# Attachment C: Appendices
# Table of Contents

**Page**

# Attachment C-1
# Definitions

**Applicable Law** means any statute, law, charter, regulation, ordinance, rule, judgment, order, decree, permit, license, requirement, approval or restriction of an appropriate Governmental Authority, or any interpretation or administration of any of the foregoing by the appropriate Governmental Authority charged with the responsibility for the foregoing, applicable from time to time to the ownership, possession, operation, improvement, expansion, equipping, design or financing of the Managed Assets or the Conveyance System or the performance of obligations under this Pilot Program, whether now or hereafter in effect; provided, however, that any such statute, law, charter, regulation, ordinance, rule, judgment, order, decree, permit, license, requirement, approval, restriction, interpretation or administration is lawful and binding. Applicable Law includes, without limitation, Environmental Laws.

**Abnormal Substance** means a substance, material or object present in the Influent which cannot be removed or treated by the Managed Assets, including but not limited to those substances, materials or objects which are not susceptible of treatment at the Managed Assets or materially interfere with or obstruct the operations of the Managed Assets.

**Biosolids** are the nutrient-rich organic material produced by treating wastewater solids at the Facility; they can be beneficially recycled as a fertilizer and soil amendment.

**Biochemical Oxygen Demand** (BOD) means the amount of oxygen required by bacteria while stabilizing decomposable organic matter, the analysis of which shall conform to the provisions of 40 CFR 136, *Test Procedures for the Analysis of Pollutants*, unless other test procedures have been specified in the NPDES Permit.

**Capital Improvements** means any addition, alteration, improvement, or other change to the Managed Assets which is capitalized under generally accepted accounting principles.

**Capital Improvement Program** means the activities of the WWP to plan, design, construct and otherwise implement expansions or improvements to the Managed Assets.

**Change in Law** means any of the following, which shall occur after adoption of the Pilot Program Plan:

a) the lawful enactment, adoption, promulgation, modification, repeal, or change in interpretation by the appropriate Governmental Authority charged with responsibility therefore of any Applicable Law, including future regulations and new species listed under the Endangered Species Act, imposition of Total Maximum Daily Loads under the Clean Water Act, and other such changes as may be imposed over time, provided that Change in Law shall also include the requirements of any Permit that has not been issued as of January 1, 2001 which is required under Applicable Law;
b) the issuance of a binding order, decree, or judgment of any Governmental Authority, if such order, decree, or judgment is not also the result of negligent or willful action or failure to act of the party relying thereon, or a breach by such party hereunder, provided that the contesting in good faith of any such order, decree, or judgment shall not constitute or be construed as a willful or negligent action of such party;
c) the suspension, termination, interruption, denial, failure to issue, or failure to renew or be renewed any Permit essential to the administration, operation or maintenance of the Managed Assets, if such act or event is not also the result of negligent or willful action or failure to act of the party relying thereon or a breach by such party hereunder, provided that the contesting in good faith of any such order shall not be construed as a negligent or willful action of such party;
d) the imposition of any material conditions on the issuance or renewal of any Permit which establishes requirements making the administration, operation or maintenance costs of the Managed Assets greater than the costs relating to the most stringent requirement in effect on the Effective Date (including, without limitation, the imposition of any such material conditions based upon or relating to Applicable Law in effect prior to the Effective Date);
e) the Managed Assets cease being regulated for all purposes under Applicable Law as the Managed Assets and the industrial dischargers thereto shall no longer be eligible for the Domestic Sewage Exclusion, set forth at 42 USC Section 6903 (27) and regulations related thereto at 40 CFR Section 261.4(a)(1), as may be amended; or,
f) the enactment, adoption, modification, repeal, or change in interpretation of any Applicable Law affecting the Managed Assets or the management, ownership, lease, operation, or maintenance thereof; or,
g) implementation of agreements, such as the Habitat Conservation Plan under the Endangered Species Act or consent agreements under other environmental laws, developed for the purposes of complying with existing, changed or new laws or regulations.

**County** means King County, a political subdivision of Washington State.

**Clean Water Act** means Title 33 of the United States Code, Sections 1251-1387, as amended from time to time.

**Conveyance System** means the sewage conveyance system located in the Service Area and connected to the Managed Assets, including, without limitation, all interceptors, pumping stations, metering stations and treatment facilities owned by the County.

**Effluent** means treated wastewater discharged from the South Treatment Plant, West Treatment Plant, Vashon Treatment Plant, Carkeek Combined Sewer Overflow Treatment Plant and Alki Combined Sewer Treatment Plant.

**Environmental Laws** means any and all federal, state and local statutory or common laws, regulations, rules, ordinances, permits, authorizations, approvals, registrations and licenses, administrative orders, judicial decrees, judgments or requirements, relating to pollution or protection of the environment, natural resources or human health.

**Fecal Coliform** means a bacterial organism commonly found in the feces of warm blooded animals, the analysis of which conforms to the provisions of 40 CFR 136, *Test Procedures for the Analysis of Pollutants*, unless other test procedures have been specified in the NPDES Permit, which is used as an indicator of fecal contamination.

**Grit** dense inorganic and organic materials such as sand, seeds and other generally non-degradable materials which are removed during the treatment process to protect downstream equipment and improve digester operation and biosolids quality.

**Good Industry Practices** means the methods, techniques, standards, and practices which, at the time they are employed and in light of the circumstances known or reasonably believed to exist at such time, are generally recognized and accepted as good operation, maintenance, repair, replacement, and management practices in the municipal wastewater treatment industry as observed in the northwest region of the United States.

**Governmental Authority** means any federal, state, or local government and any political subdivision or any governmental, quasi-governmental, judicial, public or statutory instrumentality, administrative agency, authority, body, or entity.

**Hazardous Substance** means any chemical, pollutant, contaminant, toxic substance, hazardous or extremely hazardous material or substance, waste, radioactive material, or oil and petroleum product, as such terms or any similar terms are used under any applicable Environmental Laws.

**Influent** means domestic, commercial, institutional, industrial, and other wastewater, and inflow and infiltration of stormwater into the pipes, interceptors and other facilities that collect and transport such wastewater.

**Industrial Pretreatment Program** means the program as more fully described in 40 CFR Part 403, originally developed by the Municipality of Metropolitan Seattle in 1969, as amended from time to time.

**Managed Assets** means the South Treatment Plant, the West Point Treatment Plant, Carkeek Combined Sewer Overflow Treatment Plant, Alki Combined Sewer Treatment Plant, the Conveyance System, and all appurtenant capital inventory, permanent equipment, fleet, office space, office equipment, processes, and improvements situated at the sites, and existing and operating on the effective date.

**NPDES Permits** means the National Pollutant Discharge Elimination System wastewater discharge permits Number 002918-1 issued on January 1, 1996, for West Point as amended to include Carkeek Park CSO Treatment Plant and Alki CSO Treatment Plant and Number WA-002958-1 for the South Plant, issued on July 15, 1997.

**Nonspecification Influent** means any influent received at the facility other than specification influent.

**Permit violations** means the issuance of a Notice of Penalty by the Department of Ecology.

**Planned System Improvements** means the capital improvements, as listed in Attachment C-6, which are not yet in operation and the development of which will be managed by WWP.

**Pre-existing Environmental Condition** means the presence on the sites or properties of the Wastewater Treatment Program of any hazardous substances, contained or uncontained, on or prior to the effective date, including (without limitation) any underground storage tanks that exist on the sites on or prior to the effective date and are regulated under environmental laws and any condition of the managed assets on the effective date substantially likely to result in the release of any hazardous substance.

**Productivity Incentive Fund** is an account established to provide an incentive for the WWP to exceed its performance expectations, and to provide backing for the WWP obligations in the Pilot Program, as further defined in Attachment C-8.

**Productivity Initiative** means the initiative undertaken by the WWP to identify process efficiencies and improvements in how it manages human resources so that continued and improved cost-effective services may be provided to the public with the overall goal of being the best publicly run facility in five years and competitive with the privately run facilities in ten.

**Screenings** means any debris such as rags and plastics that adversely affect treatment plant operation and/or residuals quality which are removed by a screening process.

**Septage** means the liquid and solid material pumped from a septic tank or cesspool during cleaning.

**Service Area** means that urban area of Snohomish, King and Pierce Counties, as identified in the adopted Regional Wastewater Services Plan, that is serviced by King County's wastewater treatment facilities.

**Sites** means the various sites of the Managed Assets described in Attachment C-2.

**South Treatment Plant** means the wastewater treatment plant situated on approximately 90 acres located at 1200 Monster Road Southwest, Renton, Washington.

**Specification Influent** means influent containing no hazardous substance or abnormal substance in concentrations that exceed those allowed under applicable law.

**Total Suspended Solids (TSS)** means solid matter that can be separated during the treatment process, the analysis of which conforms to the provisions of 40 CFR 136, *Test Procedures for the Analysis of Pollutants*, unless other test procedures have been specified in the NPDES Permit.

**Uncontrollable Circumstances** means any act, event or condition beyond the reasonable control of the WWP and not the result of willful action or lack of reasonable diligence of the WWP. Uncontrollable circumstances shall include, but not be limited to, any of the following:

a) an act of God (except reasonably anticipated weather conditions normal for the geographic area of the service area and within the 20-year storm event), landslide, lightning, earthquake, windstorm, volcano, flood, acts of a public enemy, war, blockade, insurrection, riot, civil disturbance or similar occurrence; or
b) a change in law; or
c) labor disputes other than labor disputes involving only employees of the WWP; or
d) the loss of or inability to obtain any utility services, including water, fuels and electric power necessary for operation of the facility or the managed assets; or

e) receipt of unauthorized or illegal discharges which adversely affect the collection system, plant facilities or process stability; or
f) the failure or refusal of the County employees, contractors, representatives or officials outside of the WWP to perform any obligation under this Pilot Program; or
g) a change in conditions outside of the control of the WWP which result in an inability to utilize the existing biosolids application sites; or
h) the destruction of all or any part of the managed assets except where such destruction resulted from routine wear and tear or the negligence or willful misconduct of the WWP; or
i) the existence of a pre-existing environmental condition; or
j) contamination of the managed assets from groundwater, soil or airborne hazardous material migrating from presently known or unknown sources on site or outside the managed assets and not caused by WWP fault; or
k) the failure of any contractor or supplier to furnish services, materials, chemicals or equipment on the dates agreed to, but only if such failure is the result of an event which would constitute an uncontrollable circumstance if it affected WWP directly, and WWP is not able after exercising all reasonable efforts to timely obtain substitutes; or
l) a violation of applicable law by a person or organization other than the WWP; or
m) receipt of nonspecification influent; or
n) a storm greater than the 20-year storm event.

**West Point Treatment Plant** means the wastewater treatment plant situated on approximately 32 acres located at 1400 Utah Street West, Seattle, Washington.

**Wastewater Program** (WWP) means the activities of the King County Department of Natural Resources Wastewater Treatment Division's Capital Improvement Program, West Operations, Planning and System Development, Maintenance, Finance and Administrative Services, South Operations, Technology Assessment and Resource Recovery, the Division Manager's Office, and the activities of the King County Department of Natural Resources Water and Land Resources Division's Environmental Laboratory and Industrial Waste Program.

# Attachment C-2
# Existing System and Scope of Wastewater Services

Attachment C-2 describes in general terms the services, service area, and major physical assets of the current WWP. The information in this attachment serves as a baseline so that if added services are requested of the WWP, future budgets and cost assumptions may be revised accordingly.

## Service Area

The Wastewater Service Area is defined in King County Ordinance Nos. 11034 and 13680 (Regional Wastewater Services Plan), now codified as King County Codes 28.81, 28.82, 28.84, and 28.86, and includes most of the urbanized areas within King County and part of southwest Snohomish County. Wastewater services are provided to about 1.3 million people (including commercial and industrial employment) in the 420-square-mile wastewater service area. Approximately 1.9 percent of the average daily influent is industrial flow, reflecting the large residential makeup of the service area.

## Treatment Facilities

The WWP facilities treated about 216 million gallons per day of wastewater at the South Treatment Plant (located in Renton), West Point Treatment Plant (Seattle), Alki Combined Sewer Overflow Treatment Plant (Seattle), Carkeek Combined Sewer Overflow Treatment Plant (Seattle), and the Vashon Treatment Plant (Vashon Island) in 2000. The complete scope of the wastewater treatment facilities, for which estimated budget targets are estimated, is described in the Wastewater Treatment Business Plan. In summary, these facilities:

1. The West Point and South Treatment Plants treat wastewater to meet NPDES permit requirements of 30 mg/L monthly average of Biological Oxygen Demand and 30 mg/l monthly average of Total Suspended Solids, and 200 Fecal Colonies/100 ml monthly geographic mean.

2. Provide septage services at South Treatment Plant.

3. Meet Class B biosolids quality as defined by the federal 503 regulations for pathogens and exceptional quality for metals, and shall be recycled in accordance with all applicable permits.

4. Operate a system to develop up to 2 million gallons per day of reclaimed water in accordance with all applicable permits at South Treatment Plant and West Point Treatment Plant.

5. Perform sampling and conventional chemistry and microbiology analyses in support of plant process optimization and NPDES requirements. The process laboratories also provide support to capital projects such as effluent reuse and the advanced wastewater technology program.

6. Provide a number of administrative functions that influence the cost of services.

7. Undertake maintenance of haul trucks, application vehicles, and other heavy equipment at the plants.

8. Operate and monitor odor control systems for wastewater treatment plants, pump stations, and conveyance lines.

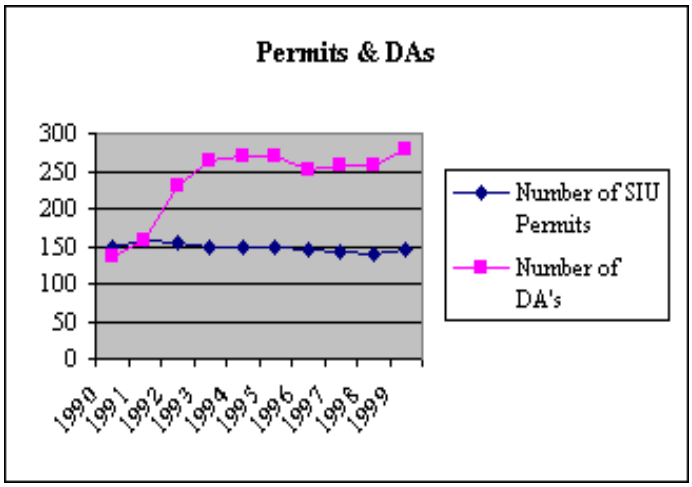
9. Conduct ongoing equipment and process testing to improve treatment performance and efficiency.

## Conveyance System

The conveyance system includes about 275 miles of underground transmission lines and tunnels, 41 pump stations, 18 regulator stations, and 37 permitted CSO (regulator and pump station facilities) and two CSO treatment facilities. Major assets of the offsite conveyance system, not located at the plants, include the Jameson Building offices and mechanical shops (located at 2501 West Jameson Street, Seattle) and warehouses for spare parts inventory. The complete scope of the conveyance facilities, for which estimated budget targets are estimated, is described in the Conveyance Business Plan.

## Industrial Pretreatment Program

King County's Industrial Waste Program is located in leased office space at 130 Nickerson Street, Seattle. It is a fully delegated EPA pretreatment program that administers local and federal pretreatment regulations as required by the County's NPDES permit and 40 CFR 403. The Industrial Waste Program also administers industrial cost recovery programs based on the pollutants discharged and the volume of discharge. The complete scope of the Industrial Waste Program, for which estimated budget targets are estimated, is described in the Wastewater Treatment Business Plan.




Traditional workload indicators for the Industrial Waste Program are the number of permits and Discharge Authorizations (DAs) in force (which indicates the number of companies in the system). Permits are issued to major dischargers, those who discharge volumes greater than 25,000 gallons of wastewater per day, or those who are federally regulated. Starting in 1990, DAs have also been issued to smaller dischargers who are not federally regulated. Changes in these numbers have resulted from decisions to shift permitted companies to DAs, a trend away from traditional "smokestack industries," and economic growth.

## Residuals Management

The WWP manages the beneficial use of wastewater process residuals in an environmentally sound and publicly acceptable manner. Costs are incurred for transportation, land application, research, public outreach, monitoring, permit compliance, and market development. About 145,000 wet tons of biosolids and two million gallons per day of reclaimed water are produced annually at the two regional plants. Digester gas is used at the West Point Treatment Plant to power four 450-hp raw sewage pumps. All of the raw sewage pumping demand is met by with digester gas and excess gas used to generate electricity is sold to Seattle City Light. Digester gas is scrubbed and sold to Puget Sound Energy at the South Treatment Plant.

Managing residuals also includes disposal of nonmaterials, such as secondary effluent discharge, grit, screenings, hazardous materials, and CSO effluent discharge.

## Internal Support Functions

- The *Environmental Laboratory* (located at 322 West Ewing Street, Seattle) employs about 80 staff, including chemists, biologists, microbiologists, environmental specialists, laboratory project managers, information systems analysts, and support positions such as sample manager, QA officer, laboratory assistants, administrative staff, and an operating engineer for the physical plant. The Environmental Laboratory provides environmental field sampling and data collection, chemical and biological analyses, and

environmental data management and reporting services to the WWP and wastewater-funded programs within the Water and Land Resources Division. Services are provided to nonwastewater funded groups in King County, or other public jurisdictions on a reimbursable basis based on laboratory capacity. The complete scope of the environmental lab, for which estimated budget targets are estimated, is described in the Laboratory Business Plan.

- *Capital Improvement Program* includes comprehensive long-range planning (e.g., the Regional Wastewater Services Plan), right-of-way and permit acquisition, individual project level planning, Geographic Information System analyses, flow monitoring and modeling, project control, managing design and construction, undertaking in-house design, and implementing the Capital Asset Management Plan.

- *Administrative services* are housed at the King Street Center in leased-to-own office space (located at 201 South Jackson Street, Seattle). Services include a safety office, environmental planning for compliance with the state and national Environmental Protection Agency, response to the Endangered Species Act and Habitat Conservation Plan development, human resources, budget, information technology and technical publications, and division management. See the Administrative Business Plan for a complete list of the scope of services.

# Attachment C-3
# Biosolids Management Baseline

The King County Department of Natural Resources Wastewater Program (WWP) produces and recycles biosolids consistent with the federal Standards for the Use of Sewage Sludge (Biosolids), 40 CFR Part 503, promulgated under Sections 405 and 406 of the Clean Water Act, as administered by the Washington Department of Ecology under RCW Chapter 70.95J, Municipal Sewage Sludge, and WAC 173-308, Biosolids Management. In addition, the WWP implements the best management practices outlined in the Biosolids Management Guidelines for Washington State (Washington Department of Ecology, July 2000) and is in the process of implementing an Environmental Management System based on the ISO 14001 standard.

Both the West Point and the South Treatment plants produce a Class B biosolids by anaerobic digestion. Class B biosolids have significantly reduced amounts of pathogens and can be safely applied to land with limited public access. A small percentage of biosolids is composted by a private firm into a Class A product (virtually pathogen free) called GroCo. Trace metals in all King County's biosolids meet the exceptional quality levels as defined by the federal and state regulations.

After dewatering at the treatment plants, the biosolids are transported by truck to sites where they are recycled to improve soils and enhance the growth of forests and agricultural crops. Each project has a site-specific land application plan that includes public involvement and environmental monitoring. The current program consists of the following projects:

- **Green Valley** – land application to privately owned hops, corn, orchards, and rangeland in Yakima County;
- **Boulder Park** – land application to privately owned dryland wheat and other grains in Douglas County;
- **GroCo** – composting of biosolids and sawdust by a private firm to make a Class A product that is used throughout the region for landscaping;
- **Mountains to Sound Greenway** – fertilization of private and public forests in eastern King County. This program also includes an environmental education program and the Compost Re-Greening project, which uses GroCo compost to eliminate logging roads and restore natural slopes and vegetation. A small amount of biosolids is also used annually in research and demonstration projects.

The biosolids program operates under policies BP-1 through BP-10 as outlined in the Regional Wastewater Services Plan adopted by the King County Council in November, 1999. Consistent with these policies, the biosolids program

maximizes reliability and cost-effectiveness by maintaining reserve capacity at reuse sites, evaluating diverse technologies and end uses, and pursuing interlocal agreements. King County works cooperatively with statewide organizations such as the Northwest Biosolids Management Association (NBMA) to ensure continued public acceptance, reasonable regulations, and environmentally sound, economic management of biosolids. Through the NBMA, King County and other agencies fund university research and demonstration that provide the technical basis for King County projects and for development of new markets.

# Attachment C-4
# Salary and Benefit Baseline

| SALARY | | | | |
|---|---|---|---|---|
| **Benefit** | **Eligibility** | **Authority** | **Current Cost** | **Comments** |
| Local 6 Wage Rates | Employees represented by SEIU Local 6 – Wastewater | Agreement between KC and SEIU Local 6 – Wastewater | 2000 Local 6 Salary Schedule | Contract effective November 1, 1997 through October 31, 2000 |
| Local 117 Wage Rates | Employees represented by Teamsters Local 117 – Wastewater | Agreement between KC and Teamsters Local 117 representing professional - technical and supervisory bargaining units in WTD | 2000 Local 117 Salary Schedules | Contract effective April 9, 1999 through October 31, 2000 |
| | Employees represented by Teamsters Local 117 – Professional and Technical | Agreement between KC and Teamsters Local 117 – Professional and Technical | 2000 Local 117 Salary Schedules | Contract effective January 1, 1999 through December 31, 2001 |
| Council 2 Wage Rates | Employees represented by Washington State Council of County and City Employees, Local 1652R – Ind. and Haz. Waste | Agreement between KC and Washington State Council of County and City Employees, Local 1652R, Council 2 | 2000 Local 1652R, Council 2 Salary Schedules | Contract effective January 1, 1999 through December 31, 2001 |
| Non-Represented Employee Wage Rates | Employees in "metro classifications" not represented by union | KCC 3.15.020 | 2000 Metro Non-Rep Salary Schedule | Annual ordinance allows for cost of living increase tied to all cities CPI |
| | Employees in "King County" classifications not represented by unions | KCC 3.15.020 | 2000 Ten-Step Salary Schedule | Annual ordinance allows for cost of living increase tied to all cities CPI |
| | Employees who have been implemented into new class and comp allocations who are not represented by unions | KCC 3.15.020 | 2000 Squared Ten-step Salary Schedule | Annual ordinance allows for cost of living increase tied to all cities CPI |

| INSURED BENFITS | | | | |
|---|---|---|---|---|
| **Benefit** | **Eligibility** | **Authority** | **Current Cost** | **Comments** |
| **Insured Benefits:**<br><br>• **Medical**<br>• **Dental**<br>• **Life**<br>• **Disability**<br>• **Vision** | Full-time regular, part-time regular, provisional, probationary and term-limited temporary employees and spouse or domestic partner, each of their dependent children, and each of the dependent children of their spouse or domestic partner (Domestic Partner coverage KCC 3.12.044)<br>(Part-time and temporary employees who exceed the calendar year working hours threshold KCC 3.12.040 C.) | KCC 3.12.040 Benefits<br><br>The director shall establish specific provisions governing eligibility for these benefits as part of the personnel guidelines and consistent with budget requirements. | Flexible Bens. = $654/emp/mon<br>Group Health = $343/emp/mon.<br>Pacificare HMO = $592/emp/mon<br>Regence = $594/emp/mon<br>WDS Dental = 114.05/emp/mon | Medical benefit costs are projected to rise at 12 – 15% per year starting in 2002. Rising medical and other benefit costs contribute to the total cost increases. See attached provided by OHRM Benefits section.<br><br>Non-mandatory benefits are a subject of bargaining, and currently KC negotiates with voluntary coalition of unions to establish benefit package. |
| MANDATORY BENEFITS | | | | |
| **Benefit** | **Eligibility** | **Authority** | **Current Cost** | **Comments** |
| **Worker's Compensation** | All Employees, as established by Federal Law and RCW title 51 | RCW title 51<br>RCW 51.14 Self Insurers<br>WAC 296-14, 15<br><br>KCC 2.92 Safety and Worker's Compensation Program | An annual lump sum amount is calculated by Safety and Worker's compensation based on actuarial projection of hours worked and claims - $332,102 for 2001 | King County is self-insured for Workers Compensation Insurance and includes responsibility to… "Administer the county self-insured worker's compensation insurance system within the rules, regulations and procedures as established by the Legislature and the Department of Labor and Industries of the state of Washington" |

| | | | | |
|---|---|---|---|---|
| **Retirement** | As established by RCW 41.40 | RCW 41.40<br>KCC 3.12.230 | PERS I – 4.67% of gross earnings<br>PERS II – 4.67% of gross earnings | These rates are subject to change pursuant to RCW 41.40.048 |
| **Social Security/OASI** | All Employees | Federal Mandated Social Security Act of 1935 | 7.65% of first $76,200 of taxable compensation<br>1.45% of remainder | |
| **Federal Family and Medical Leave** | Employees with 12 months of service and 1250 hours worked in last 12 months | Family and Medical Leave Act of 1993<br>Title 29, Part 825 of the Code of Federal Regulations | Twelve weeks of job protected leave in a 12-month period.<br>Medical benefit coverage for period of leave | Provides for 12 weeks of job protected leave for certain personal and family instances. |
| **Washington State Family Leave** | Employee other than an independent contractor employed on a continuous basis for the previous fifty-two weeks for at least thirty-five hours per week | RCW 49.78<br>WAC 296-130 | Twelve weeks of job protected leave in a 24-month period | Provides 12 weeks of job protected leave for certain personal and family instances, not to include temporary disability because of pregnancy or childbirth |
| **OTHER BENEFITS PROVIDED BY KING COUNTY** | | | | |
| **Benefit** | **Eligibility** | **Authority** | **Current Cost** | **Comments** |
| **King County Family and Medical Leave** | Employees with 12 months of service and 910/1040 hours worked in last 12 months | KCC 3.12.220 | 18 Weeks of job protected leave (may run concurrent or sequential to Federal and State provided leave)<br>Medical benefit coverage for period of leave. | Leave is to care for self, child, spouse, domestic partner, parent who has a serious health condition or after birth or placement for adoption |
| **Deferred Compensation** | Full-time regular, part-time regular, provisional, probationary and term-limited temporary employees | KCC 2.16.025 D. 2. A. | None other than administrative | Some administrative costs borne by participants. Admin. Costs included in CX transfer? |
| **Dependent Care Assistance** | Full-time regular, part-time regular, provisional, probationary and term-limited temporary employees | KCC 2.16.025 D. 2. A. | None other than administrative | Costs included in CX transfer? |

| | | | | |
|---|---|---|---|---|
| **Wellness and Work/Family Life Programs** | All employees | KCC 2.16.025 D. 2. A. | None other than administrative | Costs included in CX transfer? |
| **Transit Pass** | Full-time regular, part-time regular, provisional, probationary and term-limited temporary employees | KCC 3.12.188 | $45/emp/month??? | Costs included in CX transfer? |
| **Vacation Leave Payoff** | Benefit eligible employee separating from employment in good standing | KCC 3.12.190 | Maximum accrual amount (60 days) X hourly rate at time of separation<br><br>King County must pay the current retirement value of compensation in excess of state allowed to DRS. | Union contracts may provide for greater or lesser vacation payout amounts |
| **Sick Leave Payoff** | Benefits eligible employees who have successfully completed at least 5 years of county service and who retire as a result of length of service, or terminate by reason of death. | KCC 3.12.220 | Sick leave balance X hourly rate at time of separation X 35%<br><br>King County must pay the current retirement value of compensation in excess of state allowed to DRS. | Union contracts may provide for greater or lesser sick leave payout amounts |

# Attachment C-5
# Existing Permits and Other Controlling Documents

There are many laws and other requirements affecting the management of the wastewater system that are too extensive to include in this document. The following list includes the key legislation, regulations, contracts, permits, and agreements that the WWP and King County are obliged to follow in management of the wastewater system. Some of the references include further references to other requirements affecting management of the wastewater system.

**Regulatory and Planning Documents**

Facility Asset Management Program, King County Department of Natural Resources—Wastewater Treatment Division. April 30, 1997. (includes references to other relevant regulations).

City of Seattle Permit Project Conditions for West Point issued in 1991: Project No. 8804596

King County West Point Sewage Treatment Plant National Pollutant Discharge Elimination System Waste Discharge Permit No. 002918-1, January 1, 1996. Note: As of 1995, Carkeek Park CSO Treatment Plant is included under the West Point permit. Alki CSO Treatment Plant is included under West Point permit as of Oct. 25, 1999.

King County East Section Reclamation Plant at Renton National Pollutant Discharge Elimination System Waste Discharge Permit No. WA-002958-1, July 15, 1997.

Vashon Sewer District, Vashon Plant National Pollutant Discharge Elimination System Waste Discharge Permit No. WA—002252-7.

National Pollutant Discharge Elimination System Municipal General Permit for Discharges from municipal separate storm sewers for the Cedar/Green Water Quality Management Area, issued July 5, 1995.

King County Ordinance Nos. 11034 and 13680 (Regional Wastewater Services Plan), now codified as King County Codes 28.81, 28.82, 28.84, 28.86

King County Ordinance Nos. 11032 and 12074, now codified in King County Code Chapter 28, water pollution abatement**.**

Codification of Metro's Comprehensive Sewerage Plan: Compendium of Amendments to Metro's Comprehensive Sewerage Plan 1961 to 1989.

November 1989. This includes Metro Resolution No. 23 as amended (comprehensive plan).

Puget Sound Clean Air Agency annual registration certificates (renewed each year):

- No. 28503 for the King County treatment plant in Renton
- No. 28504 for the Alki CSO Treatment Plant
- No. 15189 for various pump stations operated by the treatment plant in Renton
- No. 15190 for various pump and regulator stations, NW King County operated by the West Point Treatment Plant
- No. 28505 for Richmond Beach (may now be under No. 15190)
- No. 28506 for Carkeek Park CSO Treatment Plant (may now be under No. 15190)
- West Point submitted an Air Operating Permit application with PSCAA in May 1998, but still hasn't received the permit yet.

Odor Control equipment and waste gas flare operation is mandated by Notice of Construction (NOC) No. 4785 for the treatment plant in Renton. West Point also operates its equipment under various NOCs.

PL 100-4 Water Quality Act of 1987

Municipality of Metropolitan Seattle Enabling Legislation, Chapter 35.58 RCW

Washington State Environmental Policy Act, RCW Chapter 43.21

Washington Clean Air Act, Chapter 70.94 RCW

Washington Clean Water Act, Chapter 90.48 RCW

Washington Industrial Safety and Health Act, Chapter 49 RCW

29 Code of Federal Regulation (CFR) Parts 1910 and 1926 -- Occupational Safety and Health Act

40 CFR Parts 51through 93--Federal Clean Air Act Regulations

40 CFR Part 403--General Pretreatment Regulations

40 CFR Parts 410 through 471 -- Categorical Pretreatment Regulations

40 CFR, Section 503 -- Federal Rules for use of Biosolids

40 CFR Parts 1500-1508 (NEPA rules)

50 CFR Chapter 1, Part 17 -- Endangered Species Act

Washington Administrative Code (WAC) 133-303-802 Permit By Rule Section of the Dangerous Waste Regulations

WAC 173-216 State Waste Discharge Permit Program

WAC 173-240 Submission of Plans and Reports for Construction of Wastewater Facilities

WAC 173-50 Accreditation of Environmental Laboratories- rules specifying the nature of data to be submitted in compliance with state waste discharge permits

WAC 173-208 Grant of Authority Sewerage Systems-Rules to be followed by local systems granted authority to issue state waste discharge permits

WAC 173-308 State Biosolids Management Rule

WAC 197-11 SEPA Guidelines

WAC 296-24-020 General Health & Safety Standards - Management's Responsibility for Workplace Safety

WAC 296-27 Recordkeeping and Reporting - Employee Health & Safety Requirements

WAC 296-62 Occupational Health & Industrial Hygiene Standards

WAC 296-155 Construction Safety Standards

WAC 296-67 Process Safety Management of Highly Hazardous Chemicals

WAC 296-307 Safety Standards for Agriculture

WAC 296-65 Asbestos Removal and Encapsulation

**Grants**

Federal EPA Grants
- 40 CFR Part 31
- Clean Water Act. Section 201
- Special Appropriations Act—applicable years, e.g., 1995

Public Works Trust Fund Loans
- WAC 399

Chapter 36.70A RCW—Growth Management Act

State Revolving Fund (SRF)

**Agreements**
Agreements for Sewerage Disposal with 34 component agencies (most expire in 2036)

Agreement for Sewage Treatment with City of Edmonds (with flow transfer to King County beginning in 2012; agreement expires in 2036)

Docket No. DE 76-9, as amended, Delegation of Authority for Municipality of Metropolitan Seattle to Administer A Permit Program For Industrial and Commercial Discharges Into Its Sewerage System. (1976)

Agreement for Sewage Treatment with City of Edmonds (with flow transfer to King County beginning in 2012; agreement expires in 2036)

Environmental Protection Agency Letter, date April 27, 1981, Approving Metro's Pretreatment Program

Memorandum of Agreement By and Between the City of Renton and the Municipality of Metropolitan Seattle (June 1991). Amendment No. 1 to the MOA for implementation of the Phase III Enlargement of the Treatment Plant in the City of Renton between King County and the City of Renton (August 1996)

Memorandum of Agreement for Stormwater Management By and Between The City of Seattle and King County, dated 1994.

West Point Settlement Agreement between Metro and Puget Sound Water Quality Defense Fund; Friends of Discovery Park; Legal Advocates for Washington; Washington Environmental Council; Magnolia Community Club. February 19, 1991.

**Financial**
1999 Sewer Revenue Bond Official Statement

King County Water Quality Enterprise Financial Statements and Supplemental Schedule for the Years Ended December 31, 1999 and 1998, and Independent Auditors' Report, Deloitte & Touche LLP

**Other**
Uniform/Local Fire Safety Codes and National Fire Protection Agency codes, American National Safety Institute, Chlorine Institute, National Institute of Safety and Health

# Attachment C-6
# Planned System Improvements

Attachment C-6 identifies the planned capital improvements the WWP will construct based on current regional growth assumptions and regulatory requirements. The projects are presented in two categories. Category 1 includes capital projects that are currently budgeted for design and construction in the current 2001-2006 capital budget, while Category 2 includes capital projects that are planned for the future but have not yet been budgeted. The information presented in this attachment comes from four primary sources:

1. The Regional Wastewater Services Plan and the list of system improvements identified to prepare the 10-year capital investment costs and future operating costs
2. Known capital projects from the Capital Asset Management Plan
3. Planned capital investments that are system improvements to enhance operations or comply with new regulations and requirements
4. Planned capital investments that were approved as part of the 1985-86 wastewater comprehensive plan (Water Pollution Abatement Plan) update

**Category 1 Projects**

This category includes all projects that are identified in the Wastewater Treatment Division's Capital Improvement Plan budget for the years 2001 – 2006. Projects are organized according to their primary functional in the wastewater system. There are 12 functional groupings in all.

- Biosolids recycling
- Central functions
- Combined Sewer Overflow (CSO) control
- Conveyance pipes/ storage
- Conveyance pump stations
- Environmental Laboratory
- Inflow and infiltration (I/I) control
- Brightwater Treatment Plan
- South Treatment Plant
- Vashon Treatment Plant
- Water reuse
- West Point Treatment Plant

Within each functional category, projects are grouped in subcategories that further define the project type. For example, asset management projects have their own grouping, as do projects that manage power or control odors. The Category 1 capital projects are presented in table located at the end of this attachment. The table includes the project name, total cost, operating cost (for some projects), and status based on available information. The timing and cost of some of these planned capital projects may change as we gain new knowledge and information.[1]

**Category 2 Projects**

Projects in this category have been identified through planning efforts such as the Regional Wastewater Services Plan or through capital asset replacement programs (CAMP). However, these projects have not yet been budgeted because the needs identified are beyond the six-year budget period. The following Category 2 projects are listed for the years 2007 – 2010, the time period between the end of the current budget request and the end of the Productivity Initiative Pilot Program.

- Regional Wastewater Services Plan Projects
  The RWSP, adopted by the King County Council in December 1999, identifies a range of capital projects necessary to manage wastewater and protect water quality in the Puget Sound region for the next 30 years and beyond. Many of the earlier RWSP projects are related to the new 36-mgd North Treatment Plant expected to be operational in 2010. Several combined sewer overflow (CSO) projects are scheduled as well. The table below identifies these projects, the year they should be completed, and their capital cost in 1998 dollars.

| Project Name | Year Completed | Cost (1998 dollars) |
|---|---|---|
| **36-mgd North Treatment Plant (NTP)** | **2010** | **306,200,000** |
| **Tunnel from the NTP to marine outfall in Puget Sound** | **2010** | **158,000,000** |
| **Marine outfall for NTP** | **2010** | **7,500,000** |
| **Pump station at Kenmore to pump flow to NTP** | **2010** | **67,200,000** |
| **Force main from Kenmore Pump Station to NTP** | **2010** | **56,300,000** |
| **1.3 MG CSO Storage Tank at South Magnolia** | **2010** | **6,800,000** |
| **0.7 MG CSO Storage Tank at SW Alaska** | **2010** | **4,300,000** |
| **0.8 MG CSO Storage Tank at Murray** | **2010** | **5,100,000** |

[1] Cost estimates vary as a percentage of the actual project cost depending on the stage of project implementation.

| | |
|---|---|
| Planning: | +50% to –30% |
| Predesign (beginning): | +40% to –20% |
| Predesign (end): | +30% to –15% |
| Design (beginning): | +20% to –10% |
| Design (end) | +10% to –10% |

- Asset Management Projects
  Asset management projects are intended to extend and optimize the useful life of assets, including facilities, structures, pipelines, and equipment by repairing them or replacing them with “like-in-kind” equipment or structures. This type of scheduled maintenance is always more cost effective than an emergency repair or replacement task required because of a critical failure.

  In general, all functional categories include asset management projects, but the majority of asset management costs are spent at the treatment plants and offsite facilities such as pump stations and regulatory stations. For example, the estimated service life of mechanical systems (e.g., pumps and fans) within the offsite facilities is approximately 20 years. Currently, about 36 of the 62 existing facilities are over 20 years old, so WWP has scheduled the repair or replacement of equipment at these facilities. Typically, asset management projects are not scheduled beyond the 6-year budget cycle; however, based on historical expenditures the WWP anticipates asset management costs of between $20 and $30 million per year for the years 2007 to 2010.

  *

Table A3
Planned Capital Projects

# South Treatment Plant

| Project Name | | | Project Cost*^ 2000 - 2006 | Annual OM cost* | Planning finish | Predesign finish | Final design finish | Construction finish |
|---|---|---|---|---|---|---|---|---|
| **South Treatment Plant - Asset Mgmt (A20010)** | | | | | | | | |
| | 423009 | STP CAMP | 5,027 | | | | | Dec-06 |
| | 423196 | STP Misc. Coatings & Sealant | 1,145 | | | | | Dec-06 |
| | 423291 | STP - E. & W. Primary Roof Replacement | 353 | | | Oct-99 | May-00 | Sep-00 |
| | 423301 | STP MTCE Annex Roof Replacement | 72 | | | | | Jun-01 |
| | 423424 | STP Minor Capital Improvements - EWRs | 6,629 | | | | | Dec-06 |
| | 423482 | STP LARS2 | 581 | | | Dec-00 | Dec-01 | Dec-02 |
| | 423485 | STP Treatment Plant Landscape Upgrade | 200 | | | | | Dec-01 |
| | 423487 | STP E. Div. Secondary Tank Coating | 291 | | Jan-99 | Feb-99 | Sep-99 | Nov-00 |
| | 423495 | STP Microvax & Ethernet Replacement | 170 | | | | | Dec-00 |
| | 423496 | STP Septage Scale | 150 | | | | | Dec-00 |
| | 423502 | STP Bowker Building Lift Station | 175 | | | Jun-00 | Aug-00 | Jan-01 |
| | 423503 | STP Satellite Engr/CM Office | 1,073 | | Feb-00 | Aug-00 | Jun-01 | May-02 |
| | 423509 | STP Study Chemical Storage Facility Upgrade | 100 | | | Aug-00 | Dec-00 | Dec-01 |
| | 423510 | STP ASWTP Clarifier Bldg Roof Repl. | 385 | | May-00 | Jun-00 | Feb-01 | Aug-01 |
| | 423511 | STP Balker Building Pave. Repl. | 143 | | | Aug-01 | Dec-01 | Jun-02 |
| | 423514 | STP East Division Corrosion Repairs. | 498 | | | | Jun-00 | Nov-01 |
| Total | | Asset Management | 16,993 | | | | | |
| **South Treatment Plant - New Facilities - Renton III (A2002z)** | | | | | | | | |
| | 423133 | STP Renton III | 45,399 | 4,300 | | | Dec-00 | Dec-06 |
| **South Treatment Plant - New Facilities - Dewatering (A2002z)** | | | | | | | | |
| | 423232 | STP Centrifuge - Renton Dewatering | 11,236 | | | Dec-00 | Jun-02 | Dec-03 |
| **South Treatment Plant - New Facilities - Fuel Cell (A2002z)** | | | | | | | | |
| | 423408 | STP Fuel Cell Demonstration | 17,500 | | | | Jun-02 | Dec-03 |
| **South Treatment Plant - Other New Facilities & Improvement (A20020)** | | | | | | | | |
| | 423501 | STP Admin. Facility Expansion | 2,000 | | Dec-00 | May-01 | Jun-02 | Dec-03 |
| Total | | STP New Facilities & Improvement | 93,128 | | | | | |

* Costs are in Year 2000 dollars
^ Costs in thousands of dollars

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **South Treatment Plant - Odor Control (A20030)** | | | | | | | |
| | 423497 | STP Alternate Disinfection Sytems (RPT Study) | 945 | | Jun-01 | Nov-01 | Jun-02 | Jun-03 |
| | 423498 | STP Ferric Chloride System | 300 | | | Jun-01 | Nov-01 | Aug-02 |
| Total | | Odor Control | 1,245 | | | | | |
| **South Treatment Plant - Power Mgmt (A20040)** | | | | | | | |
| | 423234 | STP EDRP - Power Equipment Replacement | 1,087 | | | Jul-00 | Mar-01 | Feb-03 |
| **South Treatment Plant - Total** | | | $95,460 | | | | | |

# West Treatment Plant

| Project Name | | | Project Cost*^ 2000 - 2006 | Annual OM cost* | Planning finish | Predesign finish | Final design finish | Construction finish |
|---|---|---|---|---|---|---|---|---|
| **West Treatment Plant - Asset Management - Grit System Modifications (A2011z)** | | | | | | | | |
| | 423417 | WTP Grit System Modifications | 11,422 | | | Jan-01 | Dec-01 | Apr-04 |
| **West Treatment Plant - Asset Management - PCL/SMi (A2011z)** | | | | | | | | |
| | 423351 | WTP Community-One Time Mitigation for PCL/SMI | 3,000 | | | | | Dec-03 |
| | 423352 | WTP Regional-One Time Mitigation for PCL/SMI | 500 | | | | | Dec-03 |
| Total | | Asset Management PCL/SMI | 3,500 | | | | | |
| **West Treatment Plant - Other Asset Management (A20110)** | | | | | | | | |
| | 423033 | WTP CAMP | 6,491 | | | | | Dec-06 |
| | 423315 | WTP - Develop Routine Test Procedures | 10 | | | | Dec-00 | |
| | 423323 | WTP - Process Safety & Risk Management | 609 | | | Jul-00 | | |
| | 423325 | WTP - Expansion Tank Alarm Switches | 65 | | | Jun-98 | Nov-99 | Dec-01 |
| | 423327 | WTP - Division Channel Stop Log | 100 | | Aug-98 | Mar-00 | May-00 | Oct-00 |
| | 423328 | WTP - Digester Cleaning System | 236 | | | Nov-98 | Mar-00 | Nov-01 |
| | 423333 | WTP - ICS Gate Modifications | 217 | | Feb-98 | Feb-99 | Dec-99 | Dec-01 |
| | 423334 | WTP - Sump Pump Wiring Modifications | 164 | | | Feb-98 | May-00 | Jul-01 |
| | 423337 | WTP - SCS/PLC Plant Enhancements | 18 | | | | Dec-97 | Sep-00 |
| | 423342 | WTP - Post Construction Monitoring | 147 | | | Dec-98 | Dec-99 | Feb-01 |
| | 423375 | WTP - Waste Gas Burner | 15 | | | | | |
| | 423376 | WTP Dryer Engineering/Training/Startup | 148 | none | | Feb-98 | Jul-00 | |
| | 423377 | WTP Centrifuge Relocation/Improvements | 290 | none | | Feb-97 | Dec-99 | Dec-01 |
| | 423379 | WTP High-Solids Centrifuge | 814 | 200,000 | | Feb-98 | Jul-99 | Dec-01 |
| | 423388 | WTP - Digester Roof Anti-Rotation Device | 99 | | Feb-98 | Sep-98 | Nov-00 | Nov-00 |
| | 423389 | WTP - Ferric/Caustic Containment Piping | 12 | | | | Mar-00 | Jun-00 |

* Costs are in Year 2000 dollars
^ Costs in thousands of dollars

Table A3
Planned Capital Projects

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 423411 | WTP Health/Safety/Fire/ Dryer Mods | 629 | none | | Mar-99 | Oct-99 | Nov-00 |
| | 423413 | WTP Dryer System Improvements | 701 | none | | Feb-00 | Jul-00 | Dec-01 |
| | 423425 | WTP Other Facilities Improvements - EWRs | 6,043 | | | | | Dec-06 |
| | 423447 | WTP SIF Closeout - KC Const. Dist. Marra | 7 | | | | | |
| | 423461 | WTP Clarifier Painting | 518 | | | | Mar-99 | Oct-01 |
| | 423472 | WTP Owl Creek Drainage Improvements | 194 | | | Feb-01 | Mar-01 | Oct-01 |
| | 423513 | WTP West Division Corrosion Repairs. | 521 | | | Jan-00 | Mar-00 | Dec-01 |
| Total | | Other Asset Management | 18,047 | | | | | |
| Total | | WTP Asset Management | 32,969 | | | | | |
| **West Treatment Plant - New Facilities & Improvements (A20120)** | | | | | | | | |
| | 200012 | WTP Westpoint SCS Upgrade | 1,000 | | Jun-01 | Oct-01 | Sep-02 | Sep-02 |
| | 200014 | WTP Raw Sewage Pump Engine | 350 | | | | | Dec-00 |
| | 423403 | WTP Jameson Building - Bulk Oil Storage | 476 | | | May-00 | Aug-00 | Aug-01 |
| | 423517 | WTP West Section Warehouse | 312 | | Nov-00 | Jul-01 | Jan-02 | Oct-02 |
| Total | | New Facilties and Improvements | 2,138 | | | | | |
| **West Treatment Plant - Demonstration Projects (A2011z)** | | | | | | | | |
| | 200010 | WTP Thermophillic Full Scale Demo | 3,067 | unknown | Sep-01 | Dec-01 | Dec-02 | Feb-06 |
| | 200011 | WTP Anoxic Gas Flotation Demo | 2,625 | none | | Dec-01 | Dec-03 | Aug-05 |
| | 423163 | WTP Demo and Dev. Project | 4,527 | none | | | | Jan-06 |
| Total | | Demonstration Projects | 10,219 | | | | | |
| **West Treatment Plant - Odor Control (A20130)** | | | | | | | | |
| | 423321 | WTP Digester Foam Removal/Odor Control | 186 | | | Jun-99 | Apr-03 | Jul-04 |
| | 423324 | WTP Process Cleanings w/ Odor Control | 1,414 | | | Nov-00 | Oct-01 | Jun-02 |
| | 423378 | WTP West Point Odor Improvements | 244 | 50,000 | | Aug-98 | Sep-00 | Dec-00 |
| | 423410 | WTP Thermophilic Digestion Design | 237 | none | | | Sep-00 | Dec-00 |
| Total | | Odor Control | 2,081 | | | | | |
| **West Treatment Plant - Other Power Management (A20140)** | | | | | | | | |
| | 423246 | WTP West Division Power Reliability Study | 82 | | Nov-97 | Aug-98 | Jul-00 | Sep-01 |
| | 423304 | WTP Misc Utility System Monitoring | 92 | | | Aug-99 | Jun-00 | Dec-00 |
| | 423305 | WTP Stepping Power Factor Filter/Cap | 87 | | | Jul-98 | Aug-00 | Dec-00 |
| | 423306 | WTP Plant Electrical Power Management. Sys. | 151 | | | Jun-00 | Sep-00 | Dec-01 |
| | 423307 | WTP Incinerator Enhancements | 90 | | | Aug-99 | Jan-99 | Dec-00 |
| | 423314 | WTP UPS Monitoring System | 19 | | | Aug-99 | May-00 | Dec-01 |
| | 423332 | WTP 480V Breaker Trip Indication | 35 | | | Aug-99 | Mar-00 | Dec-00 |
| | 423385 | WTP Emergency Electrical Issues | 172 | | | Dec-99 | Dec-01 | Dec-01 |

* Costs are in Year 2000 dollars
^ Costs in thousands of dollars

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Total | Other Power Management | 726 | | | | | |
| **West Treatment Plant - Power Management - Cogen (A20140)** | | | | | | | |
| 423474 | WTP West Point Cogen Upgrade | 10,134 | | | Dec-97 | Sep-02 | Jun-04 |
| Total | Power Management | 10,860 | | | | | |
| **West Treatment Plant - Total** | | $58,266 | | | | | |

# North Treatment Plant

| Project Name | | Project Cost*^ 2000 - 2006 | Annual OM cost* | Planning finish | Predesign finish | Final design finish | Construction finish |
|---|---|---|---|---|---|---|---|
| **North Treatment Plant - New Facilities & Improvements** | | | | | | | |
| 423457 | NTP Marine Outfall Study | 7,153 | | Dec-06 | | | |
| 423477 | NTP Wetlands Mitigation Banking | 179 | | Dec-00 | | | Jan-01 |
| 423484 | NTP North Treatment Plant | 127,172 | | Dec-02 | Jul-04 | Sep-05 | Jul-09 |
| **North Treatment Plant - Total** | | $134,504 | | | | | |

# Vashon Treatment Plant

| Project Name | | Project Cost*^ 2000 - 2006 | Annual OM cost* | Planning finish | Predesign finish | Final design finish | Construction finish |
|---|---|---|---|---|---|---|---|
| **Vashon Treatment Plant - New Facilities & Improvements (A20320)** | | | | | | | |
| 423460 | VTP Vashon Facility Improvement | 10,088 | | Feb-00 | Jan-01 | Jan-03 | |
| **Vashon Treatment Plant - Total** | | $10,088 | | | | | |

* Costs are in Year 2000 dollars
^ Costs in thousands of dollars

# Conveyance Pipelines and Storage

| Project Name | | Project Cost*^ 2000 - 2006 | Annual OM cost* | Planning finish | Predesign finish | Final design finish | Construction finish |
|---|---|---|---|---|---|---|---|
| **Conveyance Pipelines and Storage - Asset Management (A20410)** | | | | | | | |
| 200005 | CP&S S.W Lk. WA. Int. Rehabilitation | 1,075 | | Jun-00 | Dec-00 | May-01 | Aug-01 |
| 423121 | CP&S Madsen Creek Sewer Stabilization | 1,080 | | | Jun-00 | Apr-01 | Jul-02 |
| 423161 | CP&S Brick Sewer Access Improvements | 492 | | | | | Jun-01 |
| 423194 | CP&S CAMP | 8,900 | | | | | Dec-06 |
| 423274 | CP&S Holmes Point Rock Box | 139 | | | Jun-98 | Sep-00 | Dec-00 |
| 423299 | CP&S No. Creek Interceptor Repair | 154 | | | Dec-00 | | Dec-05 |
| 423363 | CP&S Auburn Facilities Assess & Repair | 5,259 | | | Nov-99 | Oct-00 | Dec-02 |
| 423432 | CP&S E. Channel Siphon Cathodic Protection | 735 | | Jun-98 | Mar-00 | Aug-00 | Oct-00 |
| Total | Asset Management | 17,833 | | | | | |
| **Conveyance Pipelines and Storage - New Facilities - Conveyance System Improvements (A204yy)** | | | | | | | |
| 423373 | RWSP Conveyance Sys. Improvements | 271,590 | 6 | 12/1/04 | Dec-04 | Dec-10 | Apr-12 |
| **Conveyance Pipelines and Storage - New Facilities - Eastside Interceptor (A20420)** | | | | | | | |
| 423420 | CP&S E. Side Interceptor Section 1 Repair | 5,577 | | Jan-98 | Mar-99 | Sep-00 | Dec-01 |
| **Conveyance Pipelines and Storage - New Facilities - Future Interceptors (A20420)** | | | | | | | |
| 423270 | CP&S Future Interceptors Ext. | 26,220 | | | | Dec-02 | Dec-06 |
| **Conveyance Pipelines and Storage - New Facilities - Mill Creek (A20420)** | | | | | | | |
| 423107 | CP&S Mill Creek Relief Sewer | 8,524 | 2 | | Apr-98 | Jun-98 | Jun-01 |
| **Conveyance Pipelines and Storage - New Facilities - North Creek Storage (A20420)** | | | | | | | |
| 423519 | CP&S North Creek Storage | 30,000 | | Dec-00 | Sep-00 | Mar-01 | Dec-03 |
| **Conveyance Pipelines and Storage - New Facilities - South Interceptor (A204xx)** | | | | | | | |
| 423122 | South Interceptor | 51,103 | 3 | | Jan-96 | Dec-00 | Dec-02 |
| **Conveyance Pipelines and Storage - New Facilities - Swamp Creek (A20420)** | | | | | | | |
| 423272 | CP&S Swamp Creek Sewer Trunk | 11,662 | | Jan-98 | Mar-01 | Nov-01 | Jan-03 |

* Costs are in Year 2000 dollars
^ Costs in thousands of dollars

Table A3
Planned Capital Projects

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Conveyance Pipelines and Storage - New Facilities - Tukwila Interceptor (A20420)** | | | | | | | |
| | 423520 | CP&S Tukwila Interceptor/Freeway Crossing | 3,015 | | Mar-00 | Feb-01 | Oct-01 | Dec-02 |
| **Conveyance Pipelines and Storage - New Facilities - Wilburton Siphon (A20420)** | | | | | | | |
| | 423345 | CP&S Wilburton Siphon Expansion | 5,171 | 60 | | Feb-98 | Jul-99 | Dec-01 |
| **Conveyance Pipelines and Storage - Other New Facilities & Improvements (A20420)** | | | | | | | |
| | 423114 | CP&S Cascade Siphon/Footbridge | 11 | | | | Mar-98 | Dec-98 |
| | 423117 | CP&S Byrn Mawr Lk Ridge Siphon | 1,852 | | | | Jan-98 | Apr-99 |
| | 423346 | CP&S Auburn Facilities Acquisition | 797 | | | | | Dec-04 |
| | 423507 | CP&S Bear Creek Interceptor Extension | 100 | | Dec-04 | | | |
| Total | | Other New Facilties and Improvements | 2,760 | | | | | |
| Total | | New Facilties and Improvements | 415,621 | | | | | |
| **Conveyance Pipelines and Storage - Odor Control (A20430)** | | | | | | | |
| | 200008 | CP&S EBI Odor Study | 100 | | | Nov-01 | | |
| | 423096 | CP&S Lk City Tunnel Corrosion Wrk | 16 | | | Nov-96 | Apr-97 | Dec-97 |
| | 423172 | CP&S Tukwila Frwy Crossing Relocation & Rehab. | 29 | | | | | |
| | 423269 | CP&S ESI Lining Program H2S Repair | 7,403 | | | | | Dec-05 |
| | 423286 | CP&S McAleer Odor Control Improvements | 113 | | | Aug-98 | Feb-99 | Nov-99 |
| | 423354 | CP&S Juanita Bay FM Replacement | 80 | | | | | |
| | 423430 | CP&S 2000 ESI Lining Program | 1,350 | | | Jan-00 | Oct-00 | Dec-05 |
| | 423431 | CP&S Enatai Interceptor H2S Repair Phase II | 18 | | | | | Dec-06 |
| | 423433 | CP&S S. Magnolia Outfall Replacement | 172 | | | Feb-99 | Apr-99 | Oct-99 |
| | 423439 | CP&S Fremont Siphon Odor Control | 504 | | | Dec-98 | May-99 | Dec-02 |
| | 423468 | CP&S ESI Chemical Injection | 1,744 | | | Jun-00 | Dec-02 | Dec-04 |
| | 423473 | CP&S Boeing Creek Trunk H2S Repair | 399 | | | Jun-99 | Jun-01 | Sep-01 |
| Total | | Odor Control | 11,927 | | | | | |
| **Conveyance Pipelines and Storage - Total** | | | $445,381 | | | | | |

* Costs are in Year 2000 dollars
^ Costs in thousands of dollars

# Conveyance Pump Station

| Project Name | | | Project Cost*^ 2000 - 2006 | Annual OM cost* | Planning finish | Predesign finish | Final design finish | Construction finish |
|---|---|---|---|---|---|---|---|---|
| **Conveyance Pump Station - Capital Asset Management - Sweyolocken (A2051z)** | | | | | | | | |
| | 423303 | Sweyolocken PS - Pumps, Motors & Drives | 7,764 | | | Nov-99 | Dec-01 | Nov-02 |
| **Conveyance Pump Station - Asset Management - Interbay Pump Station (A2051z)** | | | | | | | | |
| | 423135 | Interbay Pump Station | 8,351 | | | May-01 | Oct-02 | May-04 |
| **Conveyance Pump Station - Other Asset Management (A20510)** | | | | | | | | |
| | 423192 | Yarrow Bay PS - Pump & Drive Replacement | 550 | | | Sep-98 | Jun-99 | Mar-01 |
| | 423218 | Acoustic Upgrades | 708 | | | Apr-98 | Mar-00 | Nov-00 |
| | 423237 | Sunset/Heathfield PS - Drive Replacement | 49 | | | Jan-98 | Jan-99 | Dec-99 |
| | 423242 | Misc. Facilities Improvement | 17,800 | | | | | Dec-06 |
| | 423276 | Future Other Transmission | 10,211 | | | | | Dec-06 |
| | 423302 | Offsite CAMP | 12,824 | | | | | Dec-06 |
| | 423320 | Matthews Pk PS - Variable Speed Drives | 472 | | | Jun-98 | Oct-98 | Jun-01 |
| | 423341 | PLC Replacements | 1,018 | | | Nov-98 | Jul-00 | Feb-01 |
| | 423435 | Swey/WMich RS Pavement Replace. | 18 | | | | Jun-98 | Feb-00 |
| | 423481 | Misc. Paving Replacement | 2,350 | | | | | Dec-06 |
| | 423500 | Off-site Septage Facility Study | 100 | | Aug-00 | Nov-00 | Feb-01 | Dec-01 |
| Total | | Other Asset Management | 46,100 | | | | | |
| Total | | Asset Management | 62,215 | | | | | |
| **Conveyance Pump Station - New Facilities - Hidden Lake (A2052z)** | | | | | | | | |
| | 423365 | Hidden Lake/Boeing Trunk Upgrade Improvement | 28,074 | 78 | Dec-00 | Jun-01 | Jun-02 | Apr-05 |
| **Conveyance Pump Station - New Facilities - Kirkland (A2052z)** | | | | | | | | |
| | 423407 | Kirkland PS Modifications | 3,072 | 78 | Jun-00 | Dec-01 | Jun-03 | Nov-04 |
| **Conveyance Pump Station - New Facilities - Madsen Creek (A2052z)** | | | | | | | | |
| | 423494 | Madsen Creek Conveyance Alts | 6,617 | | | Oct-00 | Dec-01 | Apr-04 |

* Costs are in Year 2000 dollars
^ Costs in thousands of dollars

Table A3
Planned Capital Projects

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Conveyance Pump Station - New Facilities - Pacific (A2052z)** | | | | | | | | |
| | 423518 | Pacific Pump Station | 4,467 | | | Mar-01 | Dec-01 | Dec-03 |
| **Conveyance Pump Station - New Facilities - Bellevue (A20520)** | | | | | | | | |
| | 423521 | Bellevue PS | 21,019 | | Mar-00 | May-01 | Apr-02 | Sep-06 |
| **Conveyance Pump Station - New Facilities - Juanita Bay (A2052z)** | | | | | | | | |
| | 423406 | Juanita Bay PS Modifications | 18,387 | 121 | Feb-00 | Jul-01 | Jan-03 | Jul-05 |
| **Conveyance Pump Station - New Facilities - North Creek (A2052z)** | | | | | | | | |
| | 423123 | N Creek Expansion | 945 | 300 | | | Apr-97 | Jan-00 |
| Total | | New Facilties and Improvements | 82,581 | | | | | |
| **Conveyance Pump Station - Odor control (A20530)** | | | | | | | | |
| | 200006 | Matthews Beach Odor Upgrades | 1,658 | | Dec-00 | Mar-01 | Jun-01 | Apr-02 |
| | 200007 | Hidden Lake PS & Siphon | 775 | | | Jul-00 | Mar-01 | Jul-01 |
| | 423219 | H2S Odor Control E/W Division | 1,040 | | | | | Dec-05 |
| | 423227 | Lake City RS Permanent Odor Control Unit | 1,903 | | | Jan-98 | Aug-98 | Aug-00 |
| | 423228 | Misc. Odor Control/H2S | 9,500 | | | | | Dec-06 |
| | 423438 | Mathews Ventilation | 12 | | | | | |
| | 423455 | Univ. Reg. Station Odor Control | 527 | | | | Jan-01 | Oct-01 |
| | 423467 | Kenmore Chemical Injection | 417 | | | | Mar-00 | Dec-02 |
| | 423469 | Sweylocken Discharge Odor Upgrade | 1,101 | | | | | Dec-02 |
| | 423470 | Mobil Odor Control Units | 1,122 | | | | Apr-00 | May-01 |
| | 423471 | North Portal Odor Control | 1,333 | | | | Dec-01 | Dec-04 |
| Total | | Odor Control | 19,388 | | | | | |
| **Conveyance Pump Station - Power Management (A20540)** | | | | | | | | |
| | 423154 | South Mercer PS - Emergency Generator | 346 | | | Jun-00 | Dec-00 | Dec-01 |
| | 423155 | Sunset/Heathfield PS - Emergency Gen. | 170 | | | Jul-98 | Oct-98 | Oct-00 |
| | 423236 | York PS - Upgrade & Power Reliability | 3,477 | | | Jan-97 | May-98 | Jun-01 |
| | 423247 | Lk Ballinger PS - Emergency Generator | 372 | | | Apr-00 | Jan-00 | Dec-01 |
| | 423251 | Wilburton PS - Emergency Generator | 294 | | Jun-97 | Dec-00 | Jul-01 | Dec-01 |
| | 423396 | Standby Generator Loadbanks | 125 | | Jun-98 | Sep-98 | Apr-99 | Jan-01 |
| | 423397 | Matthews Pk PS - Emergency Generator | 891 | | | Jun-98 | Aug-00 | Nov-01 |
| | 423454 | Kenmore PS Emergency Generator | 765 | | | Sep-98 | Aug-00 | Sep-01 |
| | 423506 | Emergency Generator Program | 2,260 | | Jan-01 | Aug-02 | Oct-03 | Aug-04 |
| Total | | Power Management | 8,701 | | | | | |
| **Conveyance Pump Station - Total** | | | $172,885 | | | | | |

* Costs are in Year 2000 dollars
^ Costs in thousands of dollars

# Combined Sewer Overflow Control

| Project Name | | | Project Cost*^ 2000 - 2006 | Annual OM cost* | Planning finish | Predesign finish | Final design finish | Construction finish |
|---|---|---|---|---|---|---|---|---|
| **Combined Sewer Overflow Control - New Facilities - Denny Way (A2062z)** | | | | | | | | |
| | 423001 | Denny Way CSO | 116,266 | 550 | | Dec-97 | Aug-01 | Dec-04 |
| **Combined Sewer Overflow Control - New Facilities - Henderson/MLK (A2062z)** | | | | | | | | |
| | 423179 | S. Henderson/M.L. King CSO | 73,267 | 45 | | Apr-98 | Nov-00 | Dec-05 |
| **Combined Sewer Overflow Control - Other New Facilities & Improvements (A20620)** | | | | | | | | |
| | 423003 | Ravenna Creek Daylighting | 1,597 | | | Mar-99 | Dec-02 | Dec-03 |
| | 423129 | Alki | 500 | | | | | |
| | 423167 | Univ. Reg. Post Discharge Study | 246 | | | | | |
| | 423350 | WCC / Ravenna Creek | 1,700 | | | | | Dec-03 |
| | 423441 | CSO Plan Update | 2,374 | | Dec-05 | | | |
| | 423479 | Green/Duwamish River Study | 5,079 | | Dec-03 | | | |
| | 423489 | Carkeek Overflow Reduction | 4,374 | | | Aug-00 | Jun-01 | Apr-04 |
| | 423515 | CSO Control & Improvement | 7,146 | | | Dec-01 | | Dec-06 |
| Total | | New Facilties and Improvements | 23,016 | | | | | |
| Total | | New Facilties and Improvements | 212,549 | | | | | |
| **Combined Sewer Overflow Control - Remediation - NOAA (A2065z)** | | | | | | | | |
| | 423056 | NOAA Misc. Sediment Remediation | 9,126 | | Oct-00 | Apr-01 | Sep-02 | May-04 |
| | 423061 | NOAA Real Property Site | 544 | | | | | Jun-00 |
| | 423062 | Non-Project Specific - NOAA | 261 | | Dec-05 | | | Dec-06 |
| Total | | Remediation - NOAA | 9,931 | | | | | |

* Costs are in Year 2000 dollars
^ Costs in thousands of dollars

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Combined Sewer Overflow Control - Other Remediation (A20650)** | | | | | | | |
| | 423055 | Habitat Development | 1,578 | | May-00 | | Mar-01 |
| | 423059 | Source Control (In-Kind) | 971 | | | | Dec-01 |
| | 423368 | Sediment Management Plan | 14,440 | | Dec-06 | | |
| Total | | Other 'Remediation | 16,989 | | | | |
| Total | | Remediation | 26,920 | | | | |
| **Combined Sewer Overflow Control - Total** | | | $239,469 | | | | |

# Inflow and Infiltration

| Project Name | | | Project Cost*^ 2000 - 2006 | Annual OM cost* | Planning finish | Predesign finish | Final design finish | Construction finish |
|---|---|---|---|---|---|---|---|---|
| **Inflow & Infiltration (A20700)** | | | | | | | | |
| | 423297 | RSWP Local System I/I Control | 27,885 | | Dec-04 | | | |
| **Inflow & Infiltration - Total** | | | $27,885 | | | | | |

# Biosolids

| Project Name | | | Project Cost*^ 2000 - 2006 | Annual OM cost* | Planning finish | Predesign finish | Final design finish | Construction finish |
|---|---|---|---|---|---|---|---|---|
| **Biosolids - Asset Management (A20810)** | | | | | | | | |
| | 423141 | Biosolids Forestry Equipment | 1,992 | | | | Dec-06 | Dec-06 |
| | 423142 | Biosolids Agricultural Equipment | 1,760 | | | | | Dec-06 |
| | 423143 | WP Biosolids Equipment | 4,982 | | | | | |
| | 423202 | Mountains to Sound Greenway | 600 | | | | | Dec-06 |
| Total | | Asset Management | 9,334 | | | | | |
| **Biosolids - New Facilities & Improvements (A20820)** | | | | | | | | |
| | 423140 | Biosolids Site Development | 1,594 | | | | | Dec-06 |
| | 423326 | WPTP - Sludge Process Improvements | 836 | | | Jul-00 | Nov-00 | Sep-01 |
| Total | | New Facilties and Improvements | 2,430 | | | | | |
| **Biosolids - Total** | | | $11,764 | | | | | |

* Costs are in Year 2000 dollars
^ Costs in thousands of dollars

# Water Reuse

| Project Name | | | Project Cost*^ 2000 - 2006 | Annual OM cost* | Planning finish | Predesign finish | Final design finish | Construction finish |
|---|---|---|---|---|---|---|---|---|
| **Water Reuse - New Facilities- Satellite Facility (A2092z)** | | | | | | | | |
| | 200009 | Water Reuse Satellite Facility | 32,508 | | Jul-01 | Aug-02 | Aug-03 | Sep-05 |
| **Water Reuse - New Facilities- Demonstrations (A2092z)** | | | | | | | | |
| | 423483 | Water Reuse Technology Demonstration | 1,103 | | Sep-99 | Nov-99 | Feb-00 | Dec-01 |
| **Water Reuse - New Facilities- Conservation Program (A2092z)** | | | | | | | | |
| | 423523 | RWSP Water/Wastewater Conservation Program | 1,500 | | Dec-05 | | | |
| **Water Reuse - Other New Facilities (A20920)** | | | | | | | | |
| | 200016 | Water Resources Project | 300 | | Dec-01 | | | |
| | 423258 | Future Water Reuse | 6,264 | | | | | Dec-03 |
| | 423462 | Mill Creek Habitat Restoration | 450 | | Dec-00 | | | |
| | 423463 | Sammamish River Habitat Restoration | 650 | | | Mar-00 | Jun-00 | Dec-00 |
| | 423512 | Greenhouse Aquatic Center | 637 | | | Oct-00 | Feb-01 | Mar-02 |
| Total | | Other New Facilties and Improvements | 8,301 | | | | | |
| **Water Reuse - Total** | | | $43,411 | | | | | |

# Environmental Laboratory

| Project Name | | | Project Cost*^ 2000 - 2006 | Annual OM cost* | Planning finish | Predesign finish | Final design finish | Construction finish |
|---|---|---|---|---|---|---|---|---|
| **Environmental Laboratory - Asset Management (A21010)** | | | | | | | | |
| | 423034 | Lab CAMP | 2,571 | | | | | Dec-06 |
| | 423250 | Misc. Power Reliability | 2,500 | | | | | Dec-06 |
| | 423285 | Lab Facilities Improvements | 1,701 | | Mar-98 | Sep-98 | Jun-99 | Dec-00 |
| Total | | Asset Management | 6,772 | | | | | |
| **Environmental Laboratory - New Facilities & Improvements (A21020)** | | | | | | | | |
| | 423459 | Environmental Laboratory Expansion | 3,092 | | Dec-98 | Feb-01 | Dec-00 | Dec-01 |
| | 423490 | RWSP Instrumentation | 49 | | | | | Dec-00 |
| Total | | New Facilties and Improvements | 3,141 | | | | | |
| **Environmental Laboratory - Total** | | | $9,913 | | | | | |

* Costs are in Year 2000 dollars
^ Costs in thousands of dollars

# Central Functions

| Project Name | | | Project Cost*^ 2000 - 2006 | Annual OM cost* | Planning finish | Predesign finish | Final design finish | Construction finish |
|---|---|---|---|---|---|---|---|---|
| **Central Functions (A21100)** | | | | | | | | |
| | 200013 | Space Imaging and Land Classification | 165 | | Dec-01 | | | |
| | 200015 | ESA Data Management | 645 | | | | | Dec-01 |
| | 200017 | IBIS Upgrade - 2001 | 250 | | Jun-02 | | | |
| | 423020 | WQ - Equip. Repl Itemized < $50K | 8,300 | | | | | Dec-06 |
| | 423082 | Lake Hills Remediation | 259 | | | | | Dec-96 |
| | 423086 | Water Quality Capital Outlay | 7,200 | | | | | Dec-06 |
| | 423175 | MMIS Implementation | 250 | | | | | Dec-00 |
| | 423254 | RWSP Startup | 14 | | Dec-00 | | | |
| | 423300 | Flow Monitoring/Modeling Improvement | 191 | | | Dec-98 | Dec-99 | Dec-00 |
| | 423310 | Industrial Waste Info System (IWIS) | 16 | | | | Nov-00 | |
| | 423311 | WPCD Misc. Computer Systems | 8,426 | | | | | Dec-06 |
| | 423475 | King Street Relocation | 569 | | | | Jun-99 | Dec-00 |
| | 423478 | Lakes Study | 7,559 | | Dec-04 | | | |
| | 423493 | Information Systems | 350 | | Feb-99 | Aug-00 | Dec-00 | |
| | 423522 | Clark Settlement | 7,413 | | | | | |
| Total | | New Facilties and Improvements | 41,607 | | | | | |
| **Central Functions - HCP (A2110y)** | | | | | | | | |
| | 423458 | Habitat Conservation Program | 6,948 | | Dec-06 | | | |
| **Central Functions - Total** | | | $48,554 | | | | | |

* Costs are in Year 2000 dollars
^ Costs in thousands of dollars

This page left intentionally blank.

This page left intentionally blank.

# Attachment C-7
# Annual Budget Targets and Adjustment Methods

The WWP intends to perform the services that it directly controls for a fixed cost (as adjusted for inflation) for the term of this Pilot Program. Costs that are beyond the control of the WWP shall be subject to an annual adjustment. Table C-7.1 contains the WWP's annual budget targets. The WWP's annual budget targets in the table are based upon Year 2000 budget conditions and an assumed inflation rate of 3 percent. Table C-7.2 lists the assumptions and conditions that will form the basis for annual adjustments to the WWP's annual budget targets. Factors beyond the WWP's control that may result in adjustments to the estimated cost are:

- Influent quantity (represented by RCEs)
- Septage quantity treated
- High strength industrial waste quantity treated
- Chemical unit prices
- Electricity unit prices
- Inflation
- Changes in contracts for which services are purchased
- Changes in fiscal policy
- Uncontrollable circumstances or changes in the WWP scope of services

Actions of the WWP also impact the level of revenue generated from non-rate sources. For example, the WWP operates a co-generation facility that produces electricity from digester gas and then sells the electricity to the local utility. The revenues are used to reduce the rates. Other similar revenue generating activities include the sale of biogas and biosolids program revenues.

The costs associated with the generation of these additional revenues are included in the WWP's annual budget targets. To assure that these revenues are maximized, and that operational cost savings are not achieved to the detriment of revenues, an annual adjustment will be made to WWP's annual budget targets to reflect changes in these revenues as compared to the level of revenues in the base year. This adjustment provides the incentive to the WWP to increase operating costs if the increase can be justified by the increased revenues. Conversely, if the WWP reduces its operating costs to the detriment of revenues the WWP will not recognize a benefit because the adjustment will reduce the adjusted annual budget targets.

During the term of this Pilot Program the WWP will perform its services at a cost that does not exceed the adjusted annual budget targets as determined in

accordance with this attachment. Once annual performance and financial data is available to the WWP such data shall be used to calculate the adjusted annual guaranteed cost for the previous year in accordance with the following formula:

- Adjusted Annual Costs = Year 2000 Budget for the Wastewater Program (per Table C-7.1) plus each of the following adjustment factors
- Inflation Adjustment = (Current Year Guaranteed Cost – CYIF*(Sum of Year 2000 costs for power, chlorine, bisulfite and polymer))* ($CPI_x$ /$CPI_{2000}$ – CYIF) Where: CYIF = the Cumulative Current Year Inflation Factor estimated at 3 percent per year.
- Power adjustment* = ($Year_x$ Power $/2000 power $) * (Unit Power $Cost_x$ /Unit Power $Cost_{2000}$ –1)
- Chlorine adjustment* = ($Year_x$ Chlorine $/2000 chlorine $) * (Unit Chlorine $Cost_x$ /Unit Chlorine $Cost_{2000}$ –1)
- Bisulfite adjustment* = ($Year_x$ Bisulfite $/2000 bisulfite $) * (Unit bisulfite $Cost_x$ /Unit bisulfite $Cost_{2000}$ –1)
- Polymer adjustment* = ($Year_x$ Polymer $/2000 polymer $) * (Unit Polymer $Cost_x$ /Unit Polymer $Cost_{2000}$ –1)
- Load adjustment for power for $Year_x$= (2000 power) * ($RCE_x$ /$RCE_{2000}$ – 1)
- $Year_x$ Polymer $= (2000 polymer $ ) * ($RCE_x$ /$RCE_{2000}$ – 1)
- $Year_x$ Chlorine $ = (2000 Chlorine $ ) * ($RCE_x$ /$RCE_{2000}$ – 1)
- $Year_x$ bisulfite $ = (2000 bisulfite $ ) * ($RCE_x$ /$RCE_{2000}$ – 1)
- $Year_x$ Variable Biosolids Management Costs = (2000 Variable Biosolids Management Costs) * ($RCE_x$ /$RCE_{2000}$ – 1)
- Revenue adjustment = Year X revenue - year 2000 revenue
- Odor Control Adjustment = Year X Odor Control Budget – Year 2000 Odor Control Cost

*Note: These equations will be repeated for each category (eg. West Plant Power, East Plant Power, West Thickening Polymer, East Dewatering Polymer, etc.) as shown in table C-7.2

$CPI_x$ = CPI for year being adjusted
$CPI_{2000}$ = CPI in year 2000
$RCE_x$ = RCE for year being adjusted
$RCE_{2000}$ = RCE's for year 2000

**Table C-7.1**
**WWP Annual Budget Targets***
(expressed in millions of dollars)

| | 2000 | 2001 | 2002 | 2003 | 2004 |
|---|---|---|---|---|---|
| **Budget Target** | 60.76 | 61.47 | 62.10 | 61.56 | 61.64 |
| **2005** | **2006** | **2007** | **2008** | **2009** | **2010** |
| 63.56 | 66.30 | 68.13 | 70.02 | 72.04 | 74.14 |

*This estimate is for the WWP as defined in the Pilot Program Plan. It includes an assumed 3 percent annual inflation factor and estimates of operating costs for future facilities outlined in Table G-3 and odor chemical control costs. The actual figure for annual targets will be based on adjustments realized each year.

**Table C-7.2**
**Assumptions and Conditions for Annual Adjustments to the Annual Budget Targets**

| | |
|---|---|
| Year 2000 RCE's | 697,750 |
| Year 2000 High Strength Surcharge Revenue | $1,682,058 |
| Yeqr 2000 Septage Revenue | $1,560,523 |
| Year 2000 Industrial Waste Fee Revenue (monitoring & permitting) | $1,449,114 |
| Year 2000 Cogeneration Revenue $ | $238,015 |
| Year 2000 Methane Revenue $ | $331,032 |
| Year 2000 Biosolids Revenue $ | $130,533 |
| Year 2000 Variable Biosolids Management $ | $122,094 |
| Year 2000 Biosolids haul/application rate | $22.84/ton haul cost, 9.32/ton application rate |
| Year 2000 West Chlorine Unit Cost $/ton budget assumptions | $442.58 plus 8.4% tax. |
| Year 2000 West Chlorine Adopted Budget $ | $322,393 |
| Year 2000 West Bisulfite Unit Cost $/ton | $1.09224 per gallon, includes sales & hazardous materials tax |
| Year 2000 West Bisulfite Adopted Budget $ | $247,769 |
| Year 2000 South Chlorine Unit Cost $ | $375.15/ton |
| Year 2000 South Chlorine Adopted Budget $ | $202,580 |
| Year 2000 West Dewatering Polymer Unit Cost $/lb active | $0.491/lb. of neat polymer, plus tax 8.6%. approx. 31% active. (new contract 1/1/01) |
| Year 2000 West Dewatering Polymer Adopted Budget $ | $1,369,693 |
| Year 2000 South Dewatering Polymer Unit Cost $/lb active | $1.35/lb active, plus tax 8.6% |
| Year 2000 South Dewatering Polymer Adopted Budget $ | $328,643 budgeted by mistake, ($425,500 actual) |

| | |
|---|---|
| Year 2000 West Thickening Polymer Unit Cost $/lb active | Assumed $1.49 per pound, active, plus 8.6% tax until 9/22/00. Contract can then be allowed to expire or extended. Assumed an extension at a 5% increase. |
| Year 2000 West Thickening Polymer Adopted Budget $ | $274,699 |
| Year 2000 South Thickening Polymer Unit Cost $/lb active | $1.35/lb active, plus tax 8.6% |
| Year 2000 South Thickening Polymer Adopted Budget $ | $167, 942 |
| Year 2000 Adopted Labor Budget $ | West Operations, adopted budget labor & benefits = $5,501,018<br>South Operations, adopted budget labor & benefits = $6,531,791<br>Maintenance, adopted labor and benefits = $8,380,337<br>Environmental Lab, adopted labor & benefits = $4,847,609<br>Industrial Waste, adopted labor & benefits = $1,282,556<br>Remaining WWP, adopted labor & budget = $6,981,510 |
| Year 2000 Odor Control Chemical Adopted Budget $ | West Point & West Offsite: $323,511 ($331,814 actual)<br>East Operations: $179,000 |
| Year 2000 Total O & M Adopted Budget $ | West Point Operating = $12,486,407<br>South Operations = $13,238,379 (does not include the $8 million 12/00 energy supplemental)<br>Maintenance = $13,113,845 |
| Year 2000 West Plant Power Rate $/kwh | Assumed $0.035 |
| Year 2000 West Plant Power Adopted Budget $ | $2,045,737 |
| Year 2000 South Plant Power Rate $/kwh | Assumed $0.040 |
| Year 2000 South Plant Power Adopted Budget $ | $2,847,812 (does not include the $8 million 12/00 energy supplemental) |
| Year 2000 West offsite Power Rate $/kwh | $0.042 |
| Year 2000 West offsite Power Adopted Budget $ | $854,592 |
| Year 2000 South Offsite Power Rate $/kwh | $0.0643 |
| Year 2000 South Offsite Power Adopted Budget $ | Pump crew: $1,100,977<br>Alki: $21,226 |

**Table C-7.3**
**Assumptions for Additional Operating Costs of New Facilities***
**2001 - 2009**

| | 2001 | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|---|
| **Estimated Increased O & M cost** | $68,740 | $557,950 | $706,280 | $779,020 | $1,439,488 |
| | **2006** | **2007** | **2008** | **2009** | **2010** |
| | $1,482,670 | $1,527,150 | $1,572,970 | $1,620,160 | Not estimated |

*These estimates include an increase for inflation of 3 percent and are based new facilities planned in the RWSP. Periodic review of actual labor costs may be needed to serve new facilities as they are brought into production.

# Attachment C-8
# Productivity Incentive Fund Management Principles

In this Pilot Program, WWP has committed to manage, operate and maintain specific systems and programs to specific performance levels at annual budget target cost. If the cost is lower than the current budget for the same scope of service, it represents a saving to the ratepayer. It is expected, although not guaranteed, that WWP will perform its services at a cost even lower than the annual budget cost. The parameters of the Productivity Incentive Fund shall be consistent with the annual wastewater service-level requirements as set forth in the Wastewater Productivity Pilot Program.

## Goals and Parameters

The goals of the Productivity Incentive Fund are as follows:

- Provide financial incentives to employees to achieve higher than projected savings to the sewer ratepayers,
- Encourage teamwork, and
- Encourage employee involvement in the business.

## Productivity Incentive Fund for Wastewater Operating Fund

Henceforth, the Productivity Incentive Fund, as defined herein, shall be established each calendar year after the baseline annual operating target savings identified in the aforementioned Productivity Pilot Program are met and verified through an independent review. King County Wastewater Treatment Division shall retain 50 percent of those additional savings and 50 percent shall be assigned to a Productivity Incentive Fund. A minimum of 25 percent of the funds assigned to the Productivity Incentive Fund shall be designated for distribution to all employees participating in the Productivity Initiative. The division manager, assistant division manager and the senior project administrator (who was the Productivity Initiative Project Manager) shall not be eligible for any financial distributions from the Productivity Incentive Fund.

## Productivity Incentive Fund for Wastewater Capital Fund

During the term of the labor contract with SEIU Local 6 and Teamsters Local 117, the Productivity Pilot Program will develop a Productivity Incentive Fund for savings associated with the wastewater capital program. The county may not enter into any agreement, memorandum of understanding or any other document with any other party which would preclude the Union from participating in the Productivity Incentive Program for the wastewater capital program.

**Productivity Incentive Program Oversight Committee**

The Oversight Committee shall be responsible for oversight of funds allocated to the Fund. Membership shall be as follows:

- 4 representatives from SEIU, Local 6
- 2 representatives from Teamsters, Local 117
- 1 representative from AFSME
- 2 management representatives
- 4 nonrepresented representatives

Ex-officio membership may include, but shall not be limited to, the Office of the Executive and the Department of Finance.

The Productivity Incentive Program Oversight Committee shall have the authority and responsibility to determine the distribution and use of the Fund, subject to approval by the Manager of the Wastewater Treatment Division. The Productivity Incentive Program Oversight Committee shall prepare an annual report on the management of the fund. The fund shall be audited on an annual basis. In addition to the minimum 25 percent of the contribution to the Fund annual payouts to employees, distribution of the funds may include, but not be limited to:

- Investment in employees through training and other employee development programs
- Award and Recognition Program
- Reserve Fund (the basic premise is to use it as a "rainy day fund" that addresses possible shortfall in meeting budget targets)
- Other activities consistent with achieving the goals of the Productivity Pilot Plan

# Attachment C-9
# Capital Program Incentive Plan

A plan to propose a Capital Program Incentive Fund is being developed now. Proposed language for Council review is anticipated by October 2001. The WWP will work with employees, the Department of Natural Resources Director's Office, and Executive's Office staff during the next six months to develop an acceptable approach to the fund. An overview, objectives, and approaches to establishing baseline measurements for savings are outlined below.

**Overview**

One of the WWP's primary duties is to manage the Capital Improvement Program (CIP). Most of the costs of this activity are capitalized and therefore reflected in the rate as debt service. The WWP can minimize the effects of both operating costs and debt service on rate increases by effectively implementing the CIP. The Capital Program Incentive Fund is an incentive program to recognize performance that exceeds established cost targets for WTD's capital program.

**Objectives**

- Establish a process to measure WWP's performance in achieving its goal to minimize the rate impact of capital improvements.
- Establish an incentive system in which capital program savings are shared and a contribution is made to an assurance fund.
- Encourage the capital programs and operating groups to work cooperatively and produce the lowest possible rate impact. Accomplishing capital or operational savings to the detriment of other cost areas must not be rewarded.

Establishing the baseline from which to measure potential and actual savings is probably the most significant issue in developing a plan for the Capital Program Incentive Fund. Several possible approaches, including their advantages and disadvantages, are outlined below, and include:

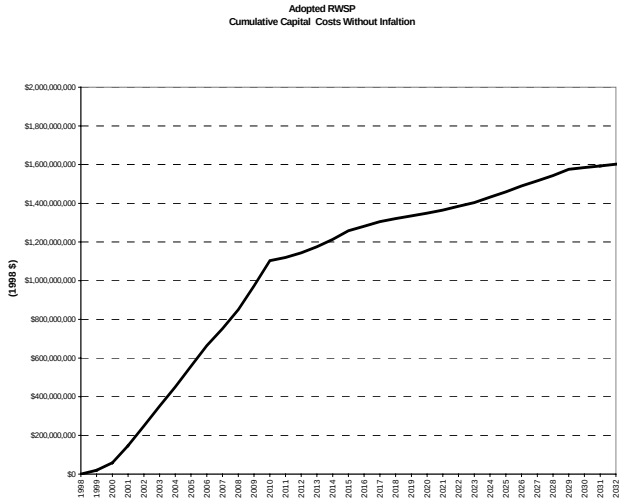
1. Cumulative Capital
2. Rates
3. Debt
4. Allied Costs
5. Compare Unit Costs
6. Time to Complete Projects
7. Life Cycle Costs

## 1. Cumulative Capital

**Measure description**: This is a long-term measure of the direct (without financing) capital costs of RWSP projects over time. We have 1998 projections extending to 2030, with and without inflation, that we can use as a benchmark to compare actual expenditures.

**Efficiency or cost saving activity measured**: This is an aggregate measure of RWSP project costs that demonstrate any savings in capital costs and/or savings from timing of projects relative to the benchmark.

**How measured/implemented**: Annual RWSP actual capital costs are tracked against benchmark estimates. Must be viewed as a long-term measurement of performance, not year to year.




### Advantages

- Shows how we are doing compared to original RWSP decision
- Easy to quantify and understand
- Data is available

### Disadvantages

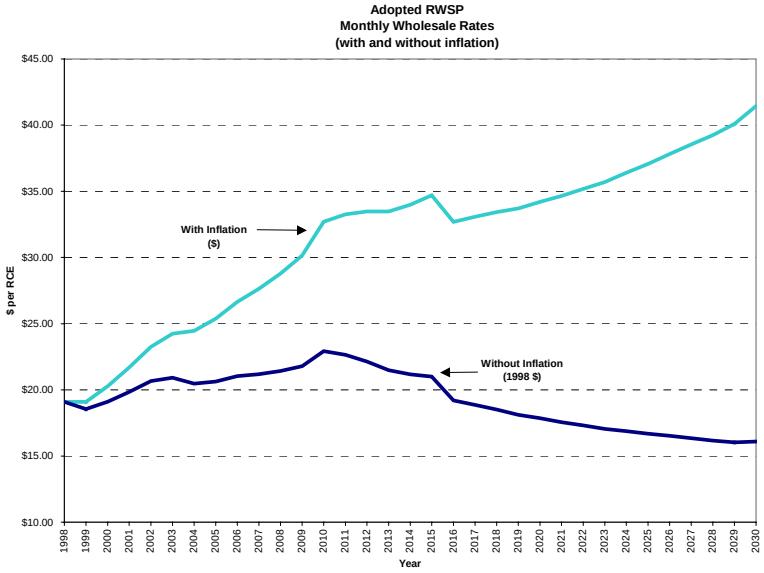
- Subject to lots of changes
- Facilities change
- This measure may be difficult to interpret at any point in time; accelerating or decelerating a project can move the curve of actual expenditures above or below the benchmark curve without necessarily indicating a positive or negative situation. It may be impossible to distinguish the difference between actual performance and the benchmark that is due to a true decrease in the construction cost or a change in timing.

## 2. Rates

**Measure description:** Comprehensive measure that reflects capital costs, operating and maintenance costs, capital financing costs and changes in revenues.

**Efficiency or cost saving activity measured:** It provides a single comprehensive measure that is easily understood by a wide audience.

**How measured/implemented:** At a minimum, this is calculated annually for the rate and budget process, plus it can be estimated for long-term periods.




### Advantages

- Comprehensive
- Meaningful and easily understood
- Done annually
- Can do long-term projections

### Disadvantages

- Affected by many variables so can be difficult to distinguish cause and effect. Simultaneous factors may strongly affect the estimates.

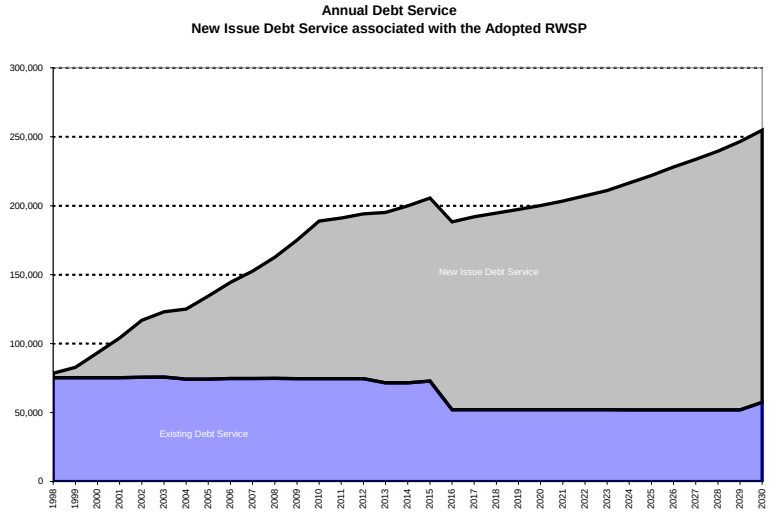
## 3. Debt

**Measure description:** Debt service payments in support of the capital program are a significant cost, so measuring both existing debt and the accumulation of

new debt highlights how the capital program affects overall division costs and the rate. It can also track and highlight the cumulative debt burden.

**Efficiency or cost saving activity measured**: Measures how changes in the capital program can reduce or increase debt burden for the ratepayer over the long term. It also reflects results and savings from refinancing, seeking lower interest loans, etc.

**How measured/implemented:** Existing debt service levels are closely tracked; debt service associated with new capital borrowing is calculated in the rate model. Given assumptions about interest rates, bond terms, and issue costs, we can project future increases to the WTD debt burden.




**Advantages**

- Huge cost component being measured
- Global

**Disadvantages**

- Cause/effect is not always clear
- Future debt service levels, in addition to the level of capital spending, is influenced by exogenous variables such as interest rates and market conditions.

### 4. Allied Costs (Capital)

**Measure description:** This measures all capital costs except construction and land acquisition, such as design, labor, procurement, project management, and so on. It can be measured both by project and by rolled-up categories.

**Efficiency or cost saving activity measured:** Measures our performance most directly. It includes many different cost components, some of which are in our control and some of which are not. It could be used to establish the amount to invest in the assurance fund. It measures our capital program business practices and many of the Productivity Initiative ideas would be captured here.

**How measured/implemented:** We have a lot of historical data being summarized for use as a benchmark to compare ourselves with others and with ourselves. We are able to do projections by project and category and then measure actuals against the projections. It can be used to compare us to other utilities, public and private. We will look at historical records, compare, and establish targets by project or by categories of projects.

**Advantages**

- Can compare to others by benchmarking
- Meaningful measures for employees and project managers
- Cause and effect is readily identified
- Can show both long term and short term

**Disadvantages**

- Potential to save allied costs could create motivations that would result in cost impacts to construction or O&M. Requires check and balance.

### 5. Compare Unit Costs

**Measure description:** Measures both allied and construction costs to compare against public and private utilities. We would need to be able to find comparable data to compare our costs to others. We could use it to compare materials costs, and to compare across different construction methods.

**Efficiency or cost saving activity measured:** Measurement would provide indicators for moving to better materials or construction methods.

**How measured/implemented:** We would have to standardize some unit costs, create the estimates, and measure actuals. We could also purchase national or outside standards. We would also want to measure several construction methods for comparison purposes.

**Advantages**

- Can be very specific
- Can focus on construction

**Disadvantages**

- May be hard to measure and produce meaningful results for the Productivity Initiative effort
- May not have the option to choose methods

### 6. Time to Complete Projects

**Measure description:** We often say that "time is money." In measuring the time it takes to complete projects and by establishing benchmarks and targets, we could better quantify and drive cost savings. The more time it takes to complete a project, the more likely the costs will rise (e.g., construction inflation).

**Efficiency or cost saving activity measured:** We have historical data to compare projections to actuals. Measuring the time required to complete projects would include increases due to inflation. By establishing targets and tracking inflationary costs, particularly by cost component, we may prioritize projects (or components of projects) to achieve lower costs because those projects (or components) are most subject to inflation and market conditions.

**How measured/implemented:** We need to analyze and assess affected cost components by the time it took to complete them. Then we must track inflation costs and incorporate information into project decisions.

**Advantages:**

**Disadvantages:**

### 7. Life Cycle Costs

**Measure description:** Measures both the direct capital cost, financing, and O&M over the long term, and enables capital vs. O&M to be optimized. It is also used to compare alternatives.

**Efficiency or cost saving activity measured:** Will significantly affect decisions during planning and design phases for long-term cost optimizing. It also factors key cost components into the decision process, such as energy, automation, and so on.

**How measured/implemented:** We need to establish a basic methodology that can be used consistently, then create specific methodology for types of facilities and equipment that includes assumptions and standards. We also need to establish our ability to use and update the methodology. Part of the implementation should include establishing points in project timelines to update

lifetime costs comprehensively, such as planning, design (at 30 percent, 60 percent, and 90 percent), construction, and startup.

**Advantages**

- Optimize early on for entire project
- Better design making
- Compares capital vs. O&M savings
- Early warning about rate impacts

**Disadvantages**

- We do not have a history of lifetime costs to use
- Assumptions have to be updated
- More work for project managers and project teams

# Attachment C-10
# Service Agreement Principles & Outline

The WWP relies upon services from other County departments to conduct its business. The quality of these services have been identified as one of the key elements of productivity for the WWP. Service Agreements will be developed to clarify expectations between the WWP and the departments listed below. Attachment C-10 proposes the general principles for developing the service agreements, a draft template Service Agreement, and the specific County Departments for which the level of service need to be defined in order for the WWP to "be the best."

**Principles of Service Agreements**

- Mutually developed by WWP and county agencies
- Agreed to by both parties
- Contains specific details on scope of services and responsibilities of both parties
- Allows for differences between different county agencies
- Benefits both parties
- No adverse impacts on other county agencies

**Proposed Service Agreement Content**

1. Objective/Purpose: A brief statement describing what this service agreement accomplishes.

2. Scope of Services
   2.1. Service Agency Responsibilities
   A detailed description of the services and products this agency will provide to the wastewater treatment program. Includes the processes that are to be followed by both parties.

   2.2. Customer Responsibilities
   A detailed description of the responsibilities of the WTD program with respect to the service agency responsibilities. Defines the tasks or information that the service agency is relying on from WTP in order to meet its responsibilities. May include investment in support agency.

   2.3. Schedule/Timelines
   These may be addressed here or as part of the responsibilities described above.

2.4. Communications
Frequency and description of any written materials expected from either party. Purpose and schedule of any meetings.

3. Modification Process
Describes what triggers a need for a modification or a mid-course correction. Specifies what elements are beyond the control of the WWP or the support agency.

4. Performance Measures/Quality of Service Standards
What needs to be measured and how. Describes the resolution process to be used when measures or standards are not being met by either party.

5. Accountability/Dispute Resolution
Ideally a tiered approach with the goal of resolving problems at the staff level, moving up through each agency as necessary.

6. Key Contacts

7. Relevant Documents/Resources

8. Value of Services
Describes the cost, quality and customer service elements to be reached with the service agreement.

9. Effective Dates and Renewal Process

10. Concurrence Statement
Includes successor language to keep agreement in place even as people change positions.

The Wastewater Program has identified the following support agencies for which Service Agreements are necessary in order to "be the best."

**Department of Finance**
- General Accounting
- Treasury
- Procurement and Contract Services
- Financial Management (Payroll, A/P, A/R)
- Business Development & Contract Compliance

**Prosecuting Attorney's Office**
- Civil Division

**Office of Human Resources Management**

**Department of Information and Administrative Services**
- Emergency Management (Radio Communications)
- Information and Telecommunication Services
- Risk Management

**Fleet Management**

**Department of Natural Resources**
- Manager's Office
- Water and Land Resources
- Local Hazardous Waste Program/ WLRD