste.

⁽³⁾ The recycling rate is based on data reported by the Department of Ecology's annual Recycling Survey. Note: The County currently has a 20-year contract that took effect in 2002 to send waste to a landfill managed by WMI, and the landfill has capacity for 50 to 100 years, plus additional acreage that could be permitted to increase capacity beyond that. Planning at both Kitsap County and WMI occurs on a yearly basis based on future projected needs. The County would have adequate time to plan for 2025 levels of waste generation, and projected levels could be accommodated at the current landfill site if a new or extended contract is enacted (Olson, 2006).

Capital Facilities Projects and Financing: 2007-2012

Table SW.3 below shows the 2007-2012 CFP for solid waste facilities, which includes seven projects at a cost of \$4,605,000 for the six-year period.

Table SW.3. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

SOLID WASTE							
COSTS/REVENUES	2007	2008	2009	2010	2011	2012	TOTAL
<i>Capacity Projects</i>							
1. Drop Box Facilities Improvements and Expansion							
Cost	75.0	500.0					575.0
Rev - Tipping Fees	75.0	500.0					575.0
2. Household Hazardous Waste Facility Ventilation Improvements and Expansion							
Cost	25.0						25.0
Rev - Tipping Fees	25.0						25.0
3. Poulsbo Recycling Center Expansion							
Cost	150.0						150.0
Rev - Tipping Fees	150.0						150.0
4. Composting/CDL Facility Expansion							
Cost	250.0	1,750.0					2,000.0

SOLID WASTE							
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
Rev - Tipping Fees	250.0	1,750.0					2,000.0
<hr/>							
5. New Household Hazardous Waste Satellite Facility							
Cost	75.0	1,500.0					1,575.0
Rev - Tipping Fees	75.0	1,500.0					1,575.0
<hr/>							
6. Olympic View Transfer Station (Buyout Options Pending)							
Cost							0.0
Rev - Tipping Fees							0.0
<hr/>							
Subtotal	575.0	3,750.0	0.0	0.0	0.0	0.0	4,325.0
<i>Non-Capacity Projects</i>							
<hr/>							
7. Hansville Landfill Closure Operations							
Cost	20.0	75.0	20.0	125.0	20.0	20.0	280.0
Rev - Tipping Fees	20.0	75.0	20.0	125.0	20.0	20.0	280.0
<hr/>							
Subtotal	20.0	75.0	20.0	125.0	20.0	20.0	280.0
<hr/>							
<i>SUMMARY: COSTS AND REVENUES</i>							
COSTS:							
Capacity Projects:							
	<u>575.0</u>	<u>3,750.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>4,325.0</u>
Subtotal	575.0	3,750.0	0.0	0.0	0.0	0.0	4,325.0
Non-Capacity Projects							
	<u>20.0</u>	<u>75.0</u>	<u>20.0</u>	<u>125.0</u>	<u>20.0</u>	<u>20.0</u>	<u>280.0</u>
Subtotal	20.0	75.0	20.0	125.0	20.0	20.0	280.0
<hr/>							
Total Costs	595.0	3,825.0	20.0	125.0	20.0	20.0	4,605.0
<hr/>							
EXISTING REVENUES							
Rev - Tipping Fees	<u>595.0</u>	<u>3,825.0</u>	<u>20.0</u>	<u>125.0</u>	<u>20.0</u>	<u>20.0</u>	<u>4,605.0</u>
Subtotal	595.0	3,825.0	20.0	125.0	20.0	20.0	4,605.0
<hr/>							
NEW REVENUES							
Rev -	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<hr/>							
Total Revenues	595.0	3,825.0	20.0	125.0	20.0	20.0	4,605.0
<hr/>							
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Background

Storm drainage facilities within unincorporated Kitsap County include a diverse combination of natural and constructed conveyance systems and quantity and quality control facilities. Ownership, maintenance responsibility, and stewardship of drainage facilities take place through a variety of means. The type and condition of stormwater facilities within Kitsap County are described below.

The National Pollutant Discharge Elimination System (NPDES) program of the federal Environmental Protection Agency requires that point source discharges meet federal and state water quality standards and that routine monitoring be conducted to ensure compliance. The program was authorized by the Clean Water Act of 1972, and is administered by the Washington State Department of Ecology (DOE). Discharges from Kitsap County's municipal storm sewer system infrastructure are not currently regulated under NPDES. The Puget Sound Water Quality Management Plan, first adopted in 1989, identified the need for a watershed management process to systematically address non-point sources of pollution throughout the Puget Sound Basin. The plan also directed each county within the Puget Sound Basin to rank its watersheds in order of priority for developing action plans to control non-point source pollution. Ranking of the County's nine primary watersheds prioritized those most in need of corrective actions to manage non-point source pollution. Many of the watersheds are also located within areas of rapid urbanization where potential impacts on fisheries and shellfish resources are a consideration.

The Puget Sound Water Quality Management Plan also directed DOE to develop a technical manual addressing erosion and sediment control, runoff control, and pollution from urban land uses. DOE was also charged with providing program implementation guidance to local jurisdictions within the Puget Sound Basin. The DOE *Stormwater Management Manual for the Puget Sound Basin* was completed in February 1992. All cities and counties within the Puget Sound Basin are required to adopt ordinances and technical manuals that are "substantially equivalent" to DOE's manual.

In response to this requirement, Kitsap County began development of the *Kitsap County Stormwater Management Ordinance and Design Manual* in 1991. In March 1995, Kitsap County's proposed ordinance and its accompanying Stormwater Design Manual were found by DOE to be substantially equivalent to DOE's *Stormwater Management Manual for the Puget Sound Basin*. The Kitsap County Board of Commissioners in December 1996 adopted Kitsap County's *Stormwater Management Ordinance and Design Manual*. The regulations became effective in April of 1997.

Subsequent revisions to the Puget Sound Water Quality Management Plan require that all local jurisdictions implement stormwater management programs addressing state goals and objectives. Kitsap County's Surface and Stormwater Management Program (SSWM) was adopted by the

County Commissioners in October 1994. The following goals and objectives are the foundation of the program:

- Protect life and property from storm, waste, flood, or surplus surface water,
- Protect water quality by preventing siltation, contamination, and erosion of County waterways,
- Protect aquifers.
- Protect County shellfish resources,
- Assure compliance with federal and state surface water management and water quality regulations and legislation,
- Increase public awareness and citizen involvement, and
- Encourage preservation of natural drainage systems.

Current Facilities Inventory

Drainage facilities within Kitsap County are composed of three basic types: natural and constructed conveyance systems, rate control facilities, and runoff quality enhancement facilities. Topography and flows govern the nature and function of the County's drainage infrastructure without consideration to property ownership, land use, or political boundaries.

Conveyance systems include natural and constructed open channels as well as pipe systems and culverts. These systems may be located on private property or within County right-of-way. The division of ownership, function, and location determines the entity responsible for facilities maintenance.

Rate control facilities include retention and detention ponds, tanks, and vaults. The common purpose of these facilities is to reduce the rate of stormwater flow from a specific site or area to reduce the potential for localized flooding, or down stream erosion problems. These facilities are designed to hold a volume of run-off based on the amount of impervious area and a particular storm event. These facilities may be located on public or private property depending upon the area being served.

Runoff quality enhancement includes such facilities as water quality ponds and bio-filtration swales. The purpose of these facilities is to remove a certain type and/or amount of pollutant from the runoff before it is discharged into a water body or collection system or dispersed over the ground for infiltration. These facilities may be located on public or private property depending upon the area being served.

Development activities taking place within Kitsap County are conditioned during the application process to comply with minimum requirements of the Kitsap County Stormwater Management Ordinance. Drainage control and water quality enhancement facilities constructed for residential projects are dedicated to the County for maintenance. Facilities constructed for commercial and multifamily developments are maintained privately. An inventory of constructed retention and detention facilities and water quality swales is presented in Table SD.1.

Table SD.1. Current Facilities Inventory – Stormwater

Type of System	Quantity
Detention Pond	224
Detention Tank	46
Retention Pond	57
Bioswale	104
Infiltration Trench	28
Vault	13
Stormseptor	4
Tidegate	13
Continuous Deflection System	5
Conveyance	5
Water Quality Pond	4
Mitigation Site	1
Total Facilities	504

Level of Service

As of October 2005, the Kitsap County Surface and Stormwater Management Program assumed maintenance responsibility for more than 500 stormwater retention/detention and runoff quality enhancement facilities. More than 102 newly constructed and private residential facilities are expected to be included in the SSWM Inspection and Maintenance Programs within the next two years. Approximately 33 percent of the 2005-2006 SSWM Program budget is slated for inspection, maintenance, and retrofitting of existing County stormwater facilities.

The goals and objectives of the County's SSWM Program reflect the level of service (LOS) for stormwater management facilities. The SSWM Capital Improvement Program, adoption of the Kitsap County Stormwater Management Ordinance, and watershed planning activities undertaken by the Department of Community Development all contribute to the public's level of service expectations.

Current LOS (2006)

The current level of service complies with applicable state regulations Land development activities requiring land use approval from Kitsap County are currently conditioned to meet the water quality, runoff control, and erosion control requirements of Kitsap County's Stormwater Management Ordinance and Design Manual, which was adopted by the Board of Commissioners in December 1996 and implemented in April 1997.

The Kitsap County Storm Drainage Ordinance and Design Manual requires development projects to provide water quality enhancement for storm events up to the 6-month, 24-hour duration storm. When discharging to streams or open channels, runoff rates from development sites are required

to be controlled to meet stream bank erosion control standards. These standards require that post-developed peak flow runoff rates for the 2-year, 24-hour duration storm event be released at one-half of the pre-developed peak flow rate for that storm event. These standards also require that pre-developed peak flow runoff rates be maintained for the 10-year and 100-year/24-hour duration storm events after development occurs. Construction sites are required to provide erosion and sediment control for storm events up to and including the 2-year, 24-hour duration storm.

Capital Facilities Projects and Financing

The Capital Facilities Plan (CFP) for SSWM consists of three major elements: the construction of regional stormwater facilities; completion of drainage analysis reports; and other necessary capital improvements which include fish passage barrier elimination, flood reduction, and runoff quality enhancement projects. SSWM's first Capital Improvement Plan (CIP), formally adopted by the Board of County Commissioners in 2003, presents a strategy for future regional infrastructure planning and regional CIP projects based upon existing and future land use, flooding impacts to public and private properties, habitat values and other infrastructure needs.

The CIP includes a clear set of objectives for future capital projects, criteria for ranking existing stormwater problems and prioritizing future area specific drainage infrastructure planning efforts, taking into account future land use, habitat values and other basin conditions. SSWM staff work with a Stormwater Advisory Committee consisting of program agencies, citizens, tribes, cities, and state officials. The Committee provides input into the prioritization of capital projects as well as providing SSWM with a broad range of input regarding program direction and implementation.

Regional capital projects initiated to date have addressed cumulative impacts of past land use practices. It is a goal of the plan to work more proactively and constructively with the development community and other agencies to arrive at mutually beneficial solutions to regional stormwater quality and quantity problems.

Funding for stormwater capital improvements consumes approximately 16-percent of the annual SSWM revenue. The SSWM Program was established in 1993 and the funding mechanism was approved in 1994 with the first program revenues collected in February of 1995. The proposed six-year CIP represents a conservative approach to budgeting and completing SSWM capital projects. Over the six year period 2006-2012, unallocated funds will be spent until the annual capital allocation of \$850,000 is reached. Where feasible, grant funds and other revenue sources for capital projects will be aggressively pursued. Grants are highly competitive and available sources have been reduced in recent years. Therefore, grants are considered supplemental to the SSWM Capital Facilities Plan. Consideration is also being given to financing options for stormwater capital projects planned for potential annexation and incorporation areas so that repayment arrangements can be made through urban growth management agreements or other mechanisms.

Regional Stormwater Facility Construction

Kitsap County has made significant progress to address stormwater problems on a regional basis. During the 2005-2006 budget cycle, the following projects were initiated or in progress.

Manchester Main Street Outfall and Conveyance System

The 1999 CH2M Hill Drainage Report identified the current Main street conveyance system and marine outfall as being undersized, therefore limiting opportunities to improve and expand upstream conveyance systems. A subsequent investigation by remote camera of the existing conveyance system within Main Street near Colchester Drive revealed corrugated metal piping in the system to be significantly deteriorated.

The project proposal is to construct a regional conveyance pipeline in phases over a number of years. The initial phase of work will involve replacement of the outfall portion of the system near the Main Street public dock, including construction of new conveyance facilities on the beach and installation of closed conveyance within Main Street. The entire project includes 1,750 linear feet of upland pipe construction extending to intersection of East Main St. and Spring Ave. E. and includes collection of drainage from portions of E. Main Street, Colchester Dr., and Denniston Lane, plus 225 linear feet of marine pipe construction.

Silverdale Regional Improvements

The County plans to construct three floodway improvements during the 2006 construction season. These projects are designed to increase flood storage and ease floodwater passage within the Clear Creek floodplain. Two of these projects, the Myhre Road bridge and Silverdale Way culvert replacement, are described in the Transportation section. The third is restoration of the Clear Creek floodplain. The objective of this project is to remove fill material from the historic floodplain to the maximum extent practical to restore floodplain capacity and enhance natural functions.

Suquamish Regional Improvements

In 1999, Parametrix completed a regional drainage study for Suquamish. The main component of the recommended capital facilities plan was a regional conveyance system and new marine outfall. The first phase of the conveyance system, including the outfall, was completed in 2004. Subsequent phases are planned in 2006, 2010 and 2012.

Navy Yard City Improvements

In 2003, Parametrix completed a regional drainage study of the Navy Yard City area. The highest priority capital construction recommendation was to improve the downstream conveyance that crosses Charleston Beach Road and Highway 304. These improvements are being incorporated into the Gateway Project which is a joint venture of Kitsap County, City of Bremerton and the Washington State Department of Transportation. This phase of the project is scheduled to start construction in 2007.

Converse Regional Improvements

In 2002 Brown and Caldwell completed a regional drainage study of the Converse Avenue area. The recommended solution was to construct a regional stormwater pond and conveyance system to allow peak flow to be removed from the closed depression. Other system improvements include improvements to conveyance between Sherlyn and Converse Avenues and formalizing drainage west of Converse, near Kerry Lane.

Other Capital Improvements

In cooperation with the SSWM Advisory Committee, the Board of Commissioners, and other interested parties, a project selection/prioritization matrix was completed and implemented in 2000. Potential projects were prioritized and placed on SSWM's proposed Capital Facilities Plan. Significant progress has been made toward addressing ongoing localized flooding problems, resolving County-owned fish passage barriers and replacing aging systems. In the 2005-6 budget cycle, the following projects were initiated or in progress.

Kingston Conveyance Upgrades and Outfall Relocations

In 2001 Surface and Stormwater Management Program staff completed an in-house drainage needs assessment for drainage basins contained within the Kingston Urban Growth Area. The project discovered three outfalls just north of the ferry terminal that currently discharge high on the bank with nylon "socks" for downslope protection and some undersized conveyance lines within Ohio Ave. Design and construction of improvements to upgrade conveyance capacity and relocate the outfalls is planned to start in 2007 and complete in 2010.

Allen's Corner

Design and permitting of conveyance improvements north of Tracyton on Tracyton Blvd. were completed in 2005. Permit appeals and difficulties in negotiating easements from affected property owners have delayed the project. The county continues its efforts to obtain the permits and easements necessary to construct the project.

Removal of Fish Passage Barriers

Two culvert replacements projects have been included in the CFP to remove fish passage barriers to coincide with a wastewater conveyance upgrade at the same locations. The projects are Royal Valley Creek Culvert Replacement at Madison Road, and Royal Valley Creek Culvert Replacement at Paulsen Road.

Capital Facilities Projects and Financing: 2007-2012

The SSWM Capital Improvement Program focuses on correction of drainage problems that are not likely to be financed by the County's road fund. The objective of the program element is to secure sufficient funding to construct projects that address identified water quality problems, publicly owned fish passage barriers, and serious flooding problems located beyond County rights-of-way.

The County's stormwater facilities include 16 capital projects at a cost of \$6,920,700. The proposed financing plan is shown in Table SD.3.

Table SD.3. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

<u>COSTS/REVENUES</u>	<u>STORMWATER</u>							<u>TOTAL</u>
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>		
<i>Capacity Projects -- Conveyance/Flood Control</i>								
1. Allen's Corner - Conveyance Improvements								
Cost	215.0							215.0
Rev - Stormwater Utility Fees	215.0							215.0
2. Central Kitsap - Charleston Beach Road Conveyance Upgrade								
Cost	84.0							84.0
Rev - Stormwater Utility Fees	84.0							84.0
3. Manchester - Main Street Outfall Replacement								
Cost	1.0	1.0	800.0	250.0				1,052.0
Rev - Stormwater Utility Fees	1.0	1.0	800.0	250.0				1,052.0
4. Kingston - Outfall Modification/Upgrades								
Cost	250.0							250.0
Rev - Stormwater Utility Fees	250.0							250.0
5. Suquamish - Center/Div. St. Conveyance/Flood Improvements								
Cost	50.0	300.0						350.0
Rev - Stormwater Utility Fees	50.0	300.0						350.0
6. South Kitsap - Converse Avenue Regional Facility								
Cost	12.5	350	5.0	5.0	755.0	750.0		1,877.5
Rev - Stormwater Utility Fees	12.5	350	5.0	5.0	755.0	750.0		1,877.5
7. Kingston - Ohio Avenue Outfall Conveyance Upgrades								
Cost			35.0	360.0				395.0
Rev - Stormwater Utility Fees			35.0	360.0				395.0

COSTS/REVENUES	STORMWATER							TOTAL
	2007	2008	2009	2010	2011	2012		
8. Suquamish - Division St. Drainage Improvements (Ctr. North)								
Cost			60.0	300.0				360.0
Rev - Stormwater Utility Fees			60.0	300.0				360.0
9. Suquamish - Brockton Avenue Drainage Improvements								
Cost				35.0	10.0	200.0		245.0
Rev - Stormwater Utility Fees				35.0	10.0	200.0		245.0
	Subtotal	612.5	651.0	900.0	950.0	765.0	950.0	4,828.5
Non-Capacity Projects Fish Passage/Environmental Enhancement								
10. Clear Creek - Ridgetop Regional Downstream Ravine Improvements								
Cost						50.0		50.0
Rev - Stormwater Utility Fees						50.0		50.0
11. Chico Creek - Golf Club Hill Fishway Repairs								
Cost	100.0							100.0
Rev - Stormwater Utility Fees	100.0							100.0
12. Royal Valley Creek Culvert Replacement - Paulsen Road								
Cost	7.5	386.0						393.5
Rev - Stormwater Utility Fees	7.5	386.0						393.5
13. Royal Valley Creek Culvert Replacement - Madison Road								
Cost	7.5	411.0						418.5
Rev - Stormwater Utility Fees	7.5	411.0						418.5
14. Hansville - Wetland High Flow Bypass								
Cost	25.0	10.0	450.0					485.0
Rev - Stormwater Utility Fees	25.0	10.0	450.0					485.0
	Subtotal	140.0	807.0	450.0	0.0	0.0	50.0	1,447.0
<i>Non-Capacity Projects -- Other</i>								
15. Port of Bremerton Regional SWM Improvements Planning								
Cost	79.8	94.8	103.1	111.4	115.5	115.5		620.2
Rev - Stormwater Utility Fees	79.8	94.8	103.1	111.4	115.5	115.5		620.2

COSTS/REVENUES	STORMWATER						
	2007	2008	2009	2010	2011	2012	TOTAL
16. Emergency Response Construction							
Cost					10.0	15.0	25.0
Rev - Stormwater Utility Fees					10.0	15.0	25.0
Subtotal	79.8	94.8	103.1	111.4	125.5	130.5	645.2
<i>SUMMARY: COSTS AND REVENUES</i>							
COSTS:							
Capacity Projects:							
	<u>612.5</u>	<u>651.0</u>	<u>900.0</u>	<u>950.0</u>	<u>765.0</u>	<u>950.0</u>	<u>4,828.5</u>
Subtotal	612.5	651.0	900.0	950.0	765.0	950.0	4,828.5
Non-Capacity Projects							
	<u>219.8</u>	<u>901.8</u>	<u>553.1</u>	<u>111.4</u>	<u>125.5</u>	<u>180.5</u>	<u>2,092.2</u>
Subtotal	219.8	901.8	553.1	111.4	125.5	180.5	2,092.2
Total Costs	832.3	1,552.8	1,453.1	1,061.4	890.5	1,130.5	6,920.7
EXISTING REVENUES							
Rev - Stormwater Utility Fees	<u>832.3</u>	<u>1,552.8</u>	<u>1,453.1</u>	<u>1,061.4</u>	<u>890.5</u>	<u>1,130.5</u>	<u>6,920.7</u>
Subtotal	832.3	1,552.8	1,453.1	1,061.4	890.5	1,130.5	6,920.7
NEW REVENUES							
Rev -	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Revenues	832.3	1,552.8	1,453.1	1,061.4	890.5	1,130.5	6,920.7
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Background

- The CFP 2007-2012 includes transportation improvement projects that are identified in the County’s 20-year Transportation Needs List, which in turn, is influenced by the transportation goals, policies, and priorities included in the County’s Comprehensive Plan Transportation Element, which is the County’s long-range transportation planning document.
- The Transportation Element satisfies the requirements of GMA and defines the transportation policies, methods, and priorities for the County transportation system over a 20-year planning period. The Transportation Element is guided by the Countywide transportation planning policies, as described in the previous section. This document includes inventory of transportation infrastructure and services within the County, establishes operational standards, provides analysis methods and results for operations of the transportation system, and provides a financially balanced 6-year Transportation Improvement Plan (TIP) to ensure that the transportation system is adequate to support the long-range land use plan.

County Roadway Inventory

Table TR.1-1 summarizes the existing miles of countywide arterial roadways by County functional classification.

Table TR.1-1. Arterial Mileage by Functional Classification (Kitsap County)

Functional Classification	Total Miles of Roadway	Percentage of Total
Urban Principal Arterial	9.85	1.1%
Urban Minor Arterial	95.12	10.2%
Urban Collector	48.04	5.1%
Rural Minor Arterial	18.37	2.0%
Rural Major Collector	95.42	10.2%
Rural Minor Collector	51.25	5.5%
Local	614.12	65.9%
Total	932.16	100.0%

Source: Kitsap County 2006

Table K-1 in the DEIS Report Appendix K includes the complete Kitsap County roadway inventory, which lists county roadways by analysis segment, along with their length, number of lanes, capacity, speed limit, and Average Daily Traffic (ADT). The inventory also shows which roadway segments are currently operating under congested conditions, as defined by the procedures described in the following section.

Level of Service

Level of Service Approach and Standards

Level of service (LOS) designations are qualitative measures of congestion that describe operational conditions within a traffic stream and take into consideration such factors as volume, speed, travel time, and delay. LOS is represented by letter grades, A through F. LOS A through C imply traffic flows with minimal delay, while LOS D and E imply conditions that approach capacity, and LOS F implies unstable flow with potential for substantial delays (Transportation Research Board 2000). The characteristics of the six LOS designations for roadway segments and intersections are summarized in Table TR.2-1. The LOS scale has been adopted by the Institute of Transportation Engineers, the Transportation Research Board, and by most jurisdictions throughout the country.

Table TR.2-1. LOS Descriptions

LOS	Roadways	Intersections
A	Describes primarily free flow operations at average travel speeds, usually about 90% of the free flow speed for the arterial class. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delay at signalized intersections is minimal.	Describes operations with low control delay, up to 10 s/veh. This LOS occurs when progression is extremely favorable and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.
B	Represents reasonably unimpeded operations at average travel speeds, usually about 70% of the free flow speed for the arterial class. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome. Drivers are not generally subjected to appreciable tension	Describes operations with control delay greater than 10 and up to 20 s/veh. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.
C	Represents stable conditions; however, ability to maneuver and change lanes in mid block location may be more restricted than in LOS B, and longer queues and/or adverse signal coordination may contribute to lower average travel speeds of about 50% of the average free flow speed for the arterial class. Motorists will experience appreciable tension while driving	Describes operations with control delay greater than 20 and up to 35 s/veh. These higher delays may result from only fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflows occur. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
D	Borders on a range in which small increases in flow may cause substantial increases in approach delay and, hence, decreases in arterial speed. This may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these. Average travel speeds are about 40% of free flow speed	Describes operations with control delay greater than 35 and up to 55 s/veh. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, and high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable
E	Characterized by significant approach delays and average travel speeds of one-third the free flow speed or lower. Such operations are caused by some combination of adverse progression, high signal density, extensive queuing at critical intersections, and inappropriate signal timing.	Describes operations with control delay greater than 55 and up to 80 s/veh. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent
F	Characterizes arterial flow at extremely low speeds below one-third to one-quarter of the free flow speed. Intersection congestion is likely at critical signalized locations, with resultant high approach delays. Adverse progression is frequently a contributor to this condition.	Describes operations with control delay in excess of 80 s/veh. This level, considered unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of lane groups. It may also occur at high v/c ratios with many individual cycle failures. Poor progression and long cycle lengths may also contribute significantly to high delay levels.

Source: Transportation Research Board 2000

Roadway Segment LOS

Kitsap County uses traditional engineering methodology to evaluate LOS of roadway segments, which are sections of roadway located between major intersections. Roadway travel volumes are compared to roadway capacity to develop a ratio known as volume-to-capacity (V/C). The

volume-to-capacity ratios relate directly to measures of level of service. Table TR.2-2 shows the relationships between LOS, V/C ratios, peak hour, and free flow speed on a roadway segment.

Table TR.2-2. V/C Ratio Ranges As They Relate To LOS

LOS	Volume to Capacity Ratio Range	Percent of Free Flow Speed (Peak Hour)
A	0.50 and below	90% or greater
B	0.60 to 0.69	70% to 90%
C	.70 to .79	50%
D	.80 to .89	40%
E	.90 to .99	33%
F	1.00 and above	25% or less

Intersection LOS

Kitsap County currently has LOS standards adopted only at the roadway segment level. However, in more urban parts of the County, it has been recognized that roadway operations may be controlled more by intersection operations than overall roadway segment operations. In these areas, the County has also been regularly measuring and analyzing intersection LOS.

Intersection LOS is determined by the average amount of delay experienced by vehicles at the intersection. Table TR.2-3 summarizes the LOS criteria for signalized intersections.

Table TR.2-3. LOS Criteria for Signalized Intersections

LOS	Average Delay per Vehicle (seconds/vehicle)
A	≤ 10
B	> 10 – 20
C	> 20 – 35
D	> 35 – 55
E	> 55 – 80
F	> 80

Source: TRB 2000

For stop-controlled intersections, LOS depends on the amount of delay experienced by drivers on the stop-controlled approaches. The LOS criteria for stop-controlled intersections have different threshold values than the criteria for signalized intersections, primarily because drivers expect different levels of performance from distinct types of transportation facilities. In general, stop-controlled intersections are expected to carry lower volumes of traffic than signalized intersections. Thus, for the same LOS, a lower level of delay is acceptable at stop-controlled intersections than it is for signalized intersections. Table TR.2-4 summarizes the LOS thresholds for stop-controlled intersections.

Table TR.2-4. LOS Criteria for Stop-Controlled Intersections

LOS	Average Delay per Vehicle (seconds/vehicle)
A	≤ 10
B	> 10 – 15
C	> 15 – 25
D	> 25 – 35
E	> 35 – 50
F	> 50

Source: TRB 2000

LOS Standards

LOS standards are used to evaluate the transportation impacts of long-term growth and concurrency. Jurisdictions must adopt standards by which the minimum acceptable roadway operating conditions are determined and deficiencies may be identified.

LOS standards for county arterials and state highways, located within Kitsap County, involve three different policy approaches established by Kitsap County, PSRC, and WSDOT. While somewhat diverse in application, all the standards and methodologies are consistent with the Highway Capacity Manual (Transportation Research Board 2000) definitions and procedures.

County Roadways

Kitsap County's LOS policy generally recognizes that urban areas are likely to have more congestion than rural areas. This reflects the different characteristics of land use and transportation in these areas. For purposes of defining LOS standards, urban areas are the geographic areas located within a UGA boundary, and rural areas are the geographic areas located outside of all UGA boundaries.

The LOS standards shown in Table TR.2-5 are based upon the location and functional classification of the roadway facilities to which they apply. Though the County's goal is to have no LOS deficiencies, it is recognized that not all roadways will meet the standards all the time given the limits of county, state and federal funding and timing of project implementation. Therefore, 15 % of the lane miles tested for concurrency will be allowed to temporarily exceed LOS standards. This 15 % allowance shall be applied at both the system wide and project site level.

Table TR.2-5. Roadway Capacity/Congestion LOS Standards

Functional Classification	Maximum V/C Ratio/LOS Standard	
	Urban ¹	Rural ²
Principal Arterial	.89/D	.79/C
Minor Arterial	.89/D	.79/C
Collector	.89/D	.79/C
Minor Collector	.89/D	.79/C
Residential/Local	.79/C	.79/C

¹Urban area is located within a UGA boundary

²Rural area is located outside UGA boundaries

Concurrency Management

GMA requires that Kitsap County adopt and enforce ordinances that prohibit development approval if the development causes the LOS on a transportation facility to decline below the standards adopted in the transportation element of the Comprehensive Plan, unless transportation improvements or strategies to accommodate the impacts of development are made concurrent with the development. This requirement is commonly referred to as “concurrency” and is described in WAC 365-195-835. Concurrency means that transportation infrastructure and services must be adequate to support land use, with adequacy defined by locally adopted standards. Under GMA, ‘concurrent with the development’ shall mean that improvements or strategies are in place at the time of development, or that a financial commitment is in place to complete the improvements or strategies within six years.

The purpose of concurrency management is as follows:

- Provide adequate levels of service on transportation facilities for existing uses as well as new development in unincorporated Kitsap County;
- Provide adequate transportation facilities that achieve and maintain County standards for levels of service as provided in the comprehensive plan, as amended; and
- Ensure that County level of service standards are maintained as new development occurs as mandated by the concurrency requirements of the GMA.

The Kitsap County Concurrency Management Ordinance establishes the process for testing whether a development project meets concurrency. At the system wide level, measures of system wide concurrency are conducted on an annual basis and periodically during development of the comprehensive plan, subarea plans and corridor studies.

At the project site level, Individual development proposals are tested for concurrency at the project site level, or area of influence.

If LOS is equal to or better than the adopted standard, the concurrency test is passed, and an applicant is issued a Capacity Reservation Certificate. For purposes of concurrency determination, the analysis of LOS adequacy would only be applied to County arterials and

collectors in rural areas and urban areas under the County’s jurisdiction. A Certificate of Concurrency is not issued to any proposed development if the standards in this section are not achieved and maintained within the 6-year period allowed by GMA for transportation concurrency. The applicant has the option of accepting the denial of application; appealing the denial of application; or accepting a 90-day reservation period, and within this time, revising the development proposal to bring transportation within concurrency requirements.

Existing Roadway – LOS Deficiencies

Table TR 2-6 summarizes the miles of roadway segment that LOS analysis has shown to exceed standards (are deficient) under existing conditions. DEIS Appendix K shows the LOS for each analysis segment in the County. The information in the table represents all segments with functional classification of collector or higher, and shows that approximately 4.3% of lane-miles of functionally classified roadways in Kitsap County currently exceed LOS standards. This is well below the 15% concurrency threshold, and indicates that under the existing concurrency management program, the system-wide concurrency test would be passed for a considerable level of additional development.

Table TR.2-6. Summary: Roadway Deficiencies for County Roadways

Region	Total Number of Segments ¹	Total Lane-Miles ²	Number of Deficient Segments ³	Lane-Miles of Deficient Segments ³	Percent Lane-Miles of Deficient Segments	Concurrency Threshold
North	170	191.5	11	14.3	7.5%	N/A
Central	263	202.3	12	4.5	2.2%	N/A
South	215	251.2	13	8.6	3.4%	N/A
TOTAL	648	645.0	36	27.4	4.3%	15%

Source: Kitsap County 2006

¹Segments include all functionally classified roadways (collector or higher)

²Lane-miles are calculated by multiplying the length of the roadway by the number of lanes on that roadway

³Deficient segments are those for which V/C exceeds standards defined in Table 3.2-7.

Capital Facilities Projects and Financing: 2007-2012

Transportation facilities include 61 improvements to capital facilities at various locations throughout the County at a cost of \$88,800,000. The proposed financing plan is shown on Table TR-3. The table does not show transportation improvements that will be financed and constructed by private parties, for example, improvements that are conditions of a project approval.

Table TR.3. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

<u>COSTS/REVENUES</u>	<u>TRANSPORTATION</u>						<u>TOTAL</u>
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	
Capacity Projects							
1. Bucklin Hill Road (1)							
Signal at W. Entrance Silverdale Plaza intersection/signal improvements at Mickelberry Road and pedestrian crossing at Clear Creek Trail							
Cost -	150.0						150.0
Rev - Federal -- STPU	90.0						90.0
Rev - Local Discretionary Revenue	60.0						60.0
2. Mile Hill Drive (2)							
Long Lake Rd. to Colchester Dr. Widen to 3 lanes, Safety / Intersection Imp's. Pedestrian/Bicycle Improvements							
Cost -	65.0						65.0
Rev - Local Discretionary Funds	65.0						65.0
3. Silverdale Way North (3)							
Schold Rd. to Mountain View Rd. Widen to 3 lanes, traffic signals Pedestrian/Bicycle Improvements							
Cost -	10.0						10.0
Rev - Local Discretionary Funds	10.0						10.0
4. Miller Bay Road Improvements (7)							
Indianola Road to Gunderson Road Widening / Intersection Improvements							
Cost -	2,940.0	25.0					2,965.0
Rev - Federal -- STPR	493.0						493.0
Rev - Local Discretionary Funds	1,817.0	25.0					1,842.0
Rev - Impact Fees	630.0						630.0
5. SR 3 / SR 303 Interchange (8)							
Construct New Interchange Participation w/ WSDOT							
Cost -	1,406.0						1,406.0
Rev - TIA	1,041.0						1,041.0
Rev - Impact Fees	365.0						365.0
6. Waaga Way Extension (9)							
Extend Waaga Way to Old Frontier Construct New Route to include Pedestrian/Bicycle Facilities							
Cost -	6,730.0	25.0					6,755.0
Rev - Federal -- STPU	3,517.0	25.0					3,542.0
Rev - Impact Fees	2,489.0						2,489.0
Rev - Local Discretionary Funds	724.0						724.0

<u>COSTS/REVENUES</u>	<u>TRANSPORTATION</u>						<u>TOTAL</u>
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	
<hr/>							
7. Miller Bay Road (10)							
Heritage Park Entrance							
Widen/channelization							
Cost -	450.0						450.0
Rev - Local Discretionary Funds	450.0						450.0
<hr/>							
8. Bucklin Hill Road (19)							
Construct right-turn drop lane to Southbound							
Tracyton Boulevard							
Cost -	130.0	700.0					830.0
Rev - Local Discretionary Funds	130.0	700.0					830.0
<hr/>							
9. Silverdale Way / Anderson Hill (20)							
Traffic Signal System and Pedestrian							
Improvements							
Cost -	30.0	440.0					470.0
Rev - Local Discretionary Funds	30.0	440.0					470.0
<hr/>							
10. Miller Bay/West Kingston Intersection Improvements (21)							
Miller Bay Rd. at West Kingston Road							
Channelization/Intersection Improvements							
Cost -	75.0	375.0					450.0
Rev - Local Discretionary Funds	15.0	75.0					90.0
Rev - Impact Fees	60.0	300.0					360.0
<hr/>							
11. Bethel Road Corridor (26)							
Ives Mill Road to Lincoln Ave.							
Widen to 5 lanes							
Includes Pedestrian/Bicycle Facilities							
Cost -	4,625.0	4,575.0	6,550.0	6,500.0			22,250.0
Rev - G.O. Bond Issue	4,625.0	4,575.0	50.0				9,250.0
Rev - TIA/Bond			6,211.5	6,211.5			12,423.0
Rev - Impact Fees			288.5	288.5			577.0
<hr/>							
12. Lund Avenue SE (27)							
Bethel Road to Hoover St.							
Widen to 5-lanes in conjunction with Bethel Rd.							
Project - Includes Pedestrian/Bicycle Facilities							
Cost -	170.0	155.0	605.0				930.0
Rev - Developer/Bond	97.5	97.5					195.0
Rev - CRID	9.0		120.0				129.0
Rev - Impact Fees	63.5	57.5	485.0				606.0
<hr/>							
13. SR 304 Improvements (34)							
Gorst to Bremerton Ferry Terminal							
Participation with City of Bremerton							
Cost -		332.0					332.0
Rev - Local Discretionary Funds		135.0					135.0
Rev - Impact Fees		197.0					197.0

<u>COSTS/REVENUES</u>	<u>TRANSPORTATION</u>						
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<hr/>							
14. Old Clifton / Anderson Hill to Berry Lake (36)							
Relax curve / realign intersection / channelization safety improvements							
Cost -	70.0	50.0	750.0				870.0
Rev - Impact Fees	70.0	10.0	400.0				480.0
Rev - Local Discretionary Funds		40.0	350.0				390.0
<hr/>							
15. Stevens Road (37)							
Bandix Road to County Line							
Widen, resurface, drainage imp's. 2-R Stds. Pedestrian/Bicycle Improvements							
Cost -	100.0	310.0	1,600.0				2,010.0
Rev - RAP			500.0				500.0
Rev - Local Discretionary Funds	100.0	310.0	1,100.0				1,510.0
<hr/>							
16. Miller Bay Road (38)							
SR 104 to Indianola Road							
Construct separated bike trail							
Cost -	450.0	1,035.0	3,400.0				4,885.0
Rev - Federal -- STPE	250.0	135.0					385.0
Rev - Local Discretionary Funds	200.0	900.0	3,400.0				4,500.0
<hr/>							
17. Sidney Road (39)							
Spruce Road to Lakeway Boulevard							
Widen, Resurface, Pedestrian/Bicycle Imp.							
Cost -	65.0	85.0	1,645.0				1,795.0
Rev - RAP			500.0				500.0
Rev - Local Discretionary Funds	65.0	85.0	1,145.0				1,295.0
<hr/>							
18. Olhava Area Improvements (41)							
Intersection improvements, shoulder paving							
Pedestrian/Bicycle Improvements							
Cost -		50.0	150.0	200.0	200.0	200.0	800.0
Rev - Developer		50.0	150.0	200.0	200.0	200.0	800.0
<hr/>							
19. Hansville Road (42)							
Casino Entrance to Solid Waste Site Road							
Widen/Channelization							
Cost -		100.0	100.0	592.0			792.0
Rev - Developer		100.0	60.0	25.0			185.0
Rev - Local Discretionary Funds			40.0	567.0			607.0
<hr/>							
20. Lake Flora Road (44)							
SR 3 to J.M. Dickenson Rd. - Pave shoulders, Realign intersection, Resurface, 3-R Standards							
Cost -		210.0	160.0	5,800.0			6,170.0
Rev - RAP		170.0	100.0	230.0			500.0
Rev - Impact Fees				739.0			739.0
Rev - Local Discretionary Funds		40.0	60.0	4,831.0			4,931.0
<hr/>							

<u>COSTS/REVENUES</u>	<u>TRANSPORTATION</u>						<u>TOTAL</u>
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	
<hr/>							
21. Carney Lake Road (45) Alta Vista Dr. to J.M. Dickenson Rd. Widen, Realign, Resurface, Pedestrian/ Bicycle Improvements							
Cost -		85.0	165.0	925.0			1,175.0
Rev - Local Discretionary Funds		85.0	165.0	925.0			1,175.0
<hr/>							
22. Cliffside Road (46) Hood Canal Drive to Little Boston Road Widen, Resurface, Pedestrian/Bicycle Imp.							
Cost -		90.0	50.0	975.0			1,115.0
Rev -RAP				750.0			750.0
Rev - Local Discretionary Funds		90.0	50.0	225.0			365.0
<hr/>							
23. Old Clifton Road (48) McCormick Woods Drive Intersection/ Signal Improvements							
Cost -			45.0	225.0			270.0
Rev - Impact Fees				180.0			180.0
Rev - Local Discretionary Funds			45.0	45.0			90.0
<hr/>							
24. Bucklin Hill Road (49) Clear Creek Crossing Replace Culvert w/New Bridge							
Cost -	1,000.0	1,061.0	514.0	2,190.0	2,240.0		7,005.0
Rev - STP				1,600.0			1,600.0
Rev - Local Discretionary Funds	1,000.0	1,061.0	514.0	590.0	2,240.0		5,405.0
<hr/>							
25. Bucklin Hill Road Road (50) Clead Creek to Tracyton Boulevard Widen (5 Lanes) w/Pedestrian/Bicycle Facilities							
Cost -			1,060.0	1,557.0	1,765.0	2,300.0	6,682.0
Rev - STP					1,115.0	1,110.0	2,225.0
Rev - Local Discretionary Funds			1,060.0	1,557.0	650.0	1,190.0	4,457.0
<hr/>							
26. Old Clifton Road (54) Campus Parkway Intersection Improvements Widen for channelization							
Cost -			25.0	60.0	15.0	470.0	570.0
Rev - Impact Fees			8.0	60.0		376.0	444.0
Rev - Local Discretionary Funds			17.0		15.0	94.0	126.0
<hr/>							
Subtotal	18,466.0	9,703.0	16,819.0	19,024.0	4,220.0	2,970.0	71,202.0
<hr/>							
Non-Capacity Projects							
<hr/>							

<u>COSTS/REVENUES</u>	<u>TRANSPORTATION</u>						<u>TOTAL</u>
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	
<hr/>							
27. Southworth Drive (4)							
Olympiad Drive to Harper Dock							
Widen Shoulders - Drainage Improvements							
Pedestrian/Bicycle Improvements							
Cost -	950.0						950.0
Rev - Federal -- STPE	295.0						295.0
Rev - Local Discretionary Funds	655.0						655.0
<hr/>							
28. Glud's Pond Culvert Removal (5)							
Steele Creek at Glud's Pond Road							
Culvert Removal and Channel Reconstruction							
Cost -	1,805.0	25.0					1,830.0
Rev - Federal -- SRF	776.0	25.0					801.0
Rev - Local Discretionary Revenue	1,029.0						1,029.0
<hr/>							
29. Tremont Avenue (6)							
SR16 to Port Orchard Boulevard							
Participation with City of Port Orchard							
Pedestrian/Bicycle Improvements							
Cost -	10.0						10.0
Rev - Local Discretionary Funds	10.0						10.0
<hr/>							
30. Dewatto Road W (11)							
Culvert replacement							
Cost -	140.0						140.0
Rev - Local Discretionary Funds	140.0						140.0
<hr/>							
31. Augusta Avenue (12)							
Center Street to Geneva Street							
Paved Shoulders Coordinated With SSWM							
Cost -	130.0						130.0
Rev - Local Discretionary Funds	130.0						130.0
<hr/>							
32. Lund Avenue Bridge (13)							
Repairs to Lund Avenue Bridge at Blackjack Creek							
Cost -	185.0						185.0
Rev - Local Discretionary Funds	185.0						185.0
<hr/>							
33. Suquamish Way (14)							
SR 305 to Division Ave.							
Construct paved shoulders							
Cost -	165.0						165.0
Rev - Local Discretionary Funds	165.0						165.0
<hr/>							
34. Miller Bay Estates (15)							
15 - Various locations, 2" Overlay							
Cost -	305.0						305.0
Rev - Local Discretionary Funds	305.0						305.0
<hr/>							
35. Washington Boulevard Phase II (16)							
Passive Dewatering System							

<u>COSTS/REVENUES</u>	TRANSPORTATION						<u>TOTAL</u>
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	
Cost -	302.0						302.0
Rev - Local Discretionary Funds	302.0						302.0
<hr/>							
36. Technology Boulevard (17)							
Intersection Study							
Participation With Port of Bremerton							
Cost -	30.0						30.0
Rev - Local Discretionary Funds	30.0						30.0
<hr/>							
37. Southeast Blueberry Road (18)							
Right of Way Acquisition							
Cost -	100.0						100.0
Rev - Local Discretionary Funds	100.0						100.0
<hr/>							
38. Hood Canal Drive (22)							
Hood Canal Pl. to Ponderosa Dr.							
Safety Improvement							
Horizontal & Vertical Alignment Corrections							
Cost -	40.0	585.0					625.0
Rev - Local Discretionary Funds	40.0	585.0					625.0
<hr/>							
39. Panther Lake Road (23)							
Replace deteriorating culvert and roadway							
Cost -	5.0	145.0					150.0
Rev - Local Discretionary Funds	5.0	145.0					150.0
<hr/>							
40. Locker Road (24)							
Replace culvert, restore bank erosion							
Cost -	25.0	225.0					250.0
Rev - Local Discretionary Funds	25.0	225.0					250.0
<hr/>							
41. Mountain View Road (25)							
Culvert replacement							
Cost -	30.0	250.0					280.0
Rev - Local Discretionary Funds	30.0	250.0					280.0
<hr/>							
42. Countywide Guardrail Installation (28)							
Eight Locations of Guardrail Installation							
Cost -	20.0	480.0					500.0
Rev - STPS(S)	20.0	480.0					500.0
<hr/>							
43. South Kingston Road (29)							
Jefferson Point to Whitehorse							
Construct paved shoulders							
Cost -		100.0					100.0
Rev - Local Discretionary Funds		100.0					100.0

<u>COSTS/REVENUES</u>	<u>TRANSPORTATION</u>						<u>TOTAL</u>
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	
<hr/>							
44. Sesame Street (30) Newberry Hill Road to Big Bird Drive Overlay with gravel shoulders							
Cost -		100.0					100.0
Rev - Local Discretionary Funds		100.0					100.0
<hr/>							
45. Lincoln Road (31) Noll Road/Gala Way, Participation with Poulsbo Intersection Improvements & Rondabout							
Cost -		100.0					100.0
Rev - Local Discretionary Funds		100.0					100.0
<hr/>							
46. Mosquito Fleet Trail (32) Gunderson to Cowling Creek Trail Right-Of-Way Purchase							
Cost -		370.0					370.0
Rev - Local Discretionary Funds		370.0					370.0
<hr/>							
47. NE Center Street Rehabilitation Improvement (33) Division Ave. to Brockton Coordinated Improvements with SSWM							
Cost -		70.0					70.0
Rev - Local Discretionary Funds		70.0					70.0
<hr/>							
48. NE Center Street Rehabilitation Improvement (35) Augusta Ave. to Division Ave Coordinated Improvements with SSWM							
Cost -	26.0	50.0	315.0				391.0
Rev - Local Discretionary Funds	26.0	50.0	315.0				391.0
<hr/>							
49. Hood Canal Drive (40) Ponderosa Blvd. to Twin Spits Rd. Construct paved shoulders							
Cost -			110.0				110.0
Rev - Local Discretionary Funds			110.0				110.0
<hr/>							
50. Hansville Road (43) Solid Waste Road to Twin Spits Road Construct Paved Shoulders							
Cost -		25.0	50.0	1,225.0			1,300.0
Rev - Local Discretionary Funds		25.0	50.0	1,225.0			1,300.0
<hr/>							
51. Kent Avenue W. (47) Slope Stabilization North of West Prospect Street							
Cost -		25.0	75.0	130.0			230.0
Rev - Local Discretionary Funds		25.0	75.0	130.0			230.0
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<u>COSTS/REVENUES</u>	<u>TRANSPORTATION</u>						
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<hr/>							
52. Tracyton Blvd. (51)							
Allens Corner to Holland Road							
Widen Shoulders, Drainage Imp's.							
Cost -		60.0	145.0	50.0	1,800.0		2,055.0
Rev - Local Discretionary Funds		60.0	145.0	50.0	1,800.0		2,055.0
<hr/>							
53. South Kingston Rd. Culvert Replacement (52)							
Carpenter Creek at S. Kingston Road							
Participation with Corps of Engineers							
Cost -					650.0		650.0
Rev - Federal -- SRF					619.0		619.0
Rev - Local Discretionary Funds					31.0		31.0
<hr/>							
54. Bridge No. 21 (53)							
Southworth Drive Bridge							
Southworth Drive at Curley Creek							
Replace concrete bridge							
Cost -				185.0	150.0	1,800.0	2,135.0
Rev - Local Discretionary Funds				185.0	150.0	1,800.0	2,135.0
<hr/>							
55. Bridge No. 11 (55)							
Miami Beach Bridge							
Miami Beach Road at Seabeck Creek							
Bridge Replacement							
Cost -					85.0	350	435.0
Rev - Local Discretionary Funds					85.0	350	435.0
<hr/>							
56. Various Locations (56)							
County Wide Sidewalk Repair							
Replacement/repair of sidewalks and							
pedestrian ramps at various locations							
Cost -	200.0		200.0		200.0		600.0
Rev - Local Discretionary Funds	200.0		200.0		200.0		600.0
<hr/>							
57. Various Locations (57)							
County Wide Culvert Projects							
Replacement of emergent structurally or							
capacity deficient culverts							
Cost -	100.0	100.0	100.0	100.0	100.0	100.0	600.0
Rev - Local Discretionary Funds	100.0	100.0	100.0	100.0	100.0	100.0	600.0
<hr/>							
58. County Wide Surfacing Upgrades (58)							
Base stabilization and paving of structurally							
deficient pavements at various locations							
Cost -	100.0	100.0	100.0	100.0	100.0	100.0	600.0
Rev - Local Discretionary Funds	100.0	100.0	100.0	100.0	100.0	100.0	600.0

<u>COSTS/REVENUES</u>	<u>TRANSPORTATION</u>						
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
59. Various Locations (59)							
County Wide Safety Improvements							
Spot improvements for guardrail, and traffic safety improvements							
Cost -		200.0		200.0		200.0	600.0
Rev - Local Discretionary Funds		200.0		200.0		200.0	600.0
60. Various Locations (60)							
County Wide Bicycle/Ped. Improvements							
Spot improvements for bicycle/pedestrian (Shoulder improvements by Day Labor)							
Cost -	100.0	100.0	100.0	100.0	100.0	100.0	600.0
Rev - Local Discretionary Funds	100.0	100.0	100.0	100.0	100.0	100.0	600.0
61. Various Locations (61)							
WSDOT Project Participation in State Projects							
Projects Involving County Roads							
Cost -	100.0	100.0	100.0	100.0	100.0	100.0	600.0
Rev - Local Discretionary Funds	100.0	100.0	100.0	100.0	100.0	100.0	600.0
Subtotal	18,466.0	3,210.0	1,295.0	2,190.0	3,285.0	2,750.0	17,598.0
() Designates TIP Priority Ranking							

SUMMARY: COSTS AND REVENUES

COSTS:							
Capacity Projects:							
	<u>18,466.0</u>	<u>9,703.0</u>	<u>16,819.0</u>	<u>19,024.0</u>	<u>4,220.0</u>	<u>2,970.0</u>	<u>71,202.0</u>
Subtotal	18,466.0	9,703.0	16,819.0	19,024.0	4,220.0	2,970.0	71,202.0
Non-Capacity Projects							
	<u>4,868.0</u>	<u>3,210.0</u>	<u>1,295.0</u>	<u>2,190.0</u>	<u>3,285.0</u>	<u>2,750.0</u>	<u>17,598.0</u>
Subtotal	4,868.0	3,210.0	1,295.0	2,190.0	3,285.0	2,750.0	17,598.0
Total Costs	23,334.0	12,913.0	18,114.0	21,214.0	7,505.0	5,720.0	88,800.0
EXISTING REVENUES							
Rev - Local Discretionary Rev	8,443.0	6,691.0	9,241.0	10,930.0	5,571.0	4,034.0	44,910.0
Rev - Impact Fees	3,677.5	564.5	1,181.5	1,267.5	0.0	376.0	7,067.0
Rev - Federal --SRF (Salmon Recovery Funding)	776.0	25.0	0.0	0.0	619.0	0.0	1,420.0
Rev - Federal -- Surface Transportation Program Funds (STP):	0.0	0.0	0.0	1,600.0	1,115.0	1,110.0	3,825.0
Rev - Federal -- STPE (STP Enhancement)	545.0	135.0	0.0	0.0	0.0	0.0	680.0
Rev -Federal -- STPR (STP Rural)	493.0	0.0	0.0	0.0	0.0	0.0	493.0
Rev - Federal -- STPS (STP Safety)	20.0	480.0	0.0	0.0	0.0	0.0	500.0
Rev - Federal -- STPU (STP Urban)	3,607.0	25.0	0.0	0.0	0.0	0.0	3,632.0
Rev - State -- RAP (Rural							

<u>COSTS/REVENUES</u>	<u>TRANSPORTATION</u>						
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
Arterial Program)	0.0	170.0	1,100.0	980.0	0.0	0.0	2,250.0
Rev - State -- TIA (Transportation Improvement Acct)	1,041.0	0.0	0.0	0.0	0.0	0.0	1,041.0
Rev - State -- TIA/Bond (Transportation Improvement Account for Bonds)	0.0	0.0	6,211.5	6,211.5	0.0	0.0	12,423.0
Subtotal	18,602.5	8,090.5	17,734.0	20,989.0	7,305.0	5,520.0	78,241.0
 <u>NEW REVENUES</u>							
Rev - CRID	9.0	0.0	120.0	0.0	0.0	0.0	129.0
Rev - Developer	0.0	150.0	210.0	225.0	200.0	200.0	985.0
Rev - Non-Voted G.O. Bonds	<u>4,722.5</u>	<u>4,672.5</u>	<u>50.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>9,445.0</u>
Subtotal	4,731.5	4,822.5	380.0	225.0	200.0	200.0	10,559.0
Total Revenues	23,334.0	12,913.0	18,114.0	21,214.0	7,505.0	5,720.0	88,800.0
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Background

The purpose of this section is to identify current water supply and transmission facilities inventories to demonstrate that adequate facilities are available for water service within Kitsap County as population increases within the County.

The following section includes water facilities owned by public and private entities in Kitsap County, including all Group “A” Community Water Systems with 50 or more connections located within the County, as identified by the State Department of Health (DOH).

Kitsap County Water Systems

Public water systems in the County have increased considerably over the past 25 years. In 1978, 450 systems were reported, compared to 742 in 1982, 803 in 1986, and 1,162 in 2003. Currently the number of systems represents approximately 7% of the 16,950 public water systems estimated to exist throughout the State of Washington.

Water systems are classified into two categories, Group A (former Classes 1–3) and Group B (former Class 4) systems. Group A systems, having 50 or more connections, currently serve 81% of the total County population; Group B systems, having two to nine connections serve 4%; and the remaining 15% of the population obtains water from individual household wells. Most of the Group B systems were developed with a shallow well to serve short plats or small subdivisions and serve only that development. Table WS.1-1 below shows the breakdown of population in the County served by the various types of water systems.

Table WS.1-1. Percent Population Served by Type of Water Supply System

Type of Water Supply System	Percent (%) Population Served
Group A Public Water Systems	81
Group B Public Water Systems	4
Individual Household Wells	15
Total	100.0

Source: Kitsap County Coordinated Water System Plan (May 9, 2005)

Each of the Group “A” water systems is required by the state to develop a Water System Comprehensive Plan, which must be updated at least every 6 years. Significant changes to infrastructure must be incorporated into the plans and approved by the state before they can be constructed.

Kitsap County Water Planning Programs

Kitsap Public Utility District (KPUD) has been designated by the Kitsap County Board of Commissioners as having countywide responsibility for technical, managerial, financial, operational, and support services needed to provide satisfactory water resource development,

protection, and utility service. KPUD also functions as a Satellite System Management Operator throughout the County by provision of direct service, contract service, and support service.

The KPUD has worked cooperatively with the County and local water purveyors to conduct the Groundwater Management Plan (GWMP) process. The District and County have also jointly sponsored the preparation of a Coordinated Water System Plan (CWSP) for Kitsap County. The District, in coordination with Ecology, completed an initial basin assessment for Kitsap County and is continuing with the second phase of the assessment by subarea. Each of these planning processes is described in more detail below.

Kitsap County Ground Water Management Plan

To meet the requirements of the Ground Water Management Act, the KPUD served as a co-lead agency to develop the Draft Kitsap County Groundwater Management Plan completed in 2004. All of Kitsap County has been identified as a groundwater management area. KPUD coordinated with water purveyors in the County, as well as other members of the Kitsap County Groundwater Advisory Committee.

Preparation of the GWMP was done in accordance with the requirements of Chapter 173-100 WAC, Groundwater Management Areas and Programs. These regulations led to the designation of Kitsap County as a Groundwater Management Area (GWMA) on October 7, 1986. An Interlocal Agreement was entered into between the KPUD and the Kitsap County Board of Commissioners on December 15, 1986. This Agreement established both entities as co-lead agencies for the evaluation and preparation of the GWMP.

Kitsap County Coordinated Water System Plan (CWSP)

The Kitsap County CWSP (revised May 9, 2005) presents an assessment of municipal and industrial water supply needs in Kitsap County and a program to effectively provide water supply and service to customers throughout the area. The CWSP was developed to comply with Chapter 70.116 RCW and Chapter 246-293 WAC by the Water Utility Coordinating Committee (WUCC). The WUCC consists of representatives from each purveyor serving more than 50 customers, the county legislative authority, the Kitsap County Department of Community Development and the Kitsap County Health District.

The CWSP provides a process and strategy for the existing water utilities to define their role in a program consistent with adopted land use polices and projected growth strategy. The regional water supply, transmission, and storage plan represents the collective views of the WUCC and integrates the findings of the Kitsap County GWMP (Water Conservation Per Groundwater Plan Volume III).

Water Conservation in the County

County government supports Group-A water utilities as they pursue ongoing conservation programs. These programs include both supply and demand management measures within individual service areas.

Members of the Water Purveyors of Kitsap County (WATERPAK) provide basic conservation kits and literature for water users. They also evaluate the advisability of countywide programs to retrofit existing homes with low flow toilets, low-flow shower heads, restricted flow aerators, and other appropriate devices on a cost-effective basis.

Water utilities conduct leak detection programs that identify problem water losses in distribution systems. The Kitsap County WATERPAK plans to evaluate a regional approach to leakage analysis efforts.

The WATERPAK developed a comprehensive, model water conservation program for small utilities. The conservation program includes conservation objectives, demand forecasting methods, program activities and level of effort, budget estimates, savings estimates, and evaluation and monitoring criteria. Program activities include education, system monitoring and improvements, promotion of conservation devices, incentives for customers, water production monitoring, drought response conservation, and other appropriate supply and demand management measures. WATERPAK plans to conduct joint conservation efforts with Pierce and Mason counties.

Current Inventory of Water Systems

This section of the CFP inventories each of 77 Group-A Water Systems serving the County, the totals of which are shown in Table WS.1-2. The table identifies the name of each water system, the portion of the 2006 County population it serves, and the current and DOH approved connections. In addition, the general characteristics of several major water systems are summarized in Table WS.1-2.

Kitsap Public Utility District Water System Facilities

The general characteristics of five major water systems managed by the KPUD are summarized below. Detailed information on each system is included in Table WS.1-2.

Eldorado Hills. Eldorado Hills is located in Section 31 and 32, Township 25N, Range 1E. It serves an area that ranges from approximately 100 feet to 500 feet in elevation. In 1984, Eldorado homeowners who were dissatisfied with their water service, requested that the District condemn and take over the water system. After a lengthy legal process, the water system was acquired by KPUD in the summer of 1986. Eldorado Hills serves only residential customers.

Keyport Water System. A majority of the Keyport Water System is located in Section 35 and 36, Township 26N, Range 1E, along the south end of Liberty Bay, north of Bremerton along the western shores of the Puget Sound. The remainder of the system is situated in Sections 1 and 2, Township 25N, Range 1E. The topography within this system also varies substantially, rising from sea level to approximately 260 feet. The water system supplies a complete mix of residential, multi-family, and commercial uses within Keyport.

North Peninsula. The North Peninsula water system was created in 1995 through the consolidation of 7 District systems, including Kingston, Hansville, Jefferson Beach, Jefferson

Point, Gamblewood, Cedar Acre 5, and Kingston Farms. The North Peninsula Water System is located on the northern end of the Kitsap Peninsula between the communities of Jefferson Beach and Hansville. The system serves residential and commercial customers.

Suquamish Water System. The Suquamish Water System includes Indianola, Miller Bay, and Suquamish. It is located along Puget Sound north of the Agate Passage bridge in Sections 8, 9, 16, 17, 20, 21, 28 and 29, Township 26N, Range 2E. Approximately 75 % of the system is within the Port Madison Indian Reservation. Topography in this service area ranges dramatically from north to south. Elevations generally extend from sea level on the eastern edge to a ridge of 360 feet in the middle before falling off on the western edge. The Suquamish water system was originally owned by the Suquamish Improvement Club before KPUD assumed operational and maintenance responsibilities in 1982. Currently, the system serves a diverse mix of residential and commercial customers.

Vinland. The Vinland system was formed in October 1994 through the intertie of the Edgewater Estates and Bella Vista systems. The system is located north of the Bangor Submarine Base in Sections 4 and 5 of Township 26N, Range 1E and Section 27, Township 27N Range 1E. The topography within the area rises from sea level near Hood Canal to elevations of 260 feet along Pioneer Way and 280 feet at Edgewater Estates to the north. The District is under contract with the City of Poulsbo to sell 120 gpm continuously from the Vinland system.

Municipal Water Systems

City of Bremerton. The current service area includes approximately 5,300 acres within the Bremerton City limits and approximately 7,420 acres within Kitsap County. This description does not include other areas with service area agreements, such as PSNS, Jackson Park, and Rocky Point Water District, or the City of Port Orchard. In 2004, the city assumed the Tracyton water system.

The City of Bremerton Water Utility service area is essentially contiguous with the surrounding water purveyors. Erland Point Water District is located at the northwestern boundary of the Bremerton Water Utility service area. The Silverdale Water District is to the northeast. The City of Bremerton Water Utility service area is bounded to the east by the North Perry Avenue Water District, and to the south by the City of Port Orchard and the Sunnyslope Water District.

City of Port Orchard. The existing service area is that property within the established city limits. The city is primarily a residential community with commercial development located to the north and east. Inside the city are two schools and various apartment units.

State Highway 166 extends along the north of the city and travels eastward from it. Commercial development has typically occurred along the corridor. Since the opening of the Port Orchard Bypass, commercial development has begun to accelerate in the Bethel corridor. Residential development is occurring primarily in the center of the city, and in the McCormick Woods subdivision within the City UGA

The northern half of the city has the greatest population density. The property development becomes more rural toward the south. The city no longer requires annexation to receive water service. It is the policy of the city to provide utility service outside its corporate limits, if the city council approves the action. The customer will be charged a 50% monthly surcharge. The city currently serves three households and the Clam Bake Restaurant along State Highway 166 in unincorporated Kitsap County.

City of Poulsbo. The City of Poulsbo is a community of about 7,500 people located at the north end of Liberty Bay in Kitsap County. The center of the city is on the east shore of the bay about 1 mile south of the head of the bay. The city extends around the head of the bay and about 0.5 mile south on the west side, and the city limits are about 2 miles down the east side of the bay. The incorporated area extends up from the shore into the low hills. It reaches elevations of 300 to 400 feet on the east, and 100 to 200 feet on the north and west.

The city has a policy requiring new customers outside city limits to file petitions for annexation and to provide power of attorney to the mayor to file petitions of annexation. This redundant system has assured that annexation occurred, and that the water system service area is within the City of Poulsbo.

Other Water Systems

Annapolis Water District. The district serves the unincorporated areas east of the city of Port Orchard. It was formed in 1942, and in 1946 it acquired the water system serving the World War II Orchard Heights Housing Project that was constructed by the Federal Housing Authority. It now serves from Watauga Beach to Long Lake and includes Beach Drive, East Port Orchard, south of Sedgwick Road, and portions of the City of Port Orchard. The 8.3 square miles of service area with three primary pressure zones range from sea level to an upper pressure zone of 487 feet.

Manchester Water District. The Manchester Water District serves the Southworth, Colby, and Manchester areas. The district's southern boundary borders Sedgwick Road and extends to Colvos Passage of Puget Sound. To the west, the boundary follows Woods Road and a portion overlaps into the Annapolis Water District.

The existing water system serving the district is composed of two service levels. There is a storage reservoir in each subsystem. These service levels are delineated by the 180 foot contour running through the district. The low-level system (elevation 275 feet) serves approximately 65% of the customers. The high level (elevation 430 feet) system has a majority of the Water District supply and storage capacity located in it, and it is growing at a faster rate than the low-level system.

North Perry Avenue Water District. North Perry Avenue Water District extends from Illahee to Keyport Road along Port Orchard Bay and is bounded to the south and west by the City of Bremerton. Although the two systems are connected, this interconnection is not currently utilized. However, it could be activated to aid either district under emergency conditions.

Silverdale Water District bounds North Perry Avenue Water District to the west. The long-range plan for the North Perry Avenue and Silverdale districts is to enter into an agreement to intertie strictly for emergency use. A portion of North Perry Avenue Water District's service area west of Central Valley Road was recently designated an uncontested overlap with Silverdale Water District. This recent change to the boundary took into consideration demand and growth factors to the area and, therefore, no further changes to the North Perry Avenue service area are anticipated in the near future.

KPUD bounds North Perry Avenue Water District to the north. At the end of 1989, the KPUD took over a small section of the north end of the North Perry Avenue Water District. This change had a minimal effect on the North Perry Avenue water system because the rural area had only a minor influence on the overall demand. Any additional changes between the two district's service areas are not foreseen to happen within the study period.

Rocky Point Water District. The Rocky Point Water District serves an area on the west side of City of Bremerton that is outside the city limits and generally encompasses the peninsula known as Rocky Point. The southern boundary is Kitsap Way. The majority of the system was constructed in the early 1940s, but several extensions have been made since that time to complete the system as it exists today. The City of Bremerton's existing water systems surround the district. The system serves approximately 530 customers. Most of these are residential customers, with a few commercial customers adjacent to Kitsap Way in the southern end of the district. There is some vacant land in the district that could provide space for the construction of additional residential units. However, part of the area is not suitable for septic tanks, which will preclude home construction at this time. Therefore, it is not anticipated that much expansion will occur in the near future.

Silverdale Water District. The Silverdale Water District provides water service to approximately 5,172 customer connections within the district's retail water service area, which primarily serves the community of Silverdale and its outlying areas. The district's existing retail service water service area comprises an area of approximately 18.5 square miles within unincorporated Kitsap County and includes portions of the Silverdale and Central Kitsap Urban Growth Areas. The 2005 population served by the district is approximately 21,678. Recently, the district acquired three additional water systems, including Forest Creek (2002), Old Bangor (2006), and Olympic View (2006).

The district includes 16 pressure zones, 19 wells with a total capacity of 6,730 gallons per minute, 13 reservoirs with a total capacity of 5.35 million gallons, 14 pressure reducing stations, and 124 miles of water distribution main.

The district is partnering with the Kitsap Public Utility District to develop a regional transmission main to wheel water through Silverdale toward Poulsbo and a plan to jointly share fire storage within the Silverdale and Newberry water systems.

Sunnyslope Water District. The service area includes the community of Sunnyslope primarily south of SR 3, northeast of the Bremerton National Airport, and east of McCormick Woods. The

service area crosses the highway and is contiguous with the City of Bremerton watershed. The district primarily serves single-family residential units at one dwelling unit per acre or greater.

Level of Service

Water Systems Inventory and Level of Service (LOS) Summary

Table WS.1- 2 shows the current inventory and capacity for the 124 Group “A” Community Water Systems that currently serve the County. The inventory includes the name of the water system, County population currently served, and existing and approved DOH connections.

Population estimates used in functional plans prepared by the water purveyors vary from the estimates used in the preparation of this plan. This is attributable to two factors. The County’s population estimates for each district are based on transportation analysis zones which overlap but do not coincide with the district’s water service area boundaries. The result is a likely overestimation of the current and future population of each district. Further, water districts’ baseline population estimates are taken from existing connections, which are converted to population estimates through persons per household assumptions.

This approach does not account for households served by private systems and therefore may result in an under-estimate of actual population located within the district service area (but not an under-estimate of actual population *served* by the district). While a portion of the UGA populations served by private water systems are anticipated to convert to public systems during the planning cycle, this is anticipated to occur after the six year horizon of this Capital Facilities Plan.

The population growth rates assumed in this plan and the districts’ current functional plans are very similar. Therefore, the water capital facilities planning is considered to adequately address the future development envisioned in this Comprehensive Plan. However, the decommissioning of private water systems within UGAs will need to be monitored to ensure that the additional ERUs not currently accounted for in the district’s capital facilities plans are addressed in future plan updates.

Table WS.1-2. Current Facilities Inventory – Group “A” Community Water Systems

50+ Connections	Connections		Water Rights ⁽²⁾			Source Capacity (gpm)	Storage Capacity (gpm in 1,000)	Data Source ⁽¹⁾	System Owner/Op ⁽⁵⁾
	Existing	Approved	Qa (afy)	Qi (gpm)	Qi (cfs)				
Alpinewood*	97	99	44.6	161		300	10	System	WW
Annapolis*	6,825	6,832	4,249	6,280		4,132	3,000	KCHD	
Apex*	125	150	135	190		177	60	KCHD	
Bainbridge Island, City of*	2,232	UND	2,564	3,456	0.35	1,993	2,800	DOH	
Bear Cub	55	55	49.5	107		160	12.02	DOH	
Bethel East	52	55	17	20		120	11	KCHD	NWW
Bill Point	84	84	64.2	42		66	30	KCHD	
BKS	61	66	35	126		180	0	System	WW
Bremerton (SW) City of*	16,811	UND	UND	UND	40		33,240	System	
Bremerton (GW Cert.) *			6,281	4,630	UND	13,619		System	
Bremerton (GW Claims) *			6,350	5,100	UND			System	
Bridletree	70	156	700	160		160	55	System	KPUD
Bucklin Hill	66	66	42.5	139		114	12.5	KCHD	WW
Cedarbrook*	34	56	30	600		120	0	System	
Cedar Glen MHP	135	135	31	100		232	32.8	KCHD	
Driftwood Cove*	62	120	32	50		50	83	System	KPUD

System Name	Connections		Water Rights ⁽²⁾			Source Capacity (gpm)	Storage Capacity (gpm in 1,000)	Data Source ⁽¹⁾	System Owner/Op ⁽⁵⁾
	Existing	Approved	Qa (afy)	Qi (gpm)	Qi (cfs)				
Eldorado Hills*	145	157	69	225		210	254	System	KPUD
Emerald Heights *	78	90	90	150		152	66	KCHD	
Erland Point*	616	1,001	1,344	900	0.25	500	350	System	
Fragaria Landing*	73	99	32	98		177	28	DOH	
Frog Pond*	515	529	283.6	294		264	270	KCHD	
Gala Pines*	52	80	54	154		150	50	System	KPUD
Glenwood Station	53	52	25	100		100	40	DOH	WW
Harbor Heights	70	70	22	100		135	20	KCHD	WW
Hintzville Acres	59	60	32.5	105		82	11	KCHD	WW
Holly*	75	99	26	110		85	30	KCHD	
Horizons West*	900	1,122	449	856		1,210	232	KCHD	WW
Indian Hills Estates	48	50	75	100		110	31.7	System	WW
Indianola (4) *	638	817	300.4	500		481	280	System	KPUD
Island Lake Water Co. *	264	278	92	80		140	131	KCHD	
Island Utilities*	108	455	336	300		310	358.7	DOH	
Keyport*	386	827	858	650		600	400	System	KPUD
Kitsap West MHP*	96	146	45	250		80	7	DOH	
Little Tree	54	54	36	100		70	30	DOH	WW

System Name	Connections		Water Rights ⁽²⁾			Source Capacity (gpm)	Storage Capacity (gpm in 1,000)	Data Source ⁽¹⁾	System Owner/Op ⁽⁵⁾
	Existing	Approved	Qa (afy)	Qi (gpm)	Qi (cfs)				
Long Lake View Estates*	358	399	152.4	260		212	186.7	System	KPUD
Mainland View Manor	53	57	32.5	150		150	0	DOH	WW
Manchester State Park	67	UND	NA	NA		INPORT	0	DOH	
Manchester Water Dist. *	2,946	4,371	1,673.70	2,260		3,630	3,200	KCHD	
Martell Mobile Manor	79	79	39.5	171		140	40	DOH	
McCormick Woods*	607	750	450	600		1,830	570	KCHD	COPO
Meadowmeer Water Svc. *	279	335	150	250		320	235	KCHD	
Miller Bay*	398	460	112	200		170	167	System	KPUD
Minter Creek Rapids*	49	55	93	250		235	0	System	WW
Navy Undersea War Ctr. *	186	UND	NA	NA	0	1,000	600	DOH	
Navy Yard Park*	99	124	48	52		52	110	System	KPUD
Newberry Hill*	40	140	1,720.00	1,950		100\200	749	System	KPUD
North Bainbridge*	1,651	2,028	1,974.00	1,475		911	860	System	KPUD
North Peninsula*	4,031	5,139	2,341.50	1,880		1,880	2,562	System	KPUD
North Perry Avenue WD*	6,275	UND	4,089.60	4,540		3,995	4,750	System	
Olympic View Manor	76	76	13	26		70	5.48	DOH	
Parkview Terrace*	757	1,067	587.1	748		1,580	169	KCHD	WW
Pine Lake MHE 13	73	82	48.6	112		138	5	KCHD	

System Name	Connections		Water Rights ⁽²⁾			Source Capacity (gpm)	Storage Capacity (gpm in 1,000)	Data Source ⁽¹⁾	System Owner/Op ⁽⁵⁾
	Existing	Approved	Qa (afy)	Qi (gpm)	Qi (cfs)				
Port Madison Water Co.*	98	144	80	30		158	65	System	
Port Orchard, City of*	1,935	UND	2,330.00	1,600		2,600	3,300	KCHD	
Poulsbo, City of*	2,650	UND	2,147	1,940	1.2	2,060	3,050	KCHD	
Priddy Vista	80	85	56	47		123	20	KCHD	
Puget Sound Naval Yard*	2,918	UND	NA	NA		INPORT	2,500	DOH	
Rocky Pt. Water Dist. 12*	543	UND	NA	NA		INPORT		KCHD	COBI
Rockaway Beach Water*	66	88	80	34		80	132	KCHD	COBI
Sandy Hook Park CC*	100	146	80	160		57	94.5	KCHD	NWW
Scenic Beach State Park	63	UND	NA	NA		65	20	DOH	
Seabeck*	152	300	3,000.00	2,000		600	580	System	KPUD
Sea View and Olalla*	66	99	55	130		130	20	System	WW
Silverdale Water Dist. 16*	5,172	7,731	4,664.90	4,835	0.78	6,730	5,351	KCHD	
S'Kallam-Lower-CWS	92	UND	NA	NA		36	138	KCHD	
S'Kallam-Upper-CWS	80	UND	NA	NA	0.25	179	127	KCHD	
South Bainbridge Water*	1,056	1,415	902.5	767	0.11	625	607	System	
Strattonwood*	72	99	40.5	160		160	30	KCHD	WW
Strawberry Hills	94	94	83.7	125		125	80	System	KPUD
Subase Bangor*	1,292	UND	NA	NA		3,050	3,500	DOH	

System Name	Connections		Water Rights ⁽²⁾			Source Capacity (gpm)	Storage Capacity (gpm in 1,000)	Data Source ⁽¹⁾	System Owner/Op ⁽⁵⁾
	Existing	Approved	Qa (afy)	Qi (gpm)	Qi (cfs)				
Sunnyslope Water Dist. *	399	486	1456.6	200		270	375	KCHD	
Suquamish*	1,335	2,965	1,456.00	1,300		1,340	805	System	KPUD
Surfcrest Park	47	54	47	105		110	50	KCHD	
Tahuyeh Lake CC*	221	239	2,000.00	334		196	125	KCHD	
View Side Community	62	64	36	125		175	40	KCHD	KPUD
Vinland*	966	1,489	704.4	890		1,530	1,112	System	KPUD
Wick Lake Ranches*	220	230	142	300		225	60	System	WW
Total	69,577	44,750	57,680.8	56,239	42.94	63,216	78,326.4		

* Expanding Water System.

PWS = Public Water System; Qa = Annual Quantity; Qi = Instantaneous Quantity; afy = Acre Feet per Year; gpm = gallons per minute; cfs = cubic feet per second.

UND – Undetermined by DOH – System sets capacity; NA = Not Applicable

- (1) Data obtained from Department of Health Drinking Water Automated Information Network (DRAIN) November 2001, KCHD data base, or input from individual system.
 - (2) Data obtained from Department of Ecology Water Rights Application Tracking System (WRATS) December 2001, or input from individual system (#). Includes allocated amounts associated with permits and certificates. Totals are shown for systems with multiple water rights, not by water system name. This table may not present water rights information pertaining to those systems for which the owner's name differs from the water system name.
 - (3) The City of Bremerton also exercises surface water claims. The total Qi for these claims is 125 gpm, and the total Qa for the claims is 7.5 afy.
 - (4) The Indianola Water System also exercises ground water claims. The total Qi for these claims is 125 gpm, and the total Qa for the claims is 7.5 afy.
- System Operator or Owner: COB – City of Bremerton; COBI – City of Bainbridge Island; COPO – City of Port Orchard, KPUD – Kitsap Public Utility District; NWW – Northwest Water; WW – Washington Water Service.

All of the Group “A” water systems inventoried in Table WS.1-2 for Kitsap County have sufficient water resources to meet existing average demand. The City of Poulsbo needs to seek additional groundwater sources to meet future demand. The City of Poulsbo has surface spring water sources that will need to be replaced as a result of new EPA water quality standards.

Responses from water purveyors indicate that a majority of the systems in Kitsap County have a range of deficiencies when meeting the requirements as outlined in the Kitsap County Uniform Fire Code. These systems generally need to increase the size of piping, need to install additional looping to increase water pressure for fire flow, or increase frequency of hydrant placement to meet spacing requirements. Some water systems such as Sunnyslope Water District have limited descriptions of existing conditions.

Table WS.2-1 Summary of Existing Water Rights Information ⁽¹⁾

	North Kitsap	Bainbridge Island	Central Kitsap	South Kitsap	Total
Ground Water Rights					
Qa (afy)	10,965	10,282	26,649	17,044	64,940
Qa (mgd)	9.78	9.17	23.77	15.2	57.93
Qi (gpm)	12,864	11,618	26,424	23,452	74,358
Qi (mgd)	18.52				
Surface Water Rights					
Qa (afy)	762	102	715	626	2205
Qa (mgd)	0.68	0.09	0.64	0.56	1.97
Qi (cfs)	28.89	2.71	38.13	41.26	110.99
Qi (mgd)	0.04	0	0.05	0.06	0.16
Total					
Qa (mgd)	10.46	9.26	24.41	15.76	59.9
Qi (mgd)	18.57	16.73	38.1	33.83	107.24

Source: CWSP Exhibit 8-3

Notes:

Qa = Annual Quantity

Qi = Instantaneous Quantity

afy = acre-feet per year

cfs = cubic feet per second

mgd = million gallons per day

(1)All water rights, permits, and certificates within Kitsap County, including municipal, commercial/industrial, domestic, irrigation, and rights for all other purposes of use.

Coordinated Water Systems Plan (CWSP)

Table WS.2-2 below, from the CWSP, shows the projected water demands for the county in 2010, 2020 and 2030. These calculations were based on the Puget Sound Regional Council’s (PSRC) demographic forecasts for each forecast analysis zone (FAZ), on past water consumption

rates and peaking factors, estimates of future commercial/industrial demand, and effects of conservation. Each of these is described in more detail in the following paragraphs.

The CWSP used water consumption rate estimates of 356 gallons per household per day (gphpd) inside UGAs and 237 gphpd outside UGAs, and a peaking factor of 2.32 to calculate future water demand. These figures are based on average trends in several representative water systems within the county. PSRC demographic forecasts were made at the FAZ level and then FAZs, UGAs and sub-areas were used to assess water demand and water use characteristics. When water districts plan for future growth, each calculates future demand based on past water use trends within the individual district.

Since rate estimates are based on past water consumption rates and do not account for the possibility of a new, large commercial or industrial water consumer, it was assumed in the CWSP that between 2000 and 2010, new industries with a total demand of 1.25 mgd would locate in the City of Bremerton’s service area, while an additional 0.25 mgd of new industrial demand would develop elsewhere throughout the County. Additional new industrial demands of these same amounts were estimated to develop between the years of 2010 and 2020, and between 2020 and 2030 an additional 0.5 mgd industrial demand would develop in the City of Bremerton.

Effects of conservation were also incorporated into demand calculations to account for implementation of conservation and efficiency measures. WATERPAK, an organization of the larger water purveyors, has pursued an effective conservation program over the past decade. In most cases, larger systems have reduced water losses below ten percent of their water production. For the CWSP, a one percent per year reduction in water supply requirements was assumed for years 2001 through 2010. Further reductions beyond 2010 were not included, based on the assumption that the majority of conservation gains, using current technology, will likely be realized by that time.

Table WS.2-2 Water Demand Projections (in mgd) from the CWSP

Year	Average Day Demand ⁽¹⁾	Maximum Day Demand ⁽²⁾
2010	30.03	69.67
2020	37.57	87.16
2030	42.89	99.50

⁽¹⁾ Based on per household approach, including conservation and additional industrial water supply requirements.

⁽²⁾ Based on peak day factor of 2.32

Source: CWSP Table 7-10 Kitsap County Water Supply Requirement Projections (in mgd)

Capital Facilities Projects and Financing: 2007-2012

Capital Facilities Plans (2007-2012) for key water systems in the County are shown in Tables WS.3-1 through WS.3.-9. The proposed financing plans generally distinguish between projects that increase capacity and projects designed to maintain the integrity of existing systems.

Table WS.3-1. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

WATER SYSTEMS - ANNAPOLIS WATER DISTRICT								
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>	
<i>Capacity Projects</i>								
1. Design and Construct Distribution System for Reclaimed Water								
Cost			1,000.0				1,000.0	
Rev - DOE Grant			1,000.0				1,000.0	
2. Connect Watauga Beach System to District System								
Cost					134.0		134.0	
Rev - District Fees/Charges					134.0		134.0	
3. Drill Well 22								
Cost					435.0		435.0	
Rev - District Fees/Charges					435.0		435.0	
4. Additional Water Storage for New Growth								
Cost						660.0	660.0	
Rev - Public Wks Trust Fund						660.0	660.0	
5. Construct Wellhouse 22 and Install Pumps and Pipes								
Cost						500.0	500.0	
Rev - District Fees/Charges						500.0	500.0	
	Subtotal	0.0	0.0	1,000.0	0.0	569.0	1,160.0	2,729.0
<i>Non-Capacity Projects</i>								
6. Obtain Permits From DOE and Kitsap County								
Cost	22.0						22.0	
Rev - District Fees/Charges	22.0						22.0	
7. Paint Interior of Powell Reservoir Tank								
Cost	166.0						166.0	
Rev - District Fees/Charges	166.0						166.0	
8. Paint Exterior of Salmonberry Reservoir Tank								
Cost	165.0						165.0	
Rev - Public Wks Trust Fund	165.0						165.0	
9. Paint Interior of Salmonberry Reservoir Tank								
Cost	220.0						220.0	
Rev - Public Wks Trust Fund	220.0						220.0	

WATER SYSTEMS - ANNAPOLIS WATER DISTRICT

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
10. Rehab Watauga Pump Station							
Cost	110.0						110.0
Rev - District Fees/Charges	110.0						110.0
11. Routine Replacement of Pumps							
Cost	28.0	29.0	30.0	31.0	40.0		158.0
Rev - District Fees/Charges	28.0	29.0	30.0	31.0	40.0		158.0
12. Vehicle Replacement							
Cost	33.0	34.0	36.0	33.0			136.0
Rev - District Fees/Charges	33.0	34.0	36.0	33.0			136.0
13. Replace 1,000 LF of AC Pipe and Older Mains							
Cost	143.0	149.0	156.0	164.0	171.0		783.0
Rev - District Fees/Charges	143.0	149.0	156.0	164.0	171.0		783.0
14. Conduct 10-Year Rate Study							
Cost	22.0						22.0
Rev - District Fees/Charges	22.0						22.0
15. Replace Bethel Main (Salmonberry to Sedgwick) with 2,400 LF 12" Main							
Cost		516.0					516.0
Rev - Public Wks Trust Fund		516.0					516.0
16. Upgrade Larger Meters							
Cost		10.0	10.0				20.0
Rev - District Fees/Charges		10.0	10.0				20.0
17. Rehab Well 8							
Cost			48.0				48.0
Rev - District Fees/Charges			48.0				48.0
18. Relocate and Upgrade Sedgwick Water Main (Jackson to Phillips)							
Cost			420.0				420.0
Rev - Public Wks Trust Fund			420.0				420.0
19. Upgrade Salmonberry Generator							
Cost				126.0			126.0
Rev - District Fees/Charges				126.0			126.0
20. Rehab Well 1							
Cost				31.0			31.0
Rev - District Fees/Charges				31.0			31.0

WATER SYSTEMS - ANNAPOLIS WATER DISTRICT

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<hr/>							
21. Conduct 6-Year Water System Update							
Cost					130.0		130.0
Rev - District Fees/Charges					130.0		130.0
<hr/>							
22. Paint Exterior of Powell Reservoir Tank							
Cost					53.0		53.0
Rev - District Fees/Charges					53.0		53.0
<hr/>							
23. Paint Interior/Exterior Watauga Beach Tanks							
Cost						132.0	132.0
Rev - District Fees/Charges						132.0	132.0
<hr/>							
24. Paint Interior of Salmonberry Elevated Tank							
Cost						79.0	79.0
Rev - District Fees/Charges						79.0	79.0
<hr/>							
25. 22. Paint Exterior of Fircrest Elevated Tank							
Cost						80.0	80.0
Rev - District Fees/Charges						80.0	80.0
<hr/>							
26. Connect Bethel Main From Fred Meyers to Oregon							
Cost						555.0	555.0
Rev - Public Wks Trust Fund						555.0	555.0
<hr/>							
27. Paint Interior/Exterior Well 1 Tank							
Cost						80.0	80.0
Rev - District Fees/Charges						80.0	80.0
<hr/>							
28. Replace Older Firmont Beach Main							
Cost						330.0	330.0
Rev - District Fees/Charges						330.0	330.0
<hr/>							
29. Relocate and Upgrade Sedgwick Main (Fred Meyers to Jackson)							
Cost						1,322.0	1,322.0
Rev - Public Wks Trust Fund						1,322.0	1,322.0
<hr/>							
30. Replace Jackson Main (Salmonberry to Sedgwick) with 2,600 LF 12" Main							
Cost						674.0	674.0
Rev - Public Wks Trust Fund						674.0	674.0
<hr/>							
31. Replace Mile Hill Drive Main (4586 Mill Drive to Baby Doll Road) with 800 LF 12" Main							
Cost						202.0	202.0
Rev - District Fees/Charges						202.0	202.0

WATER SYSTEMS - ANNAPOLIS WATER DISTRICT

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<hr/>							
32. Replace 5 Miles of Pipe on an Annual Basis							
Cost						323.0	323.0
Rev - District Fees/Charges						323.0	323.0
<hr/>							
33. Demolish Abandoned Karcher Reservoir							
Cost						100.0	100.0
Rev - District Fees/Charges						100.0	100.0
Subtotal	909.0	738.0	700.0	385.0	394.0	3,877.0	7,003.0
<hr/>							
<i>SUMMARY: COSTS AND REVENUES</i>							
COSTS:							
Capacity Projects:							
	<u>0.0</u>	<u>0.0</u>	<u>1,000.0</u>	<u>0.0</u>	<u>569.0</u>	<u>1,160.0</u>	<u>2,729.0</u>
Subtotal	0.0	0.0	1,000.0	0.0	569.0	1,160.0	2,729.0
Non-Capacity Projects							
	<u>909.0</u>	<u>738.0</u>	<u>700.0</u>	<u>385.0</u>	<u>394.0</u>	<u>3,877.0</u>	<u>7,003.0</u>
Subtotal	909.0	738.0	700.0	385.0	394.0	3,877.0	7,003.0
Total Costs	909.0	738.0	1,700.0	385.0	963.0	5,037.0	9,732.0
EXISTING REVENUES							
Rev - District Fees/Charges	<u>524.0</u>	<u>222.0</u>	<u>280.0</u>	<u>385.0</u>	<u>963.0</u>	<u>1,826.0</u>	<u>4,200.0</u>
Subtotal	524.0	222.0	280.0	385.0	963.0	1,826.0	4,200.0
NEW REVENUES							
Rev - Public Wks Trust Fund	385.0	516.0	420.0	0.0	0.0	3,211.0	4,532.0
Rev - DOE Grant	<u>0.0</u>	<u>0.0</u>	<u>1,000.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>1,000.0</u>
Subtotal	385.0	516.0	1,420.0	0.0	0.0	3,211.0	5,532.0
Total Revenues	909.0	738.0	1,700.0	385.0	963.0	5,037.0	9,732.0
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table WS.3-2. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

WATER SYSTEMS - CITY OF BREMERTON								
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>	
<i>Capacity Projects</i>								
1. Redrill Well 9 (Brindleridge)								
Cost	200.0						0.0	
Rev - System Fees/Charges	200.0						0.0	
2. Ground Source Development								
Cost				200.0			200.0	
Rev - System Fees/Charges				200.0			200.0	
3. Pump Station 14 Replacement and 12" Transmission Main - Construction								
Cost					940.0		940.0	
Rev - System Fees/Charges					940.0		940.0	
4. Storage Improvements, Studies, and Construction W440 and E398 Zones - Construction								
Cost		2,000.0					2,000.0	
Rev - System Fees/Charges		2,000.0					2,000.0	
5. Transmission Main Upgrade to Port 8" AC to 18" DI								
Cost				800.0			800.0	
Rev - System Fees/Charges				800.0			800.0	
6. 36" Transmission Main Extension, McKenna Falls to Gorst - Design								
Cost						500.0	500.0	
Rev - System Fees/Charges						500.0	500.0	
	Subtotal	200.0	2,000.0	0.0	1,000.0	940.0	500.0	4,440.0
<i>Non-Capacity Projects</i>								
7. Replace 12" Main on McWilliam Road from McWilliams Court to Pine Road (Pipe No. 1253)								
Cost	106.0						106.0	
Rev - System Fees/Charges	106.0						106.0	
8. Loop Lakehurst Drive and Puget Sound Energy								
Cost	50.0						50.0	
Rev - System Fees/Charges	50.0						50.0	
9. Construct East 18th Loop								
Cost	70.4						70.4	
Rev - System Fees/Charges	70.4						70.4	

WATER SYSTEMS - CITY OF BREMERTON

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<hr/>							
10. Install Restrained Expansion Joints and Bracing for Warren Avenue Bridge Main							
Cost	70.4						70.4
Rev - System Fees/Charges	70.4						70.4
<hr/>							
11. Annual Water Main Replacement Program - Minor Capital Improvements to Substandard Main Replacement							
Cost	200.0						0.0
Rev - System Fees/Charges	200.0						0.0
<hr/>							
12. Conversion to Radio Read Meter System							
Cost	527.0						0.0
Rev - System Fees/Charges	527.0						0.0
<hr/>							
13. Annual Water Resources Miscellaneous Capital Improvements							
Cost	50.0						50.0
Rev - System Fees/Charges	50.0						50.0
<hr/>							
14. Install 36" Main Street Connector							
Cost	50.0						50.0
Rev - System Fees/Charges	50.0						50.0
<hr/>							
15. Reservoir 14 Demolition Design							
Cost	5.0						0.0
Rev - System Fees/Charges	5.0						0.0
<hr/>							
16. Reservoir 14 Demolition Construction							
Cost	200.0						0.0
Rev - System Fees/Charges	200.0						0.0
<hr/>							
17. Annual Water Main Replacement Program - Minor Capital Improvements to Substandard Main Replacement							
Cost		200.0					200.0
Rev - System Fees/Charges		200.0					200.0
<hr/>							
18. Warren Avenue Bridge Main Construction							
Cost		125.0					125.0
Rev - System Fees/Charges		125.0					125.0
<hr/>							
19. Annual Water Resources Miscellaneous Capital Improvements							
Cost		50.0					50.0
Rev - System Fees/Charges		50.0					50.0
<hr/>							
20. Install 12" Main West 13th (High to Warren), High (11th to 13th), and Ohio (13th to 15th) Design							
Cost			25.0				25.0
Rev - System Fees/Charges			25.0				25.0

WATER SYSTEMS - CITY OF BREMERTON

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
21. Install 12" Main W13th (High to Warren), High (11th to 13th), and Ohio (13th to 15th) Construction							
Cost			325.0				325.0
Rev - System Fees/Charges			325.0				325.0
22. Pine Road (North) McWilliam to Well 21 (12")							
Cost			80.0				80.0
Rev - System Fees/Charges			80.0				80.0
23. 398 - 490 Zone Conversion at Roswell and PRV							
Cost			165.0				165.0
Rev - System Fees/Charges			165.0				165.0
24. Install 8" Pipe on Easement from Madronna Point to Marine Drive (Pipe No. 7027)							
Cost			64.0				64.0
Rev - System Fees/Charges			64.0				64.0
25. Install 8" Pipe on Marine Drive from the Cedars to North (Pipe No. 7024)							
Cost			186.0				186.0
Rev - System Fees/Charges			186.0				186.0
26. Seismic Upgrade of Anchorage and Foundation for Reservoir 8							
Cost			200.0				200.0
Rev - System Fees/Charges			200.0				200.0
27. Annual Water Main Replacement Program - Minor Capital Improvements to Substandard Main Replacement							
Cost			200.0				200.0
Rev - System Fees/Charges			200.0				200.0
28. Annual Water Resources Miscellaneous Capital Improvements							
Cost			50.0				50.0
Rev - System Fees/Charges			50.0				50.0
29. Install 8" Pipe on Madronna Point Drive From Shorewood Drive to End of Street (Pipe No.7084)							
Cost				191.0			191.0
Rev - System Fees/Charges				191.0			191.0
30. Install 12" Pipe on Werner Road From Nollwood Lane to Skylark Drive (Pipe No.8092)							
Cost				139.0			139.0
Rev - System Fees/Charges				139.0			139.0
31. Install 12" Pipe on Werner Road From Sunnyhill Road to East (Pipe No.8102)							
Cost				60.0			60.0
Rev - System Fees/Charges				60.0			60.0

WATER SYSTEMS - CITY OF BREMERTON

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
32. Install 8" Pipe on Sheridan Road From Wheaton Way to Olympus Drive (Pipe No.137)							
Cost				169.0			169.0
Rev - System Fees/Charges				169.0			169.0
33. Seismic Upgrade Anchorage and Foundation to Reservoir 6							
Cost	0.0			250.0			250.0
Rev - System Fees/Charges	0.0			250.0			250.0
34. Annual Water Main Replacement Program - Minor Capital Improvements to Substandard Main Replacement							
Cost				200.0			200.0
Rev - System Fees/Charges				200.0			200.0
35. Annual Water Resources Miscellaneous Capital Improvements							
Cost				50.0			50.0
Rev - System Fees/Charges				50.0			50.0
36. Seismic Upgrade of Partition Wall at Pistol Range Well Control Building, Well 14, Well 9, and Booster Station No. 4							
Cost					10.0		10.0
Rev - System Fees/Charges					10.0		10.0
37. Annual Water Main Replacement Program - Minor Capital Improvements to Substandard Main Replacement							
Cost					200.0		200.0
Rev - System Fees/Charges					200.0		200.0
38. Annual Water Resources Miscellaneous Capital Improvements							
Cost					50.0		50.0
Rev - System Fees/Charges					50.0		50.0
39. Install 8" Pipe on Shore Drive From 9th to 13th (Pipe No. 5082)							
Cost					70.0		70.0
Rev - System Fees/Charges					70.0		70.0
40. Install 8" Pipe on Solnae Place From Doncee Drive to WEST (Pipe No. 1035)							
Cost					57.0		57.0
Rev - System Fees/Charges					57.0		57.0
41. Install 8" Pipe on Wheaton Way From Sheridan Road to Stone Way (Pipe No. 136)							
Cost					80.0		80.0
Rev - System Fees/Charges					80.0		80.0
42. Install 8" Pipe on East of Anderson Hill Road South From South Cook Road to South (Pipe No. 10028)							
Cost					81.0		81.0
Rev - System Fees/Charges					81.0		81.0

WATER SYSTEMS - CITY OF BREMERTON

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
43. Annual Water Main Replacement Program - Minor Capital Improvements to Substandard Main Replacement							
Cost						200.0	200.0
Rev - System Fees/Charges						200.0	200.0
44. Annual Water Resources Miscellaneous Capital Improvements							
Cost	0.0					50.0	50.0
Rev - System Fees/Charges	0.0					50.0	50.0
45. Annual Water Main Replacement Program - Minor Capital Improvements to Substandard Main Replacement							
Cost						95.0	95.0
Rev - System Fees/Charges						95.0	95.0
46. Install 8" Pipe on David Road from North Lake Way to West (Pipe No. 517)							
						169.0	169.0
Rev - System Fees/Charges						169.0	169.0
47. Install 12" Pipe on Perry Avenue from Sheridan Road to Stone Way (Pipe No. 4198)							
Cost						124.0	124.0
Rev - System Fees/Charges						124.0	124.0
Subtotal	1,328.8	375.0	1,295.0	1,059.0	548.0	638.0	4,311.8
<i>SUMMARY: COSTS AND REVENUES</i>							
COSTS:							
Capacity Projects:							
	<u>200.0</u>	<u>2,000.0</u>	<u>0.0</u>	<u>1,000.0</u>	<u>940.0</u>	<u>500.0</u>	<u>4,440.0</u>
Subtotal	200.0	2,000.0	0.0	1,000.0	940.0	500.0	4,440.0
Non-Capacity Projects							
	<u>1,328.8</u>	<u>375.0</u>	<u>1,295.0</u>	<u>1,059.0</u>	<u>548.0</u>	<u>638.0</u>	<u>4,311.8</u>
Subtotal	1,328.8	375.0	1,295.0	1,059.0	548.0	638.0	4,311.8
Total Costs	1,528.8	2,375.0	1,295.0	2,059.0	1,488.0	1,138.0	8,751.8
EXISTING REVENUES							
Rev - System Fees/Charges	<u>1,528.8</u>	<u>2,375.0</u>	<u>1,295.0</u>	<u>2,059.0</u>	<u>1,488.0</u>	<u>1,138.0</u>	<u>8,751.8</u>
Subtotal	1,528.8	2,375.0	1,295.0	2,059.0	1,488.0	1,138.0	8,751.8
Total Revenues	1,528.8	2,375.0	1,295.0	2,059.0	1,488.0	1,138.0	8,751.8
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table WS.3-3. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

WATER SYSTEMS - KITSAP PUBLIC UTILITY DISTRICT								
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>	
<i>Capacity Projects</i>								
1. Long Lake - Water Treatment and Pumping Plant								
Cost	200.0						200.0	
Rev - PUD Fees/Charges	200.0						200.0	
2. Newberry - Well Pump and Pumping Plant								
Cost	250.0						250.0	
Rev - PUD Fees/Charges	250.0						250.0	
3. Regional Transmission (Silverdale) - New Infrastructure to Move 500 gpm in Silverdale								
Cost	600.0						600.0	
Rev - PUD Fees/Charges	600.0						600.0	
4. Regional Transmission (Vinland to Port Gamble) - Construct 16" Water Main								
Cost		1,000.0					1,000.0	
Rev - PUD Fees/Charges		1,000.0					1,000.0	
5. Regional Transmission (Port Gamble Ridge) - Construct 1.5 Million Gallon Reservoir								
Cost		1,250.0					1,250.0	
Rev - PUD Fees/Charges		1,250.0					1,250.0	
6. Regional Transmission (Port Gamble) - Construct Building and Pumping Plant for Well								
Cost			150.0				150.0	
Rev - PUD Fees/Charges			150.0				150.0	
7. Regional Transmission (Port Gamble Ridge to Gamblewood) - Construct 16" Water Main								
Cost			1,500.0				1,500.0	
Rev - PUD Fees/Charges			1,500.0				1,500.0	
	Subtotal	1,050.0	2,250.0	1,650.0	0.0	0.0	0.0	4,950.0
<i>Non-Capacity Projects</i>								
8. Miller Bay - Replace Well Pumps to Head of white Horse Development								
Cost	38.0						38.0	
Rev - PUD Fees/Charges	38.0						38.0	
9. Vinland - Complete Lakeness Road Loop 8" Main and PRV								
Cost	50.0						50.0	
Rev - PUD Fees/Charges	50.0						50.0	

WATER SYSTEMS - KITSAP PUBLIC UTILITY DISTRICT

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
10. Vinland - Replace Undersized Water Mains in Bela Vista							
Cost				240.0			240.0
Rev - PUD Fees/Charges				240.0			240.0
11. North Peninsula - Install 2,500 LF of 8" Water Main on Port Gamble Road							
Cost				140.0			140.0
Rev - PUD Fees/Charges				140.0			140.0
12. North Peninsula - Install Main Line PRV on Port Gamble Road							
Cost				40.0			40.0
Rev - PUD Fees/Charges				40.0			40.0
13. Keyport - Replace Water Main at South Peterson							
Cost	38.5						38.5
Rev - PUD Fees/Charges	38.5						38.5
14. Keyport Base - Install 4, 175 LF of 8" Main to Intertie Base with Town of Keyport							
Cost	453.5						453.5
Rev - PUD Fees/Charges	453.5						453.5
15. Keyport Base - Install Telemetry System							
Cost	52.1						52.1
Rev - PUD Fees/Charges	52.1						52.1
16. Keyport Base - Relocate Reservoir Overflow Piping							
Cost		39.1					39.1
Rev - PUD Fees/Charges		39.1					39.1
17. Keyport Base - Install Service Meters							
Cost		546.0					546.0
Rev - PUD Fees/Charges		546.0					546.0
18. Keyport Base - Replace 3,000' of 12" Water Main							
Cost			455.0				455.0
Rev - PUD Fees/Charges			455.0				455.0
19. Keyport Base - Replace 28 Fire Hydrants							
Cost			95.2				95.2
Rev - PUD Fees/Charges			95.2				95.2
20. North Bainbridge - Replace Miscellaneous Water Mains							
Cost				240.0			240.0
Rev - PUD Fees/Charges				240.0			240.0

WATER SYSTEMS - KITSAP PUBLIC UTILITY DISTRICT

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
21. Indianola - Indianola Intertie With North Peninsula via White Horse							
Cost	60.0						0.0
Rev - PUD Fees/Charges	60.0						0.0
<hr/>							
22. Indianola - Replace 2" Galvanized Main With 6" DI on Kingston Street							
Cost	28.0						0.0
Rev - PUD Fees/Charges	28.0						0.0
Subtotal	720.1	585.1	550.2	660.0	0.0	0.0	2,427.4
<hr/>							
<i>SUMMARY: COSTS AND REVENUES</i>							
COSTS:							
Capacity Projects:							
	<u>1,050.0</u>	<u>2,250.0</u>	<u>1,650.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>4,950.0</u>
Subtotal	1,050.0	2,250.0	1,650.0	0.0	0.0	0.0	4,950.0
Non-Capacity Projects							
	<u>720.1</u>	<u>585.1</u>	<u>550.2</u>	<u>660.0</u>	<u>0.0</u>	<u>0.0</u>	<u>2,427.4</u>
Subtotal	720.1	585.1	550.2	660.0	0.0	0.0	2,427.4
Total Costs	1,770.1	2,835.1	2,200.2	660.0	0.0	0.0	7,377.4
EXISTING REVENUES							
Rev - PUD Fees/Charges	<u>1,770.1</u>	<u>2,835.1</u>	<u>2,200.2</u>	<u>660.0</u>	<u>0.0</u>	<u>0.0</u>	<u>7,377.4</u>
Subtotal	1,770.1	2,835.1	2,200.2	660.0	0.0	0.0	7,377.4
NEW REVENUES							
Rev -	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Revenues	1,770.1	2,835.1	2,200.2	660.0	0.0	0.0	7,377.4
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table WS.3-4. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

WATER SYSTEMS - MANCHESTER WATER DISTRICT							
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<i>WATER MAIN IMPROVEMENTS</i>							
<i>Non-Capacity Projects</i>							
1. Annual Water Main Improvements							
Cost	150.0	150.0	150.0	150.0	150.0	150.0	900.0
Rev - Fees/Charges/Other	150.0	150.0	150.0	150.0	150.0	150.0	900.0
Subtotal	150.0	150.0	150.0	150.0	150.0	150.0	900.0
<i>PRESSURE REDUCING STATION AND RELIEF IMPROVEMENTS</i>							
<i>Non-Capacity Projects</i>							
2. Beach PRV							
Cost	90.0						90.0
Rev - Fees/Charges/Other	90.0						90.0
Subtotal	90.0	0.0	0.0	0.0	0.0	0.0	90.0
<i>PRESSURE ZONE IMPROVEMENTS</i>							
<i>Non-Capacity Projects</i>							
3. North 277 Zone to North 430 Zone Conversion							
Cost		42.0					42.0
Rev - Fees/Charges/Other		42.0					42.0
4. South 277 Zone to South 430 Zone Conversion and PRV							
Cost		114.0					114.0
Rev - Fees/Charges/Other		114.0					114.0
5. South 430 Zone to South 500 Zone Conversion							
Cost			578.0	578.0			1,156.0
Rev - Fees/Charges/Other			578.0	578.0			1,156.0
Subtotal	0.0	156.0	578.0	578.0	0.0	0.0	1,312.0
<i>FACILITY IMPROVEMENTS</i>							
<i>Capacity Projects</i>							
6. Well 10 and 11 Treatment Facility							
Cost					214.0	428.0	642.0
Rev - Fees/Charges/Other					214.0	428.0	642.0
Subtotal	0.0	0.0	0.0	0.0	214.0	428.0	642.0

WATER SYSTEMS - MANCHESTER WATER DISTRICT

COSTS/REVENUES	2007	2008	2009	2010	2011	2012	TOTAL
<i>Non-Capacity Projects</i>							
7. Center Avenue Tank Recoating							
Cost	110.0						110.0
Rev - Fees/Charges/Other	110.0						110.0
8. Wells 6 and 7 Site Improvements							
Cost		80.0					80.0
Rev - Fees/Charges/Other		80.0					80.0
9. Wells 3 and 12 Study							
Cost		50.0					50.0
Rev - Fees/Charges/Other		50.0					50.0
10. Banner Tank Replacement							
Cost					347.0		347.0
Rev - Fees/Charges/Other					347.0		347.0
11. Well 5 Rehabilitation							
Cost		200.0					200.0
Rev - Fees/Charges/Other		200.0					200.0
Subtotal	110.0	330.0	0.0	0.0	347.0	0.0	787.0
<i>MISCELLANEOUS IMPROVEMENTS</i>							
<i>Non-Capacity Projects</i>							
12. Automated Meter Reading System							
Cost	20.0	20.0	20.0	20.0	20.0	20.0	120.0
Rev - Fees/Charges/Other	20.0	20.0	20.0	20.0	20.0	20.0	120.0
13. Emergency Generator							
Cost	208.0						208.0
Rev - Fees/Charges/Other	208.0						208.0
14. Storage Tank Cleaning and							
Cost					5.0		5.0
Rev - Fees/Charges/Other					5.0		5.0
15. Conservation Program and Leak							
Cost	8.0	8.0	8.0	6.0	6.0	6.0	42.0
Rev - Fees/Charges/Other	8.0	8.0	8.0	6.0	6.0	6.0	42.0

WATER SYSTEMS - MANCHESTER WATER DISTRICT

COSTS/REVENUES	2007	2008	2009	2010	2011	2012	TOTAL
16. IDSE Plan and Report							
Cost	10.0			10.0			20.0
Rev - Fees/Charges/Other	10.0			10.0			20.0
17. Cross Connection Control Program							
Cost	5.0	2.0	2.0	2.0	2.0	2.0	15.0
Rev - Fees/Charges/Other	5.0	2.0	2.0	2.0	2.0	2.0	15.0
18. Wellhead Protection Program							
Cost	75.0	5.0	5.0	5.0	5.0	5.0	100.0
Rev - Fees/Charges/Other	75.0	5.0	5.0	5.0	5.0	5.0	100.0
19. Comprehensive Water System plan Update (Every 6 Years)							
Cost						120.0	120.0
Rev - Fees/Charges/Other						120.0	120.0
Subtotal	326.0	35.0	35.0	43.0	38.0	153.0	630.0

SUMMARY: COSTS AND REVENUES

COSTS:							
Capacity Projects:							
	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>214.0</u>	<u>428.0</u>	<u>642.0</u>
Subtotal	0.0	0.0	0.0	0.0	214.0	428.0	642.0
Non-Capacity Projects							
	<u>676.0</u>	<u>671.0</u>	<u>763.0</u>	<u>771.0</u>	<u>535.0</u>	<u>303.0</u>	<u>3,719.0</u>
Subtotal	676.0	671.0	763.0	771.0	535.0	303.0	3,719.0
Total Costs	676.0	671.0	763.0	771.0	749.0	731.0	4,361.0
EXISTING REVENUES							
Rev - Fees/Charges/Other	<u>676.0</u>	<u>671.0</u>	<u>763.0</u>	<u>771.0</u>	<u>749.0</u>	<u>731.0</u>	<u>4,361.0</u>
Subtotal	676.0	671.0	763.0	771.0	749.0	731.0	4,361.0
NEW REVENUES							
Rev -	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Revenues	676.0	671.0	763.0	771.0	749.0	731.0	4,361.0
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table WS.3-5. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

WATER SYSTEMS - NORTH PERRY WATER DISTRICT							
COSTS/REVENUES	2007	2008	2009	2010	2011	2012	TOTAL
<i>Capacity Projects</i>							
1. Well Drilling in 490 Pressure Zone (at Elmira and Sunset)							
Cost	250.0	0.0	0.0	0.0	250.0	0.0	500.0
Rev - Water System Fees	250.0	0.0	0.0	0.0	250.0	0.0	500.0
2. New Tank in 400 Pressure Zone (Joint Project with Silverdale)							
Cost	0.0	0.0	0.0	0.0	0.0	1,000.0	1,000.0
Rev - Water System Fees	0.0	0.0	0.0	0.0	0.0	1,000.0	1,000.0
3. Develop Paulson Well in 315 Pressure Zone							
Cost	0.0	0.0	0.0	200.0	0.0	0.0	200.0
Rev - Water System Fees	0.0	0.0	0.0	200.0	0.0	0.0	200.0
4. Well Drilling in 400 Pressure Zone							
Cost	0.0	0.0	0.0	0.0	0.0	250.0	250.0
Rev - Water System Fees	0.0	0.0	0.0	0.0	0.0	250.0	250.0
5. Rehab Pickering and Perry Wells in 490 Pressure Zone							
Cost	0.0	0.0	0.0	50.0	0.0	0.0	50.0
Rev - Water System Fees	0.0	0.0	0.0	50.0	0.0	0.0	50.0
Subtotal	250.0	0.0	0.0	250.0	250.0	1,250.0	2,000.0
<i>Non-Capacity Projects</i>							
6. Install Well 14 Generator in 490 Pressure Zone							
Cost	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Rev - Water System Fees	100.0	0.0	0.0	0.0	0.0	0.0	100.0
7. Install Iron and Manganese Filtration Systems at Perry Avenue and Gilberton 1 Wells							
Cost	0.0	0.0	0.0	450.0	0.0	0.0	450.0
Rev - Water System Fees	0.0	0.0	0.0	450.0	0.0	0.0	450.0
8. Install Sand Trap at Bucklin Hill Road Well in 345 Pressure Zone							
Cost	0.0	50.0	0.0	0.0	0.0	0.0	50.0
Rev - Water System Fees	0.0	50.0	0.0	0.0	0.0	0.0	50.0
9. Seismic Upgrade of Olympus 300,000 Gallon Reservoir							
Cost	200.0	0.0	0.0	0.0	0.0	0.0	200.0
Rev - FEMA Hazard Mitigation Grant	200.0	0.0	0.0	0.0	0.0	0.0	200.0

WATER SYSTEMS - NORTH PERRY WATER DISTRICT

COSTS/REVENUES	2007	2008	2009	2010	2011	2012	TOTAL
10. Water Main Installations							
Cost	80.0	80.0	80.0	80.0	80.0	80.0	480.0
Rev - Water System Fees	80.0	80.0	80.0	80.0	80.0	80.0	480.0
11. Water System Comprehensive Plan Update							
Cost	75.0	0.0	0.0	0.0	0.0	0.0	75.0
Rev - Water System Fees	75.0	0.0	0.0	0.0	0.0	0.0	75.0
12. Reservoir Mixing Valves at Sunset (2 MG)							
Cost	0.0	50.0	0.0	0.0	0.0	0.0	50.0
Rev - Water System Fees	0.0	50.0	0.0	0.0	0.0	0.0	50.0
13. Reservoir Mixing Valves at Olympus (1 MG)							
Cost	0.0	0.0	0.0	0.0	50.0	0.0	50.0
Rev - Water System Fees	0.0	0.0	0.0	0.0	50.0	0.0	50.0
14. Clean Interior of 7 Reservoirs							
Cost	0.0	0.0	0.0	25.0	0.0	0.0	25.0
Rev - Water System Fees	0.0	0.0	0.0	25.0	0.0	0.0	25.0
15. Recoat Sunset Reservoirs							
Cost	0.0	0.0	125.0	0.0	0.0	0.0	125.0
Rev - Water System Fees	0.0	0.0	125.0	0.0	0.0	0.0	125.0
16. Recoat Olympus Reservoirs							
Cost	0.0	50.0	0.0	0.0	0.0	0.0	50.0
Rev - Water System Fees	0.0	50.0	0.0	0.0	0.0	0.0	50.0
17. PRV at Bucklin Hill Road From 490 to 345 Pressure Zone							
Cost	0.0	0.0	0.0	50.0	0.0	0.0	50.0
Rev - Water System Fees	0.0	0.0	0.0	50.0	0.0	0.0	50.0
18. Construct New Shop/Inventory Storage Facility							
Cost	0.0	0.0	0.0	100.0	0.0	0.0	100.0
Rev - Water System Fees	0.0	0.0	0.0	100.0	0.0	0.0	100.0
Subtotal	455.0	230.0	205.0	705.0	130.0	80.0	1,805.0

SUMMARY: COSTS AND REVENUES

COSTS:

Capacity Projects:

Subtotal	<u>250.0</u>	<u>0.0</u>	<u>0.0</u>	<u>250.0</u>	<u>250.0</u>	<u>1,250.0</u>	<u>2,000.0</u>
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WATER SYSTEMS - NORTH PERRY WATER DISTRICT

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
Non-Capacity Projects							
	<u>455.0</u>	<u>230.0</u>	<u>205.0</u>	<u>705.0</u>	<u>130.0</u>	<u>80.0</u>	<u>1,805.0</u>
Subtotal	455.0	230.0	205.0	705.0	130.0	80.0	1,805.0
Total Costs	705.0	230.0	205.0	955.0	380.0	1,330.0	3,805.0
EXISTING REVENUES							
Rev - Water System Fees	<u>505.0</u>	<u>230.0</u>	<u>205.0</u>	<u>955.0</u>	<u>380.0</u>	<u>1,330.0</u>	<u>3,605.0</u>
Subtotal	505.0	230.0	205.0	955.0	380.0	1,330.0	3,605.0
NEW REVENUES							
Rev - DOE Grant	<u>200.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>200.0</u>
Subtotal	200.0	0.0	0.0	0.0	0.0	0.0	200.0
Total Revenues	705.0	230.0	205.0	955.0	380.0	1,330.0	3,805.0
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table WS.3-6. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

WATER SYSTEMS - CITY OF PORT ORCHARD								
COSTS/REVENUES	2007	2008	2009	2010	2011	2012	TOTAL	
<i>Capacity Projects</i>								
1. Well 10 Development								
Cost	250.0							250.0
Rev - Water Fees/Charges	250.0							250.0
2. Annapolis Intertie Development								
Cost	180.0							180.0
Rev - Water Fees/Charges	180.0							180.0
3. Bay Street Transmission Main Extension								
Cost	750.0							750.0
Rev - Water Fees/Charges	750.0							750.0
Subtotal	1,180.0	0.0	0.0	0.0	0.0	0.0	0.0	1,180.0
<i>Non-Capacity Projects</i>								
4. Old Clifton Road Storage Building								
Cost	5.0							5.0
Rev - Water Fees/Charges	5.0							5.0
5. Water System Telemetry Improvements								
Cost	50.0							50.0
Rev - Water Fees/Charges	50.0							50.0
6. Pressure Reducing Valves (PRVs) Installation								
Cost	50.0		50.0					100.0
Rev - Water Fees/Charges	50.0		50.0					100.0
7. City Hall Pump Station Replacement								
Cost				100.0				100.0
Rev - Water Fees/Charges				100.0				100.0
8. Water Main Replacements								
Cost			1,133.0	1,133.0				2,266.0
Rev - Water Fees/Charges			1,133.0	1,133.0				2,266.0
Subtotal	105.0	0.0	1,183.0	1,233.0		0.0	0.0	2,521.0
<i>SUMMARY: COSTS AND REVENUES</i>								
COSTS:								
Capacity Projects:								
	<u>1,180.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>1,180.0</u>

WATER SYSTEMS - CITY OF PORT ORCHARD

COSTS/REVENUES	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
Subtotal	1,180.0	0.0	0.0	0.0	0.0	0.0	1,180.0
Non-Capacity Projects							
	<u>105.0</u>	<u>0.0</u>	<u>1,183.0</u>	<u>1,233.0</u>	<u>0.0</u>	<u>0.0</u>	<u>2,521.0</u>
Subtotal	105.0	0.0	1,183.0	1,233.0	0.0	0.0	2,521.0
Total Costs	1,285.0	0.0	1,183.0	1,233.0	0.0	0.0	3,701.0
EXISTING REVENUES							
Rev - Water Fees/Charges	<u>1,285.0</u>	<u>0.0</u>	<u>1,183.0</u>	<u>1,233.0</u>	<u>0.0</u>	<u>0.0</u>	<u>3,701.0</u>
Subtotal	1,285.0	0.0	1,183.0	1,233.0	0.0	0.0	3,701.0
NEW REVENUES							
	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Revenues	1,285.0	0.0	1,183.0	1,233.0	0.0	0.0	3,701.0
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table WS.3-7. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

WATER SYSTEMS - CITY OF POULSBO								
COSTS/REVENUES	2007	2008	2009	2010	2011	2012	TOTAL	
<i>Capacity Projects</i>								
1. Big Valley Transmission Main								
Cost			300.0				300.0	
Rev - Fees/Charges/Other			300.0				300.0	
2. Pugh Road Well Improvements								
Cost	150.0						150.0	
Rev - Fees/Charges/Other	150.0						150.0	
3. Pugh Well 2 Transmission Main								
Cost			175.0				175.0	
Rev - Fees/Charges/Other			175.0				175.0	
	Subtotal	150.0	0.0	475.0	0.0	0.0	0.0	625.0
<i>Non-Capacity Projects</i>								
4. Finn Hill .5 MG Tank Recoating								
Cost	50.0						50.0	
Rev - Fees/Charges/Other	50.0						50.0	
5. Wilderness Park 1 MG Tank Recoating								
Cost	50.0						50.0	
Rev - Fees/Charges/Other	50.0						50.0	
6. Pugh 1 MG Tank Recoating								
Cost	50.0						50.0	
Rev - Fees/Charges/Other	50.0						50.0	
7. Seismic Evaluation of Water Tanks								
Cost	20.0						20.0	
Rev - Fees/Charges/Other	20.0						20.0	
8. New Public Works Facility								
Cost				2,000.0			2,000.0	
Rev - Bond Proceeds				2,000.0			2,000.0	
9. Conservation Program and Leak Detection								
Cost	9.0	9.0	9.0	9.0	9.0	9.0	54.0	
Rev - Fees/Charges/Other	9.0	9.0	9.0	9.0	9.0	9.0	54.0	
10. Cross Connection Control Program								
Cost	5.0	5.0	5.0	5.0	5.0	5.0	30.0	
Rev - Fees/Charges/Other	5.0	5.0	5.0	5.0	5.0	5.0	30.0	

WATER SYSTEMS - CITY OF POULSBO

COSTS/REVENUES	2007	2008	2009	2010	2011	2012	TOTAL
11. Well head Protection Program							
Cost	10.0	10.0	10.0	10.0	10.0	10.0	60.0
Rev - Fees/Charges/Other	10.0	10.0	10.0	10.0	10.0	10.0	60.0
12. Water Mains Replacement Program							
Cost	100.0	100.0	100.0	100.0	100.0	100.0	600.0
Rev - Fees/Charges/Other	100.0	100.0	100.0	100.0	100.0	100.0	600.0
Subtotal	294.0	124.0	124.0	2,124.0	124.0	124.0	2,914.0
<i>SUMMARY: COSTS AND REVENUES</i>							
COSTS:							
Capacity Projects:							
	<u>150.0</u>	<u>0.0</u>	<u>475.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>625.0</u>
Subtotal	150.0	0.0	475.0	0.0	0.0	0.0	625.0
Non-Capacity Projects							
	<u>294.0</u>	<u>124.0</u>	<u>124.0</u>	<u>2,124.0</u>	<u>124.0</u>	<u>124.0</u>	<u>2,914.0</u>
Subtotal	294.0	124.0	124.0	2,124.0	124.0	124.0	2,914.0
Total Costs	444.0	124.0	599.0	2,124.0	124.0	124.0	3,539.0
EXISTING REVENUES							
Rev - Fees/Charges/Other	<u>444.0</u>	<u>124.0</u>	<u>599.0</u>	<u>124.0</u>	<u>124.0</u>	<u>124.0</u>	<u>1,539.0</u>
Subtotal	444.0	124.0	599.0	124.0	124.0	124.0	1,539.0
NEW REVENUES							
Rev - Bond Proceeds	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>2,000.0</u>	<u>0.0</u>	<u>0.0</u>	<u>2,000.0</u>
Subtotal	0.0	0.0	0.0	2,000.0	0.0	0.0	2,000.0
Total Revenues	444.0	124.0	599.0	2,124.0	124.0	124.0	3,539.0
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table WS.3-8. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

WATER SYSTEMS - SILVERDALE WATER DISTRICT							
COSTS/REVENUES	2007	2008	2009	2010	2011	2012	TOTAL
<i>WATER MAIN IMPROVEMENTS</i>							
<i>Capacity Projects</i>							
1. Olympic View Road 8" and 12" Main Improvements							
Cost	956.0	956.0					1,912.0
Rev - Fees/Charges/Other	956.0	956.0					1,912.0
2. Mountain View Road 12" Main Improvements							
Cost		491.0					491.0
Rev - Fees/Charges/Other		491.0					491.0
3. Half Mile Road and Clear Creek Road 12" Main Improvements							
Cost						1,128.0	1,128.0
Rev - Fees/Charges/Other						1,128.0	1,128.0
4. Avante Place and Silverhill Drive 12" Main Improvements							
Cost					529.0		529.0
Rev - Fees/Charges/Other					529.0		529.0
5. Trigger Road and Clear Creek Road 12" Main Improvements							
Cost			556.0	556.0			1,112.0
Rev - Fees/Charges/Other			556.0	556.0			1,112.0
6. Westgate Road and Gustafson Road 8" and 12" Main Improvements							
Cost	459.0						459.0
Rev - Fees/Charges/Other	459.0						459.0
7. Zone 1 and Reservoir and Transmission Main Improvements							
Cost						764.0	764.0
Rev - Fees/Charges/Other						764.0	764.0
8. 12" Main Improvements in Undeveloped Area From Clear Creek Road to Old Frontier Road							
Cost			623.0				623.0
Rev - Fees/Charges/Other			623.0				623.0
<i>Capacity Projects</i>							
9. Kitsap Mall 8" Main and Silverdale Way 12" Main Improvements							
Cost						1,213.0	1,213.0
Rev - Fees/Charges/Other						1,213.0	1,213.0
10. Ridgetop Boulevard 12" Main Improvements							
Cost				259.0	259.0		518.0
Rev - System Fee Revenue				259.0	259.0		518.0

WATER SYSTEMS - SILVERDALE WATER DISTRICT

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
11. Provost Road and Frontier Road 12" and 16" Main Improvements							
Cost				436.0	436.0		872.0
Rev - Fees/Charges/Other				436.0	436.0		872.0
12. Anderson Hill Road and Bucklin Hill Road 12" Main Improvements							
Cost						1,099.0	1,099.0
Rev - Fees/Charges/Other						1,099.0	1,099.0
13. Silverdale Loop, Anderson Hill, and Munson Roads 8" Main Improvements							
Cost						833.0	833.0
Rev - Fees/Charges/Other						833.0	833.0
14. Dickey Road, Dickey Place, and Francis Drive 12" Main Improvements							
Cost						1,174.0	1,174.0
Rev - Fees/Charges/Other						1,174.0	1,174.0
15. Westgate Road 12" Main Improvements							
Cost	377.0						377.0
Rev - Fees/Charges/Other	377.0						377.0
16. Wilamette Meridian Road and Anderson Hill Road 16" Main Improvements							
Cost			690.0	690.0	690.0		2,070.0
Rev - Fees/Charges/Other			690.0	690.0	690.0		2,070.0
Subtotal	1,792.0	1,447.0	1,869.0	1,941.0	1,914.0	6,211.0	15,174.0
<i>Non-Capacity Projects</i>							
17. Annual Water Main Replacement Program							
Cost	200.0	200.0	200.0	200.0	200.0	200.0	1,200.0
Rev - Fees/Charges/Other	200.0	200.0	200.0	200.0	200.0	200.0	1,200.0
Subtotal	200.0	200.0	200.0	200.0	200.0	200.0	1,200.0
PRESSURE ZONE IMPROVEMENTS							
<i>Non-Capacity Projects</i>							
18. Convert Avante Drive NW to Zone 6							
Cost		10.0					10.0
Rev - Fees/Charges/Other		10.0					10.0
19. Convert West End of Hogan Road to Zone 4							
Cost		40.0					40.0
Rev - Fees/Charges/Other		40.0					40.0

WATER SYSTEMS - SILVERDALE WATER DISTRICT

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
20. Convert Mirage Lane and Sid Uhlrick Drive to Zone 4							
Cost		40.0					40.0
Rev - Fees/Charges/Other		40.0					40.0
21. Convert Silverdale Loop Road to Zone 3							
Cost	123.0						123.0
Rev - Fees/Charges/Other	123.0						123.0
Subtotal	123.0	90.0	0.0	0.0	0.0	0.0	213.0

PRESSURE REDUCING STATIONS AND RELIEF IMPROVEMENTS

Non-Capacity Projects

22. Zone 53/2 PRV on Clear Creek Road and Mountain View Road							
Cost	30.0						30.0
Rev - Fees/Charges/Other	30.0						30.0
23. Zone 53/2 PRV on Olympic View Road							
Cost	30.0						30.0
Rev - Fees/Charges/Other	30.0						30.0
24. Zone 53/2 PRV on Frontier Road and Half Mile Road							
Cost						30.0	30.0
Rev - Fees/Charges/Other						30.0	30.0
25. Zone 53/2 PRV on Frontier Road and Trigger Avenue							
Cost				30.0			30.0
Rev - Fees/Charges/Other				30.0			30.0
26. Zone 53/2 PRV on Frontier Road South of Hosman Road							
Cost	30.0						30.0
Rev - Fees/Charges/Other	30.0						30.0
Subtotal	90.0	0.0	0.0	30.0	0.0	30.0	150.0

FACILITY IMPROVEMENTS

Capacity Projects

27. Construct PUD Intertie & Zone 3 2/4/5 PS on NW Mountain View Road							
Cost	190.0	190.0					380.0
Rev - Fees/Charges/Other	190.0	190.0					380.0
28. Construct Improvements on Island Lake Well and Pump Station							
Cost	75.0						75.0
Rev - Fees/Charges/Other	75.0						75.0

WATER SYSTEMS - SILVERDALE WATER DISTRICT

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<hr/>							
29. Construct Improvements at Zone 1 Reservoir							
Cost						656.0	656.0
Rev - Fees/Charges/Other						656.0	656.0
<hr/>							
30. Construct Improvements Chena No. 1 and No.2 and Pump Station							
Cost		100.0	100.0				200.0
Rev - Fees/Charges/Other		100.0	100.0				200.0
<hr/>							
31. Construct Improvements at Wixson Well							
Cost			100.0	100.0			200.0
Rev - Fees/Charges/Other			100.0	100.0			200.0
<hr/>							
<i>Capacity Projects</i>							
<hr/>							
32. Construct Improvements at Wixson Reservoir No.2							
Cost						5,251.0	5,251.0
Rev - Fees/Charges/Other						5,251.0	5,251.0
<hr/>							
Subtotal	265.0	290.0	200.0	100.0	0.0	5,907.0	6,762.0
<hr/>							
<i>Non-Capacity Projects</i>							
<hr/>							
33. Abandon Dawn Park Well							
Cost	10.0						10.0
Rev - Fees/Charges/Other	10.0						10.0
<hr/>							
34. Abandon Frontier Woods Well No.1							
Cost			10.0				10.0
Rev - Fees/Charges/Other			10.0				10.0
<hr/>							
35. Abandon Frontier Woods Well No.2							
Cost			10.0				10.0
Rev - Fees/Charges/Other			10.0				10.0
<hr/>							
36. Abandon Westgate Well							
Cost			10.0				10.0
Rev - Fees/Charges/Other			10.0				10.0
<hr/>							
37. Abandon Silversound Wells No.1 and No.2							
Cost	15.0						15.0
Rev - Fees/Charges/Other	15.0						15.0
<hr/>							
38. Abandon Graystone Well							
Cost		10.0					10.0
Rev - Fees/Charges/Other		10.0					10.0
<hr/>							

WATER SYSTEMS - SILVERDALE WATER DISTRICT

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
39. Abandon Chapman Well							
Cost		10.0					10.0
Rev - Fees/Charges/Other		10.0					10.0
40. Abandon Olympic circle, Old Bangor, and Olympic View Facilities							
Cost		30.0					30.0
Rev - Fees/Charges/Other		30.0					30.0
Subtotal	25.0	50.0	30.0	0.0	0.0	0.0	105.0
<i>MISCELLANEOUS IMPROVEMENTS</i>							
<i>Non-Capacity Projects</i>							
41. System-Wide Seismic Improvements							
Cost		500.0	500.0	500.0	500.0	500.0	2,500.0
Rev - Fees/Charges/Other		500.0	500.0	500.0	500.0	500.0	2,500.0
42. Reservoir Recoating							
Cost	570.0	570.0					1,140.0
Rev - Fees/Charges/Other	570.0	570.0					1,140.0
43. Telemetry Improvements							
Cost	10.0	10.0	10.0	10.0			40.0
Rev - Fees/Charges/Other	10.0	10.0	10.0	10.0			40.0
44. Conservation Program and Leak Detection							
Cost	12.0	12.0	12.0	12.0	12.0	12.0	72.0
Rev - Fees/Charges/Other	12.0	12.0	12.0	12.0	12.0	12.0	72.0
45. Cross Connection Control Program							
Cost	6.0	6.0	6.0	6.0	6.0	6.0	36.0
Rev - Fees/Charges/Other	6.0	6.0	6.0	6.0	6.0	6.0	36.0
46. Wellhead Protection Program							
Cost	10.0	10.0	10.0	10.0	10.0	10.0	60.0
Rev - Fees/Charges/Other	10.0	10.0	10.0	10.0	10.0	10.0	60.0
Subtotal	608.0	1,108.0	538.0	538.0	528.0	528.0	3,848.0

SUMMARY: COSTS AND REVENUES

COSTS:

Capacity Projects:

Subtotal	<u>2,057.0</u>	<u>1,737.0</u>	<u>2,069.0</u>	<u>2,041.0</u>	<u>1,914.0</u>	<u>12,118.0</u>	<u>21,936.0</u>
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Non-Capacity Projects

WATER SYSTEMS - SILVERDALE WATER DISTRICT

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
	<u>1,046.0</u>	<u>1,448.0</u>	<u>768.0</u>	<u>768.0</u>	<u>728.0</u>	<u>758.0</u>	<u>5,516.0</u>
Subtotal	1,046.0	1,448.0	768.0	768.0	728.0	758.0	5,516.0
Total Costs	3,103.0	3,185.0	2,837.0	2,809.0	2,642.0	12,876.0	27,452.0
EXISTING REVENUES							
Rev - Fees/Charges/Other	<u>3,103.0</u>	<u>3,185.0</u>	<u>2,837.0</u>	<u>2,809.0</u>	<u>2,642.0</u>	<u>12,876.0</u>	<u>27,452.0</u>
Subtotal	3,103.0	3,185.0	2,837.0	2,809.0	2,642.0	12,876.0	27,452.0
NEW REVENUES							
Rev -	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Revenues	3,103.0	3,185.0	2,837.0	2,809.0	2,642.0	12,876.0	27,452.0
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table WS.3-9. Capital Facilities Projects and Financing 2007-2012 (All Amounts Times \$1,000)

WATER SYSTEMS - SUNNYSLOPE WATER DISTRICT							
<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
<i>Capacity Projects</i>							
1. Complete 2000 LF Victory Drive Loop Distribution System Adjacent to SR-3.							
Cost	0.0	0.0	0.0	90.0	0.0	0.0	90.0
Rev - Developer/SR Loan	0.0	0.0	0.0	90.0	0.0	0.0	90.0
2. Addition of 4,200 LF 8" Parallel Main Along Sunnyslope Road							
Cost	0.0	0.0	0.0	160.0	0.0	0.0	160.0
Rev - System Rev (SR) Loan	0.0	0.0	0.0	160.0	0.0	0.0	160.0
3. Extend 2,400 LF of 8" Main Along Old Clifton Road to West							
Cost	0.0	0.0	0.0	130.0	0.0	0.0	130.0
Rev - Developer/SR Loan	0.0	0.0	0.0	130.0	0.0	0.0	130.0
4. Extend 2,400 LF of 8" Main Along Old Clifton Road to East							
Cost	0.0	0.0	0.0	108.0	0.0	0.0	108.0
Rev - Developer/SR Loan	0.0	0.0	0.0	108.0	0.0	0.0	108.0
Subtotal	0.0	0.0	0.0	488.0	0.0	0.0	488.0
<i>Non-Capacity Projects</i>							
5. Well N.1 Emergency Generator Connection Modifications							
Cost	0.0	2.5	0.0	0.0	0.0	0.0	2.5
Rev - System Fee Revenue	0.0	2.5	0.0	0.0	0.0	0.0	2.5
6. Repair/Replace Reservoir No. 2 Overflow and Construct Outfall Improvements							
Cost	5.0	0.0	0.0	0.0	0.0	0.0	5.0
Rev - System Fee Revenue	5.0	0.0	0.0	0.0	0.0	0.0	5.0
7. Overhaul Diesel Booster Pump							
Cost	5.0	0.0	0.0	0.0	0.0	0.0	5.0
Rev - System Fee Revenue	5.0	0.0	0.0	0.0	0.0	0.0	5.0
Subtotal	10.0	2.5	0.0	0.0	0.0	0.0	12.5
<i>Non-Capacity Projects</i>							
8. Add fire Hydrants (5) Along Sunnyslope Road							
Cost	0.0	20.0	0.0	0.0	0.0	0.0	20.0
Rev - System Fee Revenue	0.0	20.0	0.0	0.0	0.0	0.0	20.0
9. Replace 500 LF Existing 4" Mains with Minimum 6" Mains.							
Cost	0.0	0.0	15.0	15.0	15.0	15.0	60.0
Rev - System Fee Revenue	0.0	0.0	15.0	15.0	15.0	15.0	60.0

WATER SYSTEMS - SUNNYSLOPE WATER DISTRICT

<u>COSTS/REVENUES</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>TOTAL</u>
10. Add Dedicated Sampling Stations (8) for Coliform Monitoring							
	4.0	0.0	0.0	0.0	0.0	0.0	4.0
Rev - System Fee Revenue	4.0	0.0	0.0	0.0	0.0	0.0	4.0
Subtotal	4.0	20.0	15.0	15.0	15.0	15.0	84.0

SUMMARY: COSTS AND REVENUES

COSTS:							
Capacity Projects:	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>488.0</u>	<u>0.0</u>	<u>0.0</u>	<u>488.0</u>
Subtotal	0.0	0.0	0.0	488.0	0.0	0.0	488.0
Non-Capacity Projects	<u>14.0</u>	<u>22.5</u>	<u>15.0</u>	<u>15.0</u>	<u>15.0</u>	<u>15.0</u>	<u>96.5</u>
Subtotal	14.0	22.5	15.0	15.0	15.0	15.0	96.5
Total Costs	14.0	22.5	15.0	503.0	15.0	15.0	584.5
EXISTING REVENUES							
Rev - System Fee Revenue	<u>14.0</u>	<u>22.5</u>	<u>15.0</u>	<u>15.0</u>	<u>15.0</u>	<u>15.0</u>	<u>96.5</u>
Subtotal	14.0	22.5	15.0	15.0	15.0	15.0	96.5
NEW REVENUES							
Rev - System Revenue Loan	0.0	0.0	0.0	160.0	0.0	0.0	160.0
Rev - Developer/SR Loan	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>328.0</u>	<u>0.0</u>	<u>0.0</u>	<u>328.0</u>
Subtotal	0.0	0.0	0.0	488.0	0.0	0.0	488.0
Total Revenues	14.0	22.5	15.0	503.0	15.0	15.0	584.5
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3. CFP Implementation

The following programs shall be implemented by December 31, 2007, or such earlier date as may be adopted by the County, to ensure that the goals and policies established in the Capital Facilities Element (CFE) will be achieved or exceeded, and that the capital improvements will be constructed. Each implementation program will be adopted by ordinance, resolution or executive order, as appropriate.

1. Review of Applications for Development Permits.

The County shall amend its land development regulations to provide for the review of various applications for development permits which applications, if granted, would impact levels of service set forth in the CFE for certain public facilities. Such system of review shall assure that no final development permit shall be issued which results in a reduction in the levels of service below the standards adopted in Policy CF-3 for certain public facilities. The land development regulations shall include, at a minimum, the provisions of Policy CF-15 in determining whether a development permit can be issued.

The land development regulations shall also address the circumstances under which public facilities may be provided by applicants for development permits. Applicants for development permits may offer to provide public facilities at the applicant's own expense - to ensure sufficient capacity of certain public facilities. Development permits may be issued subject to the provision of public facilities by the applicant subject to the following requirements:

- A. The County and the applicant enter into an enforceable development agreement that shall provide, at a minimum, a schedule for construction of the public facilities and mechanisms for monitoring to insure that the public facilities are completed concurrent with the impacts of the development, or the development will not be allowed to proceed.
- B. The public facilities to be provided by the applicant are contained in the schedule of capital improvements of the Comprehensive Plan, and will achieve and maintain the adopted standard for levels of service concurrent with the impacts of development.

2. Impact Fees

Impact fee ordinances shall require the same standard for the level of service as is required by Policy CF-3, and may include standards for other types of public facilities not addressed under Policy CF-3. All impact fee ordinances necessary to support the financial feasibility of this element shall be adopted, or amended to the required standard for the level of service by December 31, 2007.

3. Biennial Budget.

The County budget shall include in its capital appropriations all projects in the schedule of capital improvements that are planned for expenditure during the subsequent fiscal 2-year period.

4. Update of Capital Facilities Plan

The Capital Facilities Plan shall be reviewed and updated in conjunction with the budget process and the release of the official population estimates and projections by the Office of Financial Management of the State of Washington. CFP update tasks shall include:

- A. Revision of population projections.
- B. Update of inventory of public facilities.
- C. Update of costs of public facilities.
- D. Update of public facilities requirements analysis (actual levels of service compared to adopted standards).
- E. Update of revenue forecasts.
- F. Revision and development of capital improvements projects for the next six fiscal years.
- G. Update analysis of financial capacity.
- H. Amendments to the CFP, including amendments to levels of service standards, capital projects, and/or the financing plan sources of revenue.

5. Concurrency Implementation and Monitoring System.

The County shall establish and maintain Concurrency Implementation and Monitoring Systems. The Systems shall consist of the following components:

- A. *Annual Report on the Capacity and Levels of Service of Public Facilities.* The report shall summarize the actual capacity of public facilities compared to the standards for levels of service adopted in Policy CF-3, and forecast the capacity of public facilities for each of the six succeeding fiscal years. The forecast shall be based on the most recently updated schedule of capital improvements in the Capital Facilities Plan. The annual report shall provide the initial determination of the capacity and levels of service of public facilities for the purpose of issuing development permits during the 12 months following completion of the annual report. Each application will be analyzed separately for concurrency, as described in B, below.
- B. *Public Facility Capacity Review of Development Applications.* The County shall use the procedures specified in “1. Review of Applications for Development Permits” above to enforce the requirements of Policy CF-15 at the time each application for development in the unincorporated area of the County is reviewed. Reviews of

applications for development within the County's boundary will be conducted according to the terms and conditions set forth in interlocal agreement(s) between the County and municipalities within the County. Records shall be maintained during each fiscal year to identify the cumulative impacts of all development permits approved during the fiscal year-to-date on the capacity of public facilities as set forth in the most recent annual report on capacity and levels of service of public facilities.

The land development regulations of the County shall provide that applications for development permits that are denied because of insufficient capacity of public facilities may be resubmitted after a time period to be specified in the land development regulations. Such time period is in lieu of, and not in addition to, other minimum waiting periods imposed on applications for development permits that are denied for reasons other than lack of capacity of public facilities. Land development regulations shall require that development commence within a specified time after a development permit is issued, or the development permit shall expire, subject to reasonable extensions of time based on criteria included in the regulations.

- C. *Review of Changes to Planned Capacity of Public Facilities.* The County shall review each amendment to this Capital Facilities Plan, specifically with regard to any changes in standards for levels of service and changes in the schedule of capital improvements, in order to enforce the requirements of Policy CF-13.
- D. *Concurrency Implementation Strategies.* The County shall review no less frequently than every 2 years the concurrency implementation strategies that are developed pursuant to Policy CF-15 of this Capital Facilities Plan. Such strategies may include, but are not limited to, the following:
- (1) Standards for levels of service may be phased to reflect the County's financial ability to increase public facility capacity, and resulting levels of service, from year to year. Standards for levels of service may be phased to specific fiscal years to provide clear, unambiguous standards for issuance of development permits. Phased standards will appear in Policy CF-3.
 - (2) Standards for levels of service may be applied according to the timing of the impacts of development on public facilities. Final development permits, that impact public facilities in a matter of months, are issued subject to the availability of public facilities prior to the issuance of the building permit (except roads and transit which must be available within 6 years of the final development permit).

Preliminary development permits may be issued subject to public facility capacity, but the capacity determination expires unless the applicant provides financial assurances to the County and obtains subsequent development permits before the expiration of the initial development

permit. As an alternative, the determination of public facility capacity for preliminary development permits can be waived by agreement that a capacity determination must be made prior to issuance of any final development permit for the subject property. Such a waiver specifically precludes the acquisition of rights to a final development permit as a result of the issuance of the preliminary development permit. (See Policy CF-15 [a] and [b])

- (3) Public facility capital improvements are prioritized among competing applications for the same amount of facility capacity according to the criteria in Policy CF-5.2. If any applications require deferral to a future fiscal year because of insufficient capacity of public facilities during the current fiscal year, the applications to be deferred will be selected on the basis of rational criteria.

E. Public Facilities Capacities for Development Permits Issued Prior to Plan Adoption. The County will "reserve" capacity of public facilities for vested development permits that were issued by the County prior to the adoption of this Comprehensive Plan.

The County will recognize legitimate and substantial vested development rights obtained with some previous development permits. The County will identify properties that have vested development rights pursuant to procedures to be adopted in the land development regulations. Properties not identified by the County as having vested development rights may petition for a determination (DCD, hearing examiner, BOCC, etc.) of such rights.

The County will reserve capacity of public facilities to serve the needs of properties with vested development rights. In the event that there is not sufficient capacity to serve the vested properties, the County will create a "lien" on future capacity of public facilities to serve the vested property at the adopted level of service standard before allowing non-vested property to use future public facility capacity. In such circumstances, the vested development will be allowed to commence to avoid a "taking" of the vested rights.

The County intends to require vested properties to commence development and to continue in good faith to maintain the "reservation" of capacity of public facilities that are provided by the County. The County also intends to evaluate the timing and estimated density/intensity of vested properties in order to phase the reservation of capacity to meet the probable needs of such properties. Experience shows that some vested development permits are not used to the maximum allowable uses, densities or intensities, nor achieve development limits over extended periods of time.

The County finds that it is not necessary to automatically "reserve" capacity of public facilities for non-vested development permits issued prior to plan adoption; however,

those development permits should be subject to concurrency requirements. The County therefore finds that the population forecasts that are the basis for this plan are a reasonable prediction of the absorption rate for development, and that the capital facilities planned to serve forecasted development are available for that absorption rate. Reserving public facility capacity for non-vested, previously issued development permits would deny new applicants access to public facilities, and would arbitrarily enhance the value of dormant development permits.

6. Evaluation Report

Evaluation reports will address the implementation of the goals and policies of the Capital Facilities Element of the Comprehensive Plan. The monitoring procedures necessary to enable the completion of evaluation include:

- A. Review of Annual Reports of the Concurrency Implementation and Monitoring System.
- B. Review of Updates of this Capital Facilities Plan, including updated supporting documents at time of budget preparation, no less frequently than every two years.