

RESOLUTION NO. 1732

A RESOLUTION OF THE CITY OF WILSONVILLE ESTABLISHING JUST AND EQUITABLE SYSTEMS DEVELOPMENT CHARGES AND A SURCHARGE FEE FOR STORM WATER AND STORM WATER QUALITY MANAGEMENT AND REPEALS RESOLUTIONS NO. 843 AND 1129.

WHEREAS, ORS 223.297, states the following policy underlying system development charges:

"The purpose of ORS 223.297 to 223.314 is to provide a uniform framework for the imposition of system development charges by governmental units for specified purposes to establish that the charges may be used only for capital improvements."; and

WHEREAS, ORS 223.299 states:

"As used in ORS 223.297 to 223.314:

- (2) "Improvement fee" means a fee for costs associated with capital improvements to be constructed.
- (3) "Reimbursement fee" means a fee for costs associated with capital improvements already constructed or under construction.
- (4)(a) "System development charge" means a reimbursement fee, an improvement fee or a combination thereof assessed or collected at the time of increased usage of a capital improvement or issuance of a development permit, building permit or connection to the capital improvement. System development charge includes that portion of a sewer or water system connection charge that is greater than the amount necessary to reimburse the governmental unit for its average cost of inspecting and installing connections with water and sewer facilities."; and

WHEREAS, the City of Wilsonville pursuant to authority set forth in ORS 223.297 et. seq. has enacted Ordinance No. 386, as modified by Ordinances No. 430 and 432, which

provides the overall City implementing policy and procedures for system development charges (SDCs); and

WHEREAS, Ordinance No. 433 provides the overall City implementing policy and procedures for storm water and storm water quality management and for imposing a charge (herein after referenced as surcharge or surcharge fee) for storm water services; and

WHEREAS, part of the purpose of this resolution is to provide a uniform and equitable methodology for imposition of system development charges for specific storm water system capital improvements upon those developments that create the need for, or increase the demands for further capital improvements; and

WHEREAS, a further purpose of this resolution is to provide a uniform framework for the imposition of a surcharge fee for storm water services including, but not limited to, administrative review procedures and storm water quality management. The surcharge fee is adopted to ensure that any person whose water runs from properties in the City through the City's storm water facilities will pay a surcharge fee for storm water service in proportion to the degree of use. The storm water surcharge fee is intended to be a surcharge for municipal service and not a charge against property ownership; and

WHEREAS, on June 7, 2001, following initial development extensive analysis and review by Tetra Tech/KCM, Incorporated and City staff, a public hearing at the Planning Commission and a public hearing by Council, Council adopted Ordinance No. 515 amending the City's Comprehensive Plan to include the June 2001 Storm Water Master Plan (hereinafter Storm Water Master Plan); and

WHEREAS, the Storm Water Master Plan for the City of Wilsonville by Tetra Tech/KCM, Incorporated, provides that the capacity of the City's storm water drainage system and storm water quality management system must be increased to meet Metro, state and federal water quality requirements, Federal Endangered Species Act requirements; and

WHEREAS, Table 8-2 of the Storm Water Master Plan is the Storm Water Capital Improvements Plan; and

WHEREAS, Table 10-2 of the Storm Water Master Plan includes additional information on the proportionality of project improvements that benefit new users; and

WHEREAS, information from Table 8-2 and Table 10-2 is incorporated by reference herein and further consolidated and attached to this resolution as Table 1; and

WHEREAS, projects in the Capital Improvements Plan which are identified on Table 2 herein are adopted in concept only pending further analysis necessary to insure compliance with state and federal law and one project is approved in concept only and that no acquisition of property construction or limitation on development may be implemented until the analysis of the capacity and water quality for that project is extensively reviewed; and

WHEREAS, the Dammasch storm water improvements serve a separate, distinct geographic area with a separate distinct project list; and therefore, the Dammasch storm water projects and the development in the Dammasch area (see Figure 1), are not included in the calculation of system development charges and the City determines it will be equitable to establish a separate systems development charge for this area; and

WHEREAS, the north Wilsonville storm water improvements and the geographic area for these improvements are separate and distinct from the rest of the City; and therefore, these projects and area (see Figure 1) are also not included in the calculation of system development charges and the City determines it will be equitable to establish a separate system development charge for this area; and

WHEREAS, the storm water quantity system is based on a combination of a private and the public system; and

WHEREAS, the Storm Water Master Plan is based on the private on-site system being sized to detain the two through 25-year storm with no greater runoff from post development flows than from predevelopment flows; and

WHEREAS, the Storm Water Master Plan is designed so the public system can accommodate flows in excess of the capacity of the private onsite systems; and

WHEREAS, the public system must also accommodate the runoff from the private systems that will be of lower peak flows, but which will have flows over a much greater period of time; and

WHEREAS, the storm water quality system will also be a combination of the private onsite system and the public system; and

WHEREAS, the private water quality system will remove sediments and a part of the other contaminants from the high frequency storms; and

WHEREAS, the public system must provide water quality protection for the lower frequency storms with higher flows and the protection for storm water quality from the "flushing action" of the storms of higher flows on the private system in which the contaminants are flushed out of the private system into the public system; and

WHEREAS, Shaun Pigott of Shaun Pigott Associates has provided the City with a financial analysis and initial calculation of the system development charges in Chapter 10 of the Storm Water Master Plan to ensure the charges will meet the lawful objectives of providing storm water system capital improvements; and

WHEREAS, included in the methodology set forth herein is an addition to Chapter 10 to incorporate a reduction in storm water system development charges for payment of principal for improvements which benefit existing residents in the storm water surcharge bills; and

WHEREAS, the City has provided due notice of the proposed storm water system development charge methodology on October 3, 2001, and has distributed methodology for the calculations of the proposed methodology on October 19, 2001; and

WHEREAS, staff met with interested parties on November 5, 2001 and questions with responses are attached; and

WHEREAS, the City has duly noticed the public hearing of November 19, 2001, and has heard testimony and comments regarding the contents of this resolution; and

WHEREAS, based upon the reports, testimony and comments received, the City Council finds additional storm water surcharge increases are required to provide funds for operational expenses and debt service for the bond sales necessary to pay for construction of the storm water system; and

WHEREAS, the structure of the storm water surcharge fee for storm water and storm water quality management and the storm water system development charges are intended to be charges for services and capital improvements respectively. As previously noted, they are not charges imposed upon a property owner as a direct consequence of ownership of that property. Although the storm water surcharge and the storm water SDCs are intended to constitute charges for service and capital improvements, respectively, even if either were attached on property both

allow the owner to have the ability to control the amount of the charge. Similarly, the storm water and storm water quality management surcharge fee and the SDCs reflect the actual cost for providing the service and capital improvements, respectively, and only impose those charges on persons receiving a service or benefit of the capital improvements. Actual cost includes all direct and indirect costs the City might incur as set forth in ORS 310.140(13); and

WHEREAS, a storm water equivalent residential unit (ERU) is 2,750 square feet of impermeable surface as calculated in Appendix F of the June 2001 Storm Water Master Plan; and

WHEREAS, through the supersiting process and prior to amendment of the UGB and any annexation into the City, the City and the Oregon Department of Corrections have an Agreement for the Provision of Public Services to the Coffee Creek Correctional Facility; and

WHEREAS, the Agreement provides that the DOC will be required to pay its proportionate share of monthly storm water fees to the City and that the DOC's rates shall be reduced based on the proportion and the excess off-site storm water flow bears to the onsite storm water flow as determined using generally accepted engineering principles approved by DOC and the City's engineers; and

WHEREAS, the most accurate and simplest method of ensuring that the DOC is accurately charged for monthly storm water fees is to establish a separate storm water fee for DOC; and

WHEREAS, this separate storm water fee shall initially be established by separate resolutions may and shall be adjusted annually by the index set forth herein or as circumstances may change.

NOW, THEREFORE, THE CITY OF WILSONVILLE RESOLVES AS FOLLOWS:

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PART I: DETERMINATIONS & FINDINGS

- A. The City adopts the above recitals as findings and incorporates them by reference in support of this resolution.
- B. The City Council has reviewed the proposed surcharge fee for storm water services and finds the proposed fees to be rationally based and financially prudent. The City Council hereby finds that the impermeable surface as defined by an equivalent residential unit is a rationally based upon which allocation the improvement costs for storm water system capital improvements can be proportionally and equitably calculated.
- C. The City Council finds that the reimbursement component of the storm water system development charge is diminimus and therefore, there will be no reimbursement component.

PART II: DEFINITIONS

The following words and phrases, as used within this resolution, have following definitions and meanings:

- A. "Applicant" means the person seeking to obtain a building permit.
- B. "Building official" means that person, or his designee, licensed by the state and designated as such to administer the State Structural Specialty Code for the city.
- C. "Building permit" means that permit issued by the city building official pursuant to the Uniform Building Code. In addition, building permit shall mean the mobile home placement permit issued by the Director, or his representative, on a form approved by the Department of Commerce of the state and relating to the placement of mobile homes in the city. For those uses for which no building permit is provided, the final approval granted by the city approving the use shall be deemed a building permit for purposes of this ordinance.
- D. "Business and commercial" means all buildings or structures that are not classified as residential or industrial.
- E. "City Council" means the governing body of the City of Wilsonville.

- F. "DPW" means director of the Public Works Department.
- G. "DCD" means director of the Community Development Department.
- H. "Extra-capacity facilities or improvements" means those storm water improvements that are necessary in the interest of public health, safety and welfare to increase storm water capacity to address new development. Such improvements include, but are not limited to, erosion control, regional facilities (wetlands, ponds), sediment traps, grease and oil separators, acquisition of right-of-way and necessary easements, stream bank rehabilitation, piping and outfall structures.
- I. "Impervious Surface" means any substance or material restricting the passage of water including, but not limited to, roofing materials, concrete, asphalt, compacted gravel, compacted dirt, excavated slopes, or any storm sewer component with a run-off factor of 0.40 or greater as established by the City of Wilsonville Public Works Standards.
- J. "Industrial" means all buildings or structures in which a product is manufactured, stored or distributed, or any combination of the above.
- K. "Natural Outlet" shall mean any outlet into a water course, pond, ditch, lake or other body of surface or groundwater.
- L. "Occupancy permit" means the occupancy permit provided for in the Uniform Building code.
- M. "Owner" means the owner or owners of record title or; the purchaser or purchasers under a recorded sales agreement, and other persons having an interest of record in the described real property.
- N. "Parcel of land" means a lot, parcel, block or other tract of land that is occupied or may be occupied by a structure or structures or other use, and that includes the yards and other open spaces required under the zoning, subdivision, or other development ordinances.
- O. "Pollution" shall mean the presence of any foreign substance (organic, inorganic or biological) in water, that tends to degrade its quality so as to constitute a hazard or impair the usefulness or quality of water to a degree which does not

create an actual hazard to the public health but does adversely and unreasonable affect such waters for intended use.

- P. "Sewer" shall mean a pipe or conduit for carrying sewage.
- Q. "Storm Drain" (sometimes termed "Storm Sewer") shall mean a sewer which carries storm and surface waters and drainage, but excludes sanitary sewage and industrial waste.
- R. "Watercourse" shall mean a channel in which a flow of water occurs, either continuously or intermittently.

PART III: ESTABLISHES THE SURCHARGE FEE FOR STORM WATER SERVICES AND DISBURSEMENT OF FUNDS.

ARTICLE I

ADMINISTRATIVE AND ADMINISTRATIVE REVIEW

- A. The City's organization includes a Public Works Department, the Director of which is employed by the City Manager. In addition to such other duties and responsibilities that may be assigned to this person, the Director of Public Works (DPW) shall be responsible for the administration of the storm water surcharge fee part of this resolution, for developing administrative procedures for the calculation and collection of storm water surcharge fees and for developing and administering storm water management programs and related activities.
- B. Upon application to the DPW, a person responsible may seek a reduction of the monthly surcharge for storm water service. The applicant must show to DPW's satisfaction that amount of permanent reduction to the total run-off or run-off coefficient for the property. Extra capacity facilities or improvements above the requirements as described in Chapter 9 of the Storm Water Master Plan as described in Article II Definitions that are installed and maintained by the applicant may be used to show the amount of permanent reduction to the total runoff or the runoff coefficient.
- C. The fee for the application of a monthly surcharge reduction shall be \$25.00.

- D. Discretionary decisions of the DPW made in response to an application shall be in writing and mailed by regular mail to the last know address of the applicant.
- E. Any person aggrieved by a discretionary decision of the DPW may appeal the decision to the Wilsonville City Manager. The appeal shall be in writing and must be filed with the Director within ten working days of the date the Director's decision was mailed. The appeal shall state all relevant facts, identify the applicable ordinances provisions and specify the type and amount of relief sought. The appellant shall bear the burden of proof that an error was committed resulting in substantial prejudice.
- F. The appeal fee shall be \$200.00.

ARTICLE II

METHODOLOGY FOR CALCULATION OF STORM WATER SURCHARGE

- A. For ease of administration and to standardize application, the storm water surcharge is based on an equivalent residential unit (ERU). The basis for equivalent residential unit is included in Appendix F of the Storm Water Master Plan. For ease of reference Appendix F is attached as Table 3. The ERU is based on 2,750 square feet of impervious service per equivalent residential unit.
- B. In the fiscal year 2000/2001 the City had a total of 20,396 equivalent residential units. This was based on an equivalent residential unit including 2,000 square feet of impervious surface. With the recalculation of an equivalent residential unit the number of equivalent residential units for fiscal year 2000/01 dropped to 15,654, this is projected to increase to 16,045 in fiscal year 2001/2002. The calculation of the change in number of ERU is attached as Table 4.
- C. The City uses a five-year projection of operating expenses and debt service to determine the storm water surcharge fee per each equivalent residential unit. The calculation of the debt service is based on the bond sales that will be required to fund the capital improvements plan after deduction for system development charge collections and partial expenditures from storm water surcharge fees. The calculated storm water surcharge in fiscal year 2001/02 is \$3.58 per equivalent

residential unit and this would go to \$4.00 per equivalent residential unit for Fiscal Year 2002/2003 through 2006/2007. The list of expenditures and calculation of the storm water utility requirements is attached as Table 5. The accompanying Capital Improvements Plan is attached at Table 6.

ARTICLE III

STORM WATER SURCHARGE COLLECTION

Section 1. All water utility customers and user of developed properties with impervious surfaces shall be charged a storm water drainage surcharge at the single-family unit rate (ERU) of \$3.58 per 2,750 square feet of impervious surface area except the Department of Corrections which will be established by separate resolution. Actual monthly surcharges will be calculated in accordance with Ordinance No. 433.

- A. For each two thousand seven hundred fifty square feet of impervious surface the said property shall be charged the rate for a single-family unit. The minimum service charge shall be established at the rate of one single-family unit.
- B. The storm water for a mobile home park shall be established at the rate of one single-family per space.
- C. The storm water surcharge for a multiple-family building or facility shall be calculated based on the square feet of impervious surface however, the maximum charge shall be limited to the number of multiple family units on the property multiplied by the charge for a single-family unit.
- D. All charges for storm water services furnished or rendered by the City of Wilsonville shall be chargeable to the current user of the property where water and storm water services are supplied. In addition, the current property user and property owner shall be personally liable for all charges accrued against the property designated within the application.
- E. The City reserves the right to cut off and disconnect water services to the premises without further notice when charges for water and storm water services have not been paid within 30 days after the due date, and the

expense thereof shall be borne by the user to which such services have been supplied. The City shall provide a minimum of 3 days notice by a door hanger or by mail prior to water service disconnection. Water service disconnection procedures are specified in Resolution No. 1624, Article V.

- F. The collection of storm water surcharge with the increased fees and change in basis for an equivalent residential unit shall commence with the first utility billing including the December 2001 storm water service that will be in January 2002.

Section 2. The City shall annually review the storm water surcharge to determine whether additional revenues should be generated to address increases in the consumer price index (CPI) for the Portland Metropolitan Tri-County Area or to ensure that revenues do not exceed estimated demands. All calculations shall be carried out to the hundredths' place.

ARTICLE IV

DISBURSEMENT OF FUNDS

- A. All payment received by the City for storm water services rendered under the provisions of this resolution shall be deposited in the Storm Water Utility Fund.
- B. The storm water surcharge payments received shall be credited to the accounts established for the operation and maintenance of the storm water system and all conveyances, and all elements of the NPDES storm water management program as well as any debt service which may be funded with revenue bonds which are repaid from the storm water surcharge fee. Operations and maintenance cost may include personnel, system replacements and capital outlay.

ARTICLE V

REFUNDS

- A. Refunds of storm water surcharges may be made upon initiations of the DPW or upon written application filed with the DPW. Refunds shall only be allowed upon a finding by the DPW that there was an actual clerical error in the calculation of the surcharge.

ARTICLE VI

GENERAL FUND SERVICES

- A. For services provided by the general fund, a franchise fee of 4% of the gross annual revenue from the surcharge fee for storm water services will be collected and remitted quarterly to the general fund.

PART IV: ESTABLISHES THE STORM WATER SYSTEM DEVELOPMENT CHARGES, THE METHODOLOGY FOR STORM WATER SYSTEM DEVELOPMENT CHARGES, DISBURSEMENT OF FUNDS AND THE AMOUNT OF THE STORM WATER SYSTEM DEVELOPMENT CHARGES.

ARTICLE I

PURPOSE

Section 1.

- A. The purpose of this part of the Resolution is to provide a uniform framework for the imposition of a system development charge for storm water facilities, including, but not limited to, administrative review procedures, and identification of capacity increasing capital improvements which may be funded with System Development Charge revenues.
- B. This System Development Charge is adopted to ensure that new development contributes to extra-capacity storm water improvements needed to accommodate additional storm water runoff generated by such development.

ARTICLE II
ADMINISTRATION AND ADMINISTRATIVE REVIEW

Section 1. The City Manager shall employ the Community Development Director (DCD). In addition to such other duties and responsibilities as may be assigned to this person, the DCD shall be responsible for the administration of the system development charge part of the resolution. The DCD shall be responsible for developing administrative procedures for calculation and collection of fees, developing and administering capital improvement programs and related activities.

- A. Discretionary decisions of the DCD shall be in writing and mailed by regular mail to the last known address of the applicant.
- B. Any person aggrieved by a discretionary decision of the DCD may appeal the decision to the Wilsonville City Council. The appeal shall be in writing and must be filed with the City Recorder within 10 working days of the date the DCD's decision was mailed in accordance with Article X of Ordinance No. 386.
- C. The appeal shall state all relevant facts, identify the applicable ordinance provisions and specify the type and amount of relief sought. The appeal fee shall be \$400 and should be forwarded with the appeal.
- D. The appellant shall bear the burden of proving that an error was committed resulting in substantial prejudice.
- E. Any person who makes a written objection to the calculation of a system development charge shall be informed by staff that he/she has the right to petition for review pursuant to ORS 34.010 to 34.100 which petition must be filed within 60 days of notice of the calculated systems development charge.

Section 2. As provided by Ordinance No. 386, Article X, any citizen or other interested person may challenge an expenditure of SDC revenues as being in violation of this ordinance provided a written petition for review is filed with the Wilsonville City Recorder within two years of the expenditure.

ARTICLE III

SYSTEM DEVELOPMENT CHARGE METHODOLOGY FOR IMPROVEMENTS

Section 1. Comprehensive Plan Implementation Measure 3.1.7.D provides the following fundamental guidance in the development of the Storm Water Master Plan: "Major natural drainage way shall be retained and improved as the backbone of the drainage system and designated as open space. The integrity of these drainage ways shall be maintained as development occurs. Where possible onsite drainage systems will be designed to complement natural drainage ways and designated open space to create an attractive appearance and will be protected by conservation, utility or inundation in easements...". The Storm Water Master Plan was developed based on Implementation Measure 3.1.7.D. Table 8-2 of the Storm Water Master Plan is the Storm Water Capital Improvements Plan with additional information from Table 10-2 and is attached to this resolution as Table 1. When developing the Capital Improvements Plan that is used as a basis for the storm water system development charges, the following projects have in part, been reduced or eliminated from system development charge calculations.

- A. The Dammasch storm water improvements in the amount of \$3,263,000 have been excluded from the calculations along with the impervious surface from this area. These charges will be imposed upon refinement of the Storm Water Plan for the Dammasch area (see Figure 1) at the time of planning for development of the planning of Dammasch Urban Village.
- B. The North Wilsonville Storm Water improvements in the amount of \$2,456,000 along with the impervious surface for this area have been excluded and will be separately calculated at the time the planning for this area (see Figure 1) is completed.

- C. Project CLC-11, Regional Detention/Wetlands Enlargement east of Parkway Avenue on the south tributary to Coffee Lake Creek may be duplicating detention capacity and is approved in concept only.
- D. Project CLC-2, Wetland Enhancement adjacent to the south tributary to Coffee Lake Creek; Project CLC-3, Wetland Enhancement adjacent to the middle tributary to Coffee Lake Creek; Project CLC-6, Water Quality/Spill Control Facility, middle tributary to Basalt Creek; Project CLC-8, Regional Detention/Wetlands Enhancement on the south tributary to Basalt Creek and Project CLC-9, Regional Detention/Wetlands Enhancement on Basalt Creek upstream of the Burlington Northern Railroad may be impacted by Resolution of a possible conflict between the Federal Water Pollution Control Act and the Federal regulations for protection and recovery of salmonoid species listed as threatened by the National Marine Fishery Service as applicable to these sights. The overall cost of the Capital Improvements Plan was reduced from \$19,310,000 to \$12,291,000 for the calculation of storm water system development charges with the revised Capital Improvements Plan attached as Table 2 to this resolution. The Capital Improvements Plan includes projects which serve both existing and new users of the storm water system. The improvement fee portion of the system development charges only applies to the part of the improvement which serve new system users. Costs were provided between present and new customers based on storm water flows and are summarized in Table 10-2 of the Storm Water Master Plan dated June 2001. This apportionment of costs has been included in Table 2.

Section 2. The basis for allocating the Capital Improvements Plan to new development is the equivalent residential unit that is described as the impervious area for a single family residence. The basis of equivalent residential units is included in Appendix F of the Storm Water Master Plan. A copy of the calculation of equivalent residential units is attached as Exhibit 3. The Capital Improvements Plan that is allocated

to new users must be apportioned over all new users in the area that is to be served by the Capital Improvements Plan. The new users include 9,189 ERUs.

Section 3. The method of funding the Capital Improvements Plan may impact on the calculation of the system development charges. In the calculation of the storm water system development charges we have included bond financing for part of the Capital Improvements Plan. The other parts of the plan would be financed with system development charges and storm water surcharge funds that would either be used to directly pay for the capital improvements or to pay the debt service on the bonds. With the use of bonds for financing, the City will also need to provide debt service coverage of at least 110% of the bond payments from the storm water utility surcharge. For the calculation of debt service payments the debt service coverage is 110% of the operating expenses and debt service. The excess of the storm water utility collections above the storm water utility expenses and the debt service would also be used to pay for part of the costs of implementing the Capital Improvements Plan. With this approach, the new users could pay debt service on that part of the Capital Improvements Plan that benefits existing residents. For this reason, that portion of the debt service principal that would be paid by new users will be subtracted from the calculated storm water system development charge to provide a net SDC. To calculate the debt service principal payment, the Capital Improvements Plan has been distributed over the period from 2002 through 2025. The operations and maintenance projections were also completed through the same time period with bond sales added into the income projections as needed to provide adequate funds for the Capital Improvements Plan. The present worth of the payments by new users on the debt service for the Capital Improvements Plan that would service existing users is \$74. Summaries of the income and expense projections and the Capital Improvements Plan are attached as Table 7 and 8. A summary of the calculation of debt service credit is attached as Table 9.

The calculation of the improvement systems development charge is as follows:

The value of Capital Improvement Program included at full cost and allocated to new users.	\$2,257,195
The value of Capital Improvement Program included at 80% of estimated cost allocated to new users.	\$2,286,786
Total	\$4,543,981
The number of new users in equivalent residential units (ERU).	9189
The improvement SDC/ERU before debt service credit is determined by dividing the value of the CIP allocated to new users by the number of new ERUs.	\$495
Less debt service reduction.	\$74
Net improvement SDC/ERU.	\$421

ARTICLE IV

REIMBURSEMENT SYSTEM DEVELOPMENT CHARGES

Section 1. To date, the cost of the storm water system improvements that are in place has primarily been funded by developers or by system development charges as the City is relatively new and existing natural drainage was able to serve early development. The amount that has been paid by other funds is almost negligible so the storm water system development charge will not have a reimbursement component.

ARTICLE V

STORM WATER SYSTEM DEVELOPMENT CHARGES

Section 1. Charges inside the City. The storm water SDC is obtained by adding the improvement fee to the reimbursement fee. The storm water SDC is based upon application of the forgoing methodologies and is effective December 1, 2001. The equivalent residential unit for single-family residences, multi family developments, commercial developments, industrial developments and public developments is based on 2,750 square feet per equivalent residential unit. The combined storm water systems development charge is as follows:

<u>Type of Project</u>	<u>Cost Per ERU</u>
Single-family	\$421
Multi family	\$421
Commercial	\$421
Industrial	\$421
Public	\$421
Other	\$421

Section 2. Charges outside the City. The City has no plans to provide storm water services outside the City. If and when provided, the storm water system development charge will be calculated based on actual and projected costs per equivalent residential unit.

Section 3. Payment. The amount of storm water SDC due at the time of issuance of the building permit or at other times as described in Ordinance No. 386 shall be determined by dividing the number of square feet of impervious surface by 2,750 to determine the equivalent residential units. For single-family dwelling units the equivalent residential unit is based on average square footage of 2,750 square foot per equivalent residential unit. The number of equivalent residential units is multiplied by the amount described in Section 1 or Section 2 to determine the storm water system development charge.

Section 4. Reduction in storm water SDC payments based on approved alternative fee calculations. Article 5, Section 5 of Ordinance No. 386 allows approval of a reduction in system development charges based on approval of an alternate fee calculation which would show that individual developments present special or unique situations such that the calculated fee is grossly disproportionate to the actual impact of the development. The primary, but not the only, reduction in storm water system development charge fees will be based on retention/detention in excess of the 25 year

storm. The alternate fee calculations shall show the specific analysis to determine the proposed reduction in storm water system development charges.

ARTICLE VI

PAYMENT

Section 1. Unless deferred, the SDC imposed hereby is due and payable at the time of issuance of a building permit by the city; issuance of a development permit not requiring issuance of a building permit; or issuance of a permit to connect to the storm water system. Except as otherwise provided in Ordinance No. 386, Article VII, no permit shall be issued for a development subject to the SDC unless the SDC is first paid in full.

ARTICLE VII

CREDIT

Section 1. As provided by Ordinance No. 386, Article IX, an applicant for a building permit is eligible for credit against the SDC for constructing a qualified capital improvement.

ARTICLE VIII

EXEMPTIONS

Section 1. The following development is exempt from the SDC.

- A. Remodeling or replacement of any single-family structure (including mobile homes);
- B. Multi-family structure remodeling or replacement except to the extent of addition of dwelling units;
- C. Remodeling or replacement of office, business and commercial, industrial or institutional structures except to the extent it creates additional area of impervious surface.

ARTICLE IX

DEDICATED FUND

Section 1. The city shall maintain a dedicated fund entitled "Storm water System Improvement Fee Systems Development Fund", herein "fund". All moneys derived from the SDC shall be placed in the fund. SDC revenue, including interest on the fund, shall

be used for no purpose other than those activities described as, or for the benefit of, capital improvement storm water facilities.

Section 2. SDC revenues may be spent to provide new storm water projects as shown in Table 1 including all related improvements necessary to meet adopted standards. In addition, the reasonable and customary costs of administering this SDC and projects funded hereunder, including repayment of debt, may be paid from SDC revenues.

ARTICLE X

REFUNDS

Section 1. Refunds of SDCs may be made upon initiation of the DCD or upon written application filed with the DCD. Refunds shall only be allowed upon a finding by the DCD that there was an actual clerical error in the calculation of the SDC, or upon clear evidence that the project has been cancelled. Refunds for cancelled projects can be reduced to cover the administrative costs of calculating and issuing the refund (currently estimated at \$50.00/refund). Refunds shall be allowed for failure to claim a credit provided the claim for refund is in writing and actually received by the city within 30 days of the date of issuance of the building permit or final occupancy permit if deferral was granted. No refund shall be granted for any reason other than those expressly provided for herein.

ARTICLE XI

COLLECTION

Section 1. Notwithstanding issuance of a building or occupancy permit without payment, the SDC liability shall survive and be a personal obligation of the permittee.

Section 2. Intentional failure to pay the SDC within 60 days of the due date shall result in a penalty equal to 50% of the SDC. Interest shall accrue from the 60-day point at the legal rate established by statute.

Section 3. In the event of a delinquency, in addition to an action at law and any statutory rights, the City may:

- A. Refuse to issue any permits of any kind to the delinquent party for any development.
- B. Refuse to honor any credits held by the delinquent party for any development.

- C. Condition any development approval of the delinquent party on payment in full, including penalties and interest.
- D. Revoke any previous deferrals issued to the delinquent party, in which case the amount immediately shall be due, and refuse to issue any new deferrals.
- E. Withdraw the amount due, including penalties and interest, from any offset account held by the jurisdiction for the delinquent party.

Section 4. For purposes of this section, delinquent party shall include any person controlled by a delinquent individual permittee.

PART V. STATEMENT OF VALIDITY

- A. The City Council hereby finds that the fees and charges herein are not taxes subject to the property tax limitations of Article 11, Section 11(b) of the Oregon Constitution and further meets the definition of incurred charges set forth in Article 11, Section 11(b)(2).

PART VI. REPEAL OF EXISTING RESOLUTIONS

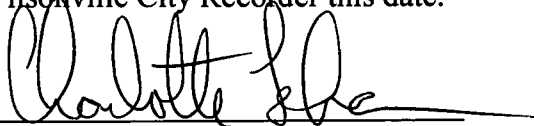
- A. Upon adoption of this resolution by the City Council, Resolutions No. 1129 and 843 enacted by City Council are hereby repealed.

ARTICLE XI

SEVERABILITY

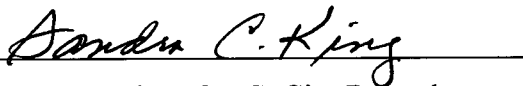
Section 1. The invalidity of any section, subsection, paragraph, sentence, or phrase of this ordinance or the exhibit or resolution which is incorporated herein, shall not affect the validity of the remaining portions thereof.

ADOPTED by the City Council of the City of Wilsonville at a regular meeting thereof this 19th day of November, 2001, and filed with the Wilsonville City Recorder this date.



CHARLOTTE LEHAN, MAYOR

ATTEST:



Sandra C. King, CMC, City Recorder

SUMMARY OF VOTES:

Mayor Lehan	<u>Yes</u>
Councilor Helser	<u>Yes</u>
Councilor Barton	<u>Yes</u>
Councilor Kirk	<u>Yes</u>
Councilor Holt	<u>Yes</u>

Table 1

**City of Wilsonville
Storm Water
Capital Improvement Plan - Uninflated
Projects and costs from Table 10-2 of Master Plan**

PROJECT	TOTAL	PERCENT ALLOCATED TO NEW USERS	CIP ALLOCATED TO NEW USERS
Include in SDC calculations at full improvement cost			
CLC-1 Wetland enhancement NW of Burlington Northern RR/ WV Road Crossing	\$281,000	0.106	\$29,786
CLC-5 Regional detention/wetland enhancement between Boones Ferry Road & 95th Avenue across I-5 from Wiedeman Road	\$450,000	0.381	\$171,450
CLC-10 Regional detention/wetland enhancement at Dammasch Basin Outfall/ Arrowhead Creek	\$1,046,000	0.416	\$435,136
CLC-12 Stream restoration on South Tributary to Coffee Lake Creek	\$459,000	0.350	\$160,650
CLC-13 Conveyance improvements on Channel west of Commerce Circle	\$114,000	0.374	\$42,636
BC-1 Erosion control on Boeckman Creek	\$52,000	0.358	\$18,616
BC-2 Stream restoration/wetland enhancement in existing channel on north side of Memorial Park	\$238,000	0.330	\$78,540
BC-4 Detention pond modification on Boeckman Creek north of Boeckman Road-completed	\$0	0.000	\$0
BC-6 Regional detention/wetland enhancement in a linear channel on south side of Wiedeman Road ROW or BC-7 on west side of Sysco property	\$1,465,000	0.468	\$685,620
BC-8 Conveyance improvements on Elligsen Road outfall from Urban Reserve Area 35	\$457,000	0.233	\$106,481
Boones Ferry Road line replacements south of WV Road	\$369,000	0.496	\$183,042
Kolbe Lane culvert replacement	\$72,000	0.122	\$8,770
Barber Street Line Replacements	\$222,000	0.214	\$47,492
(Boones Ferry Road line replacements north of Wilsonville Road)	\$523,000	0.148	\$77,417
95th Ave/Hillman Court Line Replacements	\$197,000	0.194	\$38,193
Ridder Road and I-5 Crossing Improvements	\$777,000	0.089	\$68,847
Boeckman Road Line Replacements	\$369,000	0.283	\$104,519
Include in SDC calculations at 80% of MP costs because projects are subject to modification			
CLC-2 Wetland enhancement adjacent to south tributary to Coffee Lake Creek	\$1,416,000	0.350	\$495,600
CLC-3 Wetland enhancement adjacent to Middle Tributary to Coffee Lake Creek	\$1,313,000	0.378	\$496,314
CLC-6 Water Quality/spill control facility Middle Tributary to Basalt Creek	\$450,000	0.191	\$85,950

PROJECT	TOTAL	PERCENT ALLOCATED TO NEW USERS	CIP ALLOCATED TO NEW USERS
Include in SDC calculations at full improvement cost			
CLC-8 Regional detention/wetland enhancement on south tributary to Basalt Creek	\$1,157,000	0.275	\$318,175
CLC-9 Regional detention/wetland enhancement on Basalt Creek upstream of Burlington Northern RR	\$572,000	0.255	\$145,860
CLC-11 Regional detention/ Wetland enlargement east of Parkway Avenue on south tributary to Coffee Lake Creek	\$1,592,000	0.827	\$1,316,584
Exclude from SDC calculations & income calculations			
Dammasch stormwater improvements	\$3,263,000	1.000	\$3,263,000
North Wilsonville stormwater improvements	\$2,456,000	1.000	\$2,456,000
Total	\$19,310,000	0.000	\$10,834,678

19,310,000

Table 2

City of Wilsonville

Stormwater

Capital Improvement Plan - Uninflated for SDC Purposes

Projects and Costs from Storm Water Master Plan with 20% Reduction for Projects CLC-2, CLC-3, CLC-6, CLC-8, CLC-9 & CLC-11

PROJECT	TOTAL	PERCENT ALLOCATED TO NEW USERS	CIP ALLOCATED TO NEW USERS
Include in SDC calculations at full improvement cost			
CLC-1 Wetland enhancement NW of Burlington Northern RR/ WV Road Crossing	\$281,000	0.106	\$29,786
CLC-5 Regional detention/wetland enhancement between Boones Ferry Road & 95th Avenue across I-5 from Wiedeman Road	\$450,000	0.381	\$171,450
CLC-10 Regional detention/wetland enhancement at Damasch Basin Outfall/ Arrowhead Creek	\$1,046,000	0.416	\$435,136
CLC-12 Stream restoration on South Tributary to Coffee Lake Creek	\$459,000	0.35	\$160,650
CLC-13 Conveyance improvements on Channel west of Commerce Circle	\$114,000	0.374	\$42,636
BC-1 Erosion control on Boeckman Creek	\$52,000	0.358	\$18,616
BC-2 Stream restoration/wetland enhancement in existing channel on north side of Memorial Park	\$238,000	0.33	\$78,540
BC-4 Detention pond modification on Boeckman Creek north of Boeckman Road-completed	\$0	0	\$0
BC-6 Regional detention/wetland enhancement in a linear channel on south side of Wiedeman Road ROW or BC-7 on west side of Sysco property	\$1,465,000	0.468	\$685,620
BC-8 Conveyance improvements on Elligsen Road outfall from Urban Reserve Area 35	\$457,000	0.233	\$106,481
Boones Ferry Road line replacements south of WV Road	\$369,000	0.49604878	\$183,042
Kolbe Lane culvert replacement	\$72,000	0.121805556	\$8,770
Barber Street Line Replacements	\$222,000	0.213927928	\$47,492
(Boones Ferry Road line replacements north of Wilsonville Road)	\$523,000	0.148024857	\$77,417
95th Ave/Hillman Court Line Replacements	\$197,000	0.193873096	\$38,193
Ridder Road and I-5 Crossing Improvements	\$777,000	0.088606178	\$68,847
Boeckman Road Line Replacements	\$369,000	0.283249322	\$104,519
Include in SDC calculations at 80% of MP costs because projects are subject to modification			

PROJECT	TOTAL	PERCENT ALLOCATED TO NEW USERS	CIP ALLOCATED TO NEW USERS
Include in SDC calculations at full improvement cost			
CLC-2 Wetland enhancement adjacent to south tributary to Coffee Lake Creek	\$1,132,800	0.35	\$396,480
CLC-3 Wetland enhancement adjacent to Middle Tributary to Coffee Lake Creek	\$1,050,400	0.378	\$397,051
CLC-6 Water Quality/spill control facility Middle Tributary to Basalt Creek	\$360,000	0.191	\$68,760
CLC-8 Regional detention/wetland enhancement on south tributary to Basalt Creek	\$925,600	0.275	\$254,540
CLC-9 Regional detention/wetland enhancement on Basalt Creek upstream of Burlington Northern RR	\$457,600	0.255	\$116,688
CLC-11 Regional detention/ Wetland enlargement east of Parkway Avenue on south tributary to Coffee Lake Creek	\$1,273,600	0.827	\$1,053,267
Exclude from SDC calculations			
Dammasch stormwater improvements			
North Wilsonville stormwater improvements			
Total	\$12,291,000	0	\$4,543,981

CHAPTER 10. FINANCING ANALYSIS

10.1 STORMWATER FINANCIAL PLANNING

The City of Wilsonville expanded its authority as an Oregon municipality to include "storm drainage and water quality management" services and applied a fee for these services in September of 1994. From the beginning of the program, the City has endeavored to establish basic levels of service along with the funding mechanisms necessary to support the day to day operations and maintenance of the existing stormwater system. This focus also included the likely impacts of the National Pollutant Discharge Elimination System (NPDES) stormwater permitting to which Wilsonville applied as a co-applicant with other Clackamas County jurisdictions. Having established this operational focus for the initial stormwater program, the City has broadened its allocation of resources to support comprehensive basin planning within the City's boundaries and urban reserve areas. This master planning has produced specific recommendations regarding structural and non-structural needs for the system. As this master plan and the public involvement process further shapes program needs and priorities, a structure for evaluating the financial impacts of these program options has also been developed. Similar to the financial planning in place for the City's sanitary sewer and water utilities, the Stormwater financial model has documented a capital improvement schedule that links the timing of expenditures with the City's likely service charge and system development charge revenue profile. Initial model runs indicate that an initial systems development charge of \$495 per equivalent residential unit (ERU) is required. The model further indicates a requirement for a stormwater utility rate of \$3.58 per ERU per month.

10.2 POTENTIAL FUNDING SOURCES FOR STORMWATER CAPITAL IMPROVEMENT AND OPERATIONS

Within the state of Oregon, the funding options available to a municipality for storm sewer operations, maintenance and improvements funding are identical to those established for other municipal utility functions. The flexibility established for stormwater financing and upheld in the Oregon Supreme Court (Roseburg School District et al v. City of Roseburg) allows the City access to a service charge for funding stormwater operations/capital improvements. The key at this stage of Wilsonville's stormwater program development is to re-calibrate the use of rates as a primary revenue source, while assuring that all possible funding mechanisms have been considered in designing an overall financing strategy. While secondary financing techniques such as system development charges, plan review fees and grants/loans can serve to offset new facility or direct service costs, they cannot provide the revenue stream necessary to support a full-time, comprehensive stormwater management program. Wilsonville recognized this fact when, in 1994, it established its "surcharge" for storm drainage and water quality management under Ordinance No. 433. The financial model is intended to evaluate capital, maintenance and operations costs in relation to the full spectrum of available funding options, including impacts on the City's service charge. The funding options considered as part of the financial analysis include:

The availability of a public works loan from the state of Oregon as managed by the Oregon Economic Development Department needs to be checked prior to any borrowing. The interest rates would be competitive with revenue bonds and there may be lower issuance costs. These funds as stated in the preceding subparagraph are available on a competitive basis.

Revenue Bonds—This form of debt financing is also available to Wilsonville for drainage related capital improvements. Unlike G.O. bonds, revenue bonds are not backed by the City as a whole, but constitute a lien against the stormwater service charge revenues of the Stormwater Utility. Revenue bonds present a greater comparative risk to the investor than do G.O. bonds, since repayment of debt depends on an adequate revenue stream, legally defensible rate structure and sound fiscal management by the issuing jurisdiction. Due to this increased risk, revenue bonds generally command a higher interest rate than G.O. bonds. This type of debt also has very specific coverage requirements in the form of a reserve fund specifying an amount, usually expressed in terms of average or maximum debt service due in any future year. This debt service is required to be held as a cash reserve for annual debt service payment to the benefit of bondholders. For purposes of the debt financing model contained in this Master Plan, both coverage requirements and reserves have been factored into the calculations. Typically, voter approval is not required when issuing revenue bonds; however, state law does provide for a referendum process to be initiated by the voters.

System Development Charges—ORS 223.297 for system development charges (SDC) is designed to provide a logical and clear framework for establishing fees which recover from new development the City's costs in providing existing and future system capacity. It is also designed to establish the basis for the fee calculation, which the City must follow in order to comply with the statute. However, the fundamental objective for the fee structure is the imposition on new development of a proportionate share of those costs associated with providing or expanding stormwater infrastructure to meet the capacity needs created by that specific new development. The City's SDC structure (and existing service charge design) has been evaluated during earlier stages of this master planning process (see Appendix F-1) and recommendations made regarding improvements regarding consistency and clarity of how the fee is calculated. The City's approach in structuring its stormwater SDC is sound, however, and the improvements provided here are not intended to address any significant problems regarding methodology.

SDCs cannot be applied retroactively and are a one-time charge at the time of development approval. The other important consideration under Oregon statute is that only infrastructure funded through stormwater or other city fees/charges would be eligible for inclusion in the SDC. The other key issue is whether the existing system has any capacity remaining and available to new development. Engineering analysis has concluded that the City's stormwater water conveyance system, particularly the piped system modeled as part of this analysis, does have capacity available for new connections to the system. This available capacity becomes the basis for the reimbursement element of the SDC provided that the capacity was constructed with City funds.

The improvement portion of the SDC has also been calculated as part of this analysis and is based on that portion of future facility cost appropriately allocated to new development

The current city's stormwater system development charge is \$87.00 per ERU. The current stormwater system has primarily been installed by developers at the time of development or by use of the stormwater systems development charges which had been collected from the development community. The amount that the City has paid would result in a negligible reimbursement component of the stormwater systems development charge so the reimbursement component will not be included.

The stormwater capital improvements plan has projects with a present construction cost of \$19,310,000. With regards to calculation of systems development charges, projects totaling \$7,091,000 are known requirements of which the full improvement component needs to be included in the systems development charges. Additional projects in the overall capital improvements plan are subject to modification to reconcile the conflicts between use of detention facilities to remove pollutants and the requirements to keep streams flowing to allow fish to migrate upstream. This group of projects with a total cost of \$6,500,000 is included in the systems development charge calculations at 80 percent of estimated cost. Finally, the stormwater improvements for the Dammasch Urban Village and for the north Wilsonville area (near Coffee Creek Correctional Facility) were excluded from the systems development charge calculations since these projects will be separate and distinct from the normal projections. As such, the equivalent residential units for the Dammasch and north Wilsonville areas have also been excluded from the calculations.

Although the net figure is subject to revision and to public process, the recommended systems development charge is \$495 per equivalent residential unit. Table 10-1 is a summary of the calculations for the systems development charge improvement fee. Table 10-2 provides a detailed list of the projects included in each category.

TABLE 10-1. STORMWATER SDC CALCULATIONS				
Project	Total Cost	Allocated to present customers	Allocated to future customers	Include in Improvement SDC
Include in SDC calculations at full Improvement Cost	\$7,091,000	\$4,833,805	\$2,257,195	\$2,257,195
Include in SDC calculations at reduced costs because projects are subject to modification	\$6,500,000	\$3,641,517	\$2,858,483	\$2,286,786
Exclude from SDC calculations	\$5,719,000	\$0	\$5,719,000	\$0
Total	\$19,310,000	\$8,475,322	\$10,834,678	\$4,543,981
ERUs				9,189
SDC per ERU				\$495

TABLE 10-2 (continued).
STORMWATER CAPITAL IMPROVEMENTS PROJECT COSTS

Project	Total Cost	Allocated to present customers	Allocated to future customers
Include in SDC Calculations at Reduced Costs Because Projects Are Subject to Modification			
CLC-2 Wetland enhancement adjacent to south tributary to Coffee Lake Creek	\$1,416,000	\$920,400	\$495,600
CLC-3 Wetland enhancement adjacent to Middle Tributary to Coffee Lake Creek	\$1,313,000	\$816,686	\$496,314
CLC-6 Water Quality/spill control facility Middle Tributary to Basalt Creek	\$450,000	\$364,050	\$85,950
CLC-8 Regional detention/wetland enhancement on south tributary to Basalt Creek	\$1,157,000	\$838,825	\$318,175
CLC-9 Regional detention/wetland enhancement on Basalt Creek upstream of Burlington Northern RR	\$572,000	\$426,140	\$145,860
CLC-11 Regional detention/Wetland enlargement east of Parkway Avenue on south tributary to Coffee Lake Creek	\$1,592,000	\$275,416	\$1,316,584
Subtotal	\$6,500,000	\$3,641,517	\$2,858,483
Exclude from SDC Calculations			
Dammasch stormwater improvements	\$3,263,000	\$0	\$3,263,000
North Wilsonville stormwater improvements	\$2,456,000	\$0	\$2,456,000
Subtotal	\$5,719,000	\$0	\$5,719,000
Total	\$19,310,000	\$8,475,322	\$10,834,678

10.4 SUMMARY

This financing analysis for Wilsonville represents a rate impact assessment of proposed operating and capital conditions targeted at providing an enhanced level of service with emphasis on much needed conveyance/storage facilities, continued regulatory compliance, maintenance, public information and water quality programming. Labor costs focus on allocations of professional engineering, maintenance and administrative support resources. Options for funding the CIP portion of the City's Master Plan include both the "pay as you go method" and issuance of 20-year revenue bonds. It should also be emphasized that this analytical tool and training in its use are part of the financial work products provided to the City through this Master Plan.

The conclusions of the financing analysis can be summarized as follows:

1. It is clear from the analysis of the financial options that the two primary sources of funds for construction of the stormwater facilities will be stormwater systems development charges and stormwater utility fees. It is also clear that any borrowing

Appendix F-1

Memorandum Regarding Structure for Service Charges and SDC

To: Eldon Johansen, Community Development Director
Jamie Porter, Engineering Associate

Through: Brad Moore, KCM, Inc.

From: Shaun Pigott

Date: March 31, 1998

**Re: IDEAS REGARDING THE CITY OF WILSONVILLE'S
SYSTEM DEVELOPMENT CHARGE ORDINANCE
AND RESOLUTION FOR STORM DRAINAGE;
ORDINANCE AND RESOLUTION FOR STORM
DRAINAGE SERVICE SURCHARGE FEE**

Wilsonville's ordinances and resolutions affecting drainage SDC's and "surcharges" clearly have worked very well for the City since their implementation. As part of the Master Plan, I was asked to take a critical look at these codes and offer any suggestions for their improvement and/or clarification. The following comments are offered, therefore, as possible enhancements to ordinances and resolutions which obviously work very effectively for Wilsonville's drainage program.

Ordinance 386 - An Ordinance Regarding System Development Charges

The City employs an umbrella ordinance establishing SDC's for all areas of infrastructure and effectively mirrors the language (with the exception of Article VII Section 4 re deferred payment provisions) of ORS 223. Specific calculation methodologies for each area of infrastructure are then established through resolution. Based on my experience, this is the optimal approach as it allows consistency of SDC administration and the flexibility for the City to make adjustments as needs/conditions change. Overall, there are no changes that I would suggest making to this language.

Resolution 843 - System Development Charge for Storm Drainage Facilities

Once again, the City's resolution addresses all the requirements of ORS 223. However, there are four points of possible improvement that the City may wish to consider. These points are discussed on the following page:

are directly dealt with through non-use provisions, credit calculation and tying drainage billing to water. There are a number of secondary issues within the ordinance that the City should consider. These are as follows:

1. The "surcharge" approach indicates that the drainage fee is attached to some other City function or activity, yet that surcharge linkage is never actually stated. It appears that the use of the term surcharge is a protection against the "charge against property" test established under Measure 5. The use of the term surcharge seems to run counter to the City's intention to have it relate to an individual system user's benefit from or contribution to the storm water system.
2. Defining impervious surface to mean run-off factors of .40 or greater is an approach I have never seen before. The logic behind run-off factors or coefficients is to assign some value to land use classifications or broad categories of property for purposes of estimating cumulative run-off. It appears that the City would be better served not using that coefficient reference in its definition under Article 1 Section 1.F.
3. The term "retention systems" in the ordinance is defined in terms of a "de"tention system.
4. The 2,000 square foot impervious area for a single family residence is low based on comparative data. The source of this information appears to be the City's own design standards and is based on a median 8,000 square foot lot with 25% coverage. Again, this median lot data may tend to understate the actual impervious footprint of a single family residence in Wilsonville.
5. Article V Section 2.3 appears to apply the standard ERU value to each living unit of a multi-family building such as an apartment. This does tend to overstate the surcharge to that location when compared to actual measurement of the impervious surface footprint. Depending on the number of stories and impervious surface for parking etc, this can amount to a significant overstatement of impervious area.
6. The ordinance does not specifically state how non single family residential/duplex properties are dealt with in the surcharge structure. Are these properties actually measured for impervious surface or are these based on some form of average or estimates?

Table 3**Revised Impervious Surface for ERU Purposes**

Deletes Dammasch, excludes URA#42 (Day Road) and adds Urban Reserve at WV Rd and Boeckman Rd and Urban Reserve at Elligsen Rd

	1997 Impervious Area Acres	Square Feet	1997 ERUs	2000 ERUs	Buildout Impervious Area	Buildout Number of ERUs	Remaining Number of ERUs
			2,750	2,750		2,750	2,750
Category							
Public Land	25	1,089,000	396	391	25	396	5
Single family residential		7,221,500	2,626	3,007		4,429	1,422
Multifamily residential		5,136,600	1,868	2,134		3,150	1,016
Commercial	150.5	6,555,780	2,384	2,724	238.5	4,080	1,356
Industrial	408.8	17,807,328	6,475	7,398	747.5	12,788	5,389
TOTAL	1044.8	45,511,488	13,749	15,654	1730.1	24,843	9,189

Table 4**Calculation of ERU's**

	Single Family	Multifamily, Commercial & Industrial	Total
Number of ERU's in 2000/01& 2,000 SF per ERU	3,007	17,389	20,396
Impermeable surface in square feet	8,269,250	34,778,000	43,047,250
Number of ERU's in 2000/01& 2750 SF per ERU	3,007	12,647	15,654
Number of ERU's in 2001/02& 2750 SF per ERU with 2.5% growth	3,082	12,963	16,045

Table 5

Operations and Maintenance Projections

This version uses a combination of revenue bonds, SDC's and stormwater utility funds for

% growth in ERU's	2.5%					
Annual O&M cost inflation	3.5%					
Annual estimate of change in Seattle CCI	3.5%					
Fiscal Year	2002	2003	2004	2005	2006	2007
Number of ERU's (Peaks at 25,234)	16045	16446	16857	17278	17710	18153
Utility surcharge per ERU	\$3.58	\$4.00	\$4.00	\$4.00	\$4.00	\$4.00
New ERU added during the FY	391	401	411	421	432	443
SDC per ERU (\$495 less debt svc principal payt first year and then increase at 3.5% per year	\$421	\$436	\$451	\$467	\$483	\$500
SDC revenue	\$95,474	\$174,836	\$185,361	\$196,607	\$208,656	\$221,500
Operating Revenue						
Charges for services	\$689,300	\$789,400	\$809,100	\$829,300	\$850,100	\$871,300
Deduction for rate change in December 2001	-\$86,200					
Beginning fund balance	\$341,000	\$105,963	\$86,567	\$89,600	\$92,733	\$95,983
Interest earnings	\$13,600	\$4,200	\$3,500	\$3,600	\$3,700	\$3,800
Miscellaneous revenue	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenue	\$957,700	\$899,563	\$899,167	\$922,500	\$946,533	\$971,083
Operating Expense						
Personal services	\$99,528	\$103,000	\$106,600	\$110,300	\$114,200	\$118,200
Material & services	\$168,650	\$174,600	\$180,700	\$187,000	\$193,500	\$200,300
General fund allocation	\$161,700	\$167,400	\$173,300	\$179,400	\$185,700	\$192,200
Capital improvements	\$192,000	\$60,000	\$62,100	\$64,300	\$66,600	\$68,900
Interfund service & transfers	\$13,900	\$14,400	\$14,900	\$15,400	\$15,900	\$16,500
Subtotal	\$635,778	\$519,400	\$537,600	\$556,400	\$575,900	\$596,100
Total exp before debt service	\$635,778	\$519,400	\$537,600	\$556,400	\$575,900	\$596,100
Debt service						
2001 \$1,763,000 bond issue		-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500
Total debt service		-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500
Summary						
Net funds available after O&M & debt service	\$321,922	\$198,663	\$180,067	\$184,600	\$189,133	\$193,483
Cont & ending O&M fund balance	\$105,963	\$86,567	\$89,600	\$92,733	\$95,983	\$99,350
Transfer to long term Capital funds	\$215,959	\$112,096	\$90,467	\$91,867	\$93,150	\$94,133

Table 6

City of Wilsonville

Storm Water Capital Funding Program

Capital Improvement Plan - Inflated

20% Reduction for Projects CLC-2, CLC-3, CLC-6, CLC-8, CLC-9 & CLC-11

Fiscal Year	2002	2003	2004	2005	2006	2007
Revenue						
Carryover from prior year	\$0	\$1,396,629	\$787,160	\$326,826	\$100,989	\$393,502
Interest income at 4%	\$0	\$55,865	\$31,486	\$13,073	\$4,040	\$15,740
Bond sale	\$1,674,850					
Systems development charges	\$76,779	\$95,474	\$174,836	\$185,361	\$196,607	\$208,656
Stormwater utility fees	\$0	\$215,959	\$112,096	\$90,467	\$91,867	\$93,150
Total funds available	\$1,751,629	\$1,763,928	\$1,105,578	\$615,727	\$393,502	\$711,049
Expenses						
Include in SDC calculations at full improvement cost						
CLC-1 Wetland enhancement NW of Burlington Northern RR/ WV Road Crossing	\$32,500	\$0	\$0	\$0	\$0	\$0
CLC-5 Regional detention/wetland enhancement between Boones Ferry Road & 95th Avenue across I-5 from Wiedeman Rd	\$84,500	\$0	\$0	\$0	\$0	\$444,687
CLC-13 Conveyance improvements on Channel west of Commerce Circle	\$114,000	\$0	\$0	\$0	\$0	\$0
BC-1 Erosion control on Boeckman Creek	\$52,000	\$0	\$0	\$0	\$0	\$0
Boones Ferry Road line replacements south of WV Road	\$0	\$0	\$0	\$0	\$0	\$0
Kolbe Lane culvert replacement	\$72,000	\$0	\$0	\$0	\$0	\$0
Include in SDC calculations at 80% of MP costs because projects are subject to modification						
CLC-2 Wetland enhancement adjacent to south tributary to Coffee Lake Creek	\$0	\$519,168	\$0	\$0	\$0	\$0
CLC-3 Wetland enhancement adjacent to Middle Tributary to Coffee Lake Creek	\$0	\$457,600	\$0	\$0	\$0	\$0
CLC-6 Water Quality/spill control facility Middle Tributary to Basalt Creek	\$0	\$0	\$389,376	\$0	\$0	\$0

Fiscal Year	2002	2003	2004	2005	2006	2007
Revenue						
CLC-8 Regional detention/wetland enhancement on south tributary to Basalt Creek	\$0	\$0	\$389,376	\$0	\$0	\$0
CLC-9 Regional detention/wetland enhancement on Basalt Creek upstream of Burlington Northern RR	\$0	\$0	\$0	\$514,738	\$0	\$0
Exclude from SDC calculations						
Dammasch stormwater improvements						
North Wilsonville stormwater improvements						
Total expenses	\$355,000	\$976,768	\$778,752	\$514,738	\$0	\$444,687
Balance to carry forward	\$1,396,629	\$787,160	\$326,826	\$100,989	\$393,502	\$266,362

Fiscal Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
BC-6 Regional detention/wetland enhancement in a linear channel on south side of Wiedeman Road ROW or BC-7 on west side of Sysco property		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BC-8 Conveyance improvements on Elligsen Road outfall from Urban Reserve Area 35		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Boones Ferry Road line replacements south of WV Road		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Kolbe Lane culvert replacement	\$72,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Barber Street Line Replacements		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(Boones Ferry Road line replacements north of Wilsonville Road)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
95th Ave/Hillman Court Line Replacements		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ridder Road and I-5 Crossing Improvements		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Boeckman Road Line Replacements		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Include in SDC calculations at 80% of MP costs because projects are subject to modification											
CLC-2 Wetland enhancement adjacent to south tributary to Coffee Lake Creek	\$399,360	\$519,168	\$0	\$0	\$0	\$0	\$0	\$0	\$867,125	\$0	\$0
CLC-3 Wetland enhancement adjacent to Middle Tributary to Coffee Lake Creek	\$352,000	\$457,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$868,790	\$0
CLC-6 Water Quality/spill control facility Middle Tributary to Basalt Creek	\$288,000	\$0	\$389,376	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CLC-8 Regional detention/wetland enhancement on south tributary to Basalt Creek	\$288,000	\$0	\$389,376	\$0	\$0	\$0	\$715,664	\$0	\$0	\$0	\$0
CLC-9 Regional detention/wetland enhancement on Basalt Creek upstream of Burlington Northern RR	\$366,080	\$0	\$0	\$514,738	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CLC-11 Regional detention/ Wetland enlargement east of Parkway Avenue on south tributary to Coffee Lake Creek	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Exclude from SDC calculations											
Dammasch stormwater improvements											
North Wilsonville stormwater improvements											
Total	\$2,048,440	\$976,768	\$778,752	\$514,738	\$0	\$444,687	\$1,296,446	\$313,192	\$867,125	\$868,790	\$367,841
Carryover to next year		\$787,160	\$326,826	\$100,989	\$393,502	\$266,362	\$911,204	\$964,866	\$500,918	\$3,315,344	\$3,486,896

Fiscal Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
BC-6 Regional detention/wetland enhancement in a linear channel on south side of Wiedeman Road ROW or BC-7 on west side of Sysco property	\$0	\$2,345,512	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BC-8 Conveyance improvements on Elligsen Road outfall from Urban Reserve Area 35	\$0	\$0	\$760,939	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Boones Ferry Road line replacements south of WV Road	\$0	\$0	\$614,412	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Kolbe Lane culvert replacement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Barber Street Line Replacements	\$0	\$0	\$0	\$384,432	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(Boones Ferry Road line replacements north of Wilsonville Road)	\$0	\$0	\$0	\$905,667	\$0	\$0	\$0	\$0	\$0	\$0	\$0
95th Ave/Hillman Court Line Replacements	\$0	\$0	\$0	\$0	\$354,786	\$0	\$0	\$0	\$0	\$0	\$0
Ridder Road and I-5 Crossing Improvements	\$0	\$0	\$0	\$0	\$1,399,333	\$0	\$0	\$0	\$0	\$0	\$0
Boeckman Road Line Replacements	\$0	\$0	\$0	\$0	\$0	\$691,130	\$0	\$0	\$0	\$0	\$0
Include in SDC calculations at 80% of MP costs because projects are subject to modification											
CLC-2 Wetland enhancement adjacent to south tributary to Coffee Lake Creek	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CLC-3 Wetland enhancement adjacent to Middle Tributary to Coffee Lake Creek	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CLC-6 Water Quality/spill control facility Middle Tributary to Basalt Creek	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CLC-8 Regional detention/wetland enhancement on south tributary to Basalt Creek	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CLC-9 Regional detention/wetland enhancement on Basalt Creek upstream of Burlington Northern RR	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CLC-11 Regional detention/ Wetland enlargement east of Parkway Avenue on south tributary to Coffee Lake Creek	\$0	\$0	\$0	\$0	\$0	\$0	\$2,480,846	\$0	\$0	\$0	\$0
Exclude from SDC calculations											
Dammasch stormwater improvements											
North Wilsonville stormwater improvements											
Total	\$1,610,269	\$2,345,512	\$1,375,351	\$1,290,099	\$1,754,119	\$691,130	\$2,480,846	\$0	\$0	\$0	\$0
Carryover to next year	\$2,471,974	\$713,662	\$1,789,496	\$1,128,605	\$2,104,153	\$2,129,901	\$336,172	\$994,494	\$1,723,347	\$2,158,851	\$2,437,498

Table 7

**City of Wilsonville
Storm Water Capital Funding Program
Capital Improvement Plan - Inflated
Projects and Costs from Master Plan with 20%
Reduction for Projects CLC-2, CLC-3, CLC-6, CLC-8,
CLC-9 & CLC-11**

Includes deletion of North Wilsonville & Dammasch stormwater improvements

Fiscal Year	2024	2025	TOTAL
Revenue			
Carryover from prior year	\$2,437,498	\$2,737,891	
Interest income at 4%	\$97,500	\$109,516	
Bond sale			
System development charges	\$0	\$0	
Stormwater utility fees	\$202,893	\$220,500	
Total	\$2,737,891	\$3,067,907	
Projects			
Include in SDC calculations at full improvement cost			
CLC-1 Wetland enhancement NW of Burlington Northern RR/ WV Road Crossing	\$0	\$0	\$400,341
CLC-5 Regional detention/wetland enhancement between Boones Ferry Road & 95th Avenue across I-5 from Wiedeman Road	\$0	\$0	\$529,187
CLC-10 Regional detention/wetland enhancement at Dammasch Basin Outfall/ Arrowhead Creek	\$0	\$0	\$1,610,269
CLC-12 Stream restoration on South Tributary to Coffee Lake Creek	\$0	\$0	\$580,781
CLC-13 Conveyance improvements on Channel west of Commerce Circle	\$0	\$0	\$114,000
BC-1 Erosion control on Boeckman Creek	\$0	\$0	\$52,000
BC-2 Stream restoration/wetland enhancement in existing channel on north side of Memorial Park	\$0	\$0	\$313,192
BC-4 Detention pond modification on Boeckman Creek north of Boeckman Road-completed	\$0	\$0	

Fiscal Year	2024	2025	TOTAL
BC-6 Regional detention/wetland enhancement in a linear channel on south side of Wiedeman Road ROW or BC-7 on west side of Sysco property	\$0	\$0	\$2,345,512
BC-8 Conveyance improvements on Elligsen Road outfall from Urban Reserve Area 35	\$0	\$0	\$760,939
Boones Ferry Road line replacements south of WV Road	\$0	\$0	\$614,412
Kolbe Lane culvert replacement	\$0	\$0	\$72,000
Barber Street Line Replacements	\$0	\$0	\$384,432
(Boones Ferry Road line replacements north of Wilsonville Road)	\$0	\$0	\$905,667
95th Ave/Hillman Court Line Replacements	\$0	\$0	\$354,786
Ridder Road and I-5 Crossing Improvements	\$0	\$0	\$1,399,333
Boeckman Road Line Replacements	\$0	\$0	\$691,130
Include in SDC calculations at 80% of MP costs because projects are subject to modification			
CLC-2 Wetland enhancement adjacent to south tributary to Coffee Lake Creek	\$0	\$0	\$1,386,293
CLC-3 Wetland enhancement adjacent to Middle Tributary to Coffee Lake Creek	\$0	\$0	\$1,326,390
CLC-6 Water Quality/spill control facility Middle Tributary to Basalt Creek	\$0	\$0	\$389,376
CLC-8 Regional detention/wetland enhancement on south tributary to Basalt Creek	\$0	\$0	\$1,105,040
CLC-9 Regional detention/wetland enhancement on Basalt Creek upstream of Burlington Northern RR	\$0	\$0	\$514,738
CLC-11 Regional detention/ Wetland enlargement east of Parkway Avenue on south tributary to Coffee Lake Creek	\$0	\$0	\$2,480,846
Exclude from SDC calculations			
Dammasch stormwater improvements			\$0
North Wilsonville stormwater improvements			\$0
Total	\$0	\$0	\$18,330,664
Carryover to next year	\$2,737,891	\$3,067,907	

2001 \$1,763,000 bond issue	\$0	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500
2008 \$1,700,000 bond issue								-\$175,040	-\$175,040	-\$175,040	-\$175,040	-\$175,040
2011 \$3,450,000 bond issue											-\$355,200	-\$355,200
2017 \$2,200,000 bond issue												
Total debt service	\$0	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$356,540	-\$356,540	-\$356,540	-\$711,740	-\$711,740
Summary												
Net funds available after O&M & debt service	\$321,922	\$198,663	\$180,067	\$184,600	\$189,133	\$193,483	\$198,050	\$221,777	\$231,093	\$240,110	\$276,277	\$294,960
Cont & ending O&M fund balance	\$105,963	\$86,567	\$89,600	\$92,733	\$95,983	\$99,350	\$102,817	\$106,433	\$110,150	\$114,017	\$118,000	\$122,133
Transfer to long term Capital funds	\$215,959	\$112,096	\$90,467	\$91,867	\$93,150	\$94,133	\$95,233	\$115,343	\$120,943	\$126,093	\$158,277	\$172,827
Debt service & O&M coverage												
Charges for services	\$603,100	\$789,400	\$809,100	\$829,300	\$850,100	\$871,300	\$893,100	\$1,110,000	\$1,137,800	\$1,166,200	\$1,577,400	\$1,616,800
Operating expense & debt service												
Operating expense	\$635,778	\$519,400	\$537,600	\$556,400	\$575,900	\$596,100	\$616,900	\$638,600	\$660,900	\$684,100	\$708,000	\$732,800
Total debt service	0	181500	181500	181500	181500	181500	181500	356540	356540	356540	711740	711740
Total operating & debt service	\$635,778	\$700,900	\$719,100	\$737,900	\$757,400	\$777,600	\$798,400	\$995,140	\$1,017,440	\$1,040,640	\$1,419,740	\$1,444,540
Coverage	NA	112.6%	112.5%	112.4%	112.2%	112.0%	111.9%	111.5%	111.8%	112.1%	111.1%	111.9%

2001 \$1,763,000 bond issue	-\$181,500	-\$181,500	-\$181,500	-\$181,500								
2008 \$1,700,000 bond issue	-\$175,040	-\$175,040	-\$175,040	-\$175,040	-\$175,040	-\$175,040	-\$175,040	-\$175,040	-\$175,040	-\$175,040		
2011 \$3,450,000 bond issue	-\$355,200	-\$355,200	-\$355,200	-\$355,200	-\$355,200	-\$355,200	-\$355,200	-\$355,200	-\$355,200	-\$355,200	-\$355,200	-\$355,200
2017 \$2,200,000 bond issue					-\$323,450	-\$323,450	-\$323,450	-\$323,450	-\$323,450	-\$323,450	-\$323,450	-\$323,450
Total debt service	-\$711,740	-\$711,740	-\$711,740	-\$711,740	-\$853,690	-\$853,690	-\$853,690	-\$853,690	-\$853,690	-\$853,690	-\$678,650	-\$678,650
Summary												
Net funds available after O&M & debt service	\$313,993	\$333,277	\$352,810	\$372,593	\$322,293	\$344,593	\$366,843	\$356,510	\$358,760	\$375,177	\$398,833	\$367,683
Cont & ending O&M fund balance	\$126,417	\$130,850	\$135,433	\$140,183	\$145,083	\$150,133	\$155,400	\$160,850	\$166,467	\$172,283	\$178,333	\$184,567
Transfer to long term Capital funds	\$187,577	\$202,427	\$217,377	\$232,410	\$177,210	\$194,460	\$211,443	\$195,660	\$192,293	\$202,893	\$220,500	\$183,117
Debt service & O&M coverage												
Charges for services	\$1,657,200	\$1,698,600	\$1,741,100	\$1,784,600	\$1,900,700	\$1,948,200	\$1,996,800	\$2,013,700	\$2,044,000	\$2,089,400	\$1,968,300	\$1,968,300
Operating expense & debt service												
Operating expense	\$758,500	\$785,100	\$812,600	\$841,100	\$870,500	\$900,800	\$932,400	\$965,100	\$998,800	\$1,033,700	\$1,070,000	\$1,107,400
Total debt service	711740	711740	711740	711740	853690	853690	853690	853690	853690	853690	678650	678650
Total operating & debt service	\$1,470,240	\$1,496,840	\$1,524,340	\$1,552,840	\$1,724,190	\$1,754,490	\$1,786,090	\$1,818,790	\$1,852,490	\$1,887,390	\$1,748,650	\$1,786,050
Coverage	112.7%	113.5%	114.2%	114.9%	110.2%	111.0%	111.8%	110.7%	110.3%	110.7%	112.6%	110.2%

Table 8

Operations and Maintenance Projections

This version uses a combination of revenue bonds, SDC's and stormwater utility funds for the CIP

% growth in ERU's	
Annual O&M cost inflation	
Annual est of change in Seattle CCI	
Fiscal Year	2026
Number of ERU's (Peaks at 25,234)	25234
Utility surcharge per ERU	\$6.65
SDC per ERU (\$495 less debt svc principal payt first year and then increase at 3.5% per year	960
SDC revenue	\$0
Operating Revenue	
Charges for services	\$2,013,700
Deduction for rate change in Dec 2001	
Beginning fund balance	\$184,567
Interest earnings	\$7,400
Miscellaneous revenue	
Total Revenue	\$2,205,667
Operating Expense	
Material & services	\$385,000
General fund allocation	\$369,800
Capital improvements	\$132,700
Interfund service & transfers	\$31,700
Total exp before debt service	\$1,146,200
Debt service	

2001 \$1,763,000 bond issue	
2008 \$1,700,000 bond issue	
2011 \$3,450,000 bond issue	-\$355,200
2017 \$2,200,000 bond issue	-\$323,450
Total debt service	-\$678,650
Summary	
Net funds available after O&M & debt service	\$380,817
Cont & ending O&M fund balance	\$191,033
Transfer to long term Capital funds	\$189,783
Debt service & O&M coverage	
Charges for services	\$2,013,700
Operating expense & debt service	
Operating expense	\$1,146,200
Total debt service	678650
Total operating & debt service	\$1,824,850
Coverage	110.3%

Table 9

Calculation of SDC reduction for debt principal payment

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Debt service at present costs												
2001 \$1,763,000 bond issue	\$0	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500
2008 \$1,700,000 bond issue								-\$123,400	-\$123,400	-\$123,400	-\$123,400	-\$123,400
2011 \$3,450,000 bond issue											-\$210,260	-\$210,260
2017 \$2,200,000 bond issue												
Total debt service	\$0	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$181,500	-\$304,900	-\$304,900	-\$304,900	-\$515,160	-\$515,160
Remaining principal												
2001 \$1,763,000 bond issue	1763000	\$1,687,280	\$1,607,017	\$1,521,938	\$1,431,754	\$1,336,159	\$1,234,829	\$1,127,419	\$1,013,564	\$892,878	\$764,950	\$629,347
2008 \$1,700,000 bond issue							\$1,198,433	\$1,146,939	\$1,092,355	\$1,034,497	\$973,166	\$908,156
2011 \$3,450,000 bond issue										\$2,042,050	\$1,954,313	\$1,861,311
2017 \$2,200,000 bond issue												
Annual principal payment												
2001 \$1,763,000 bond issue		\$75,720	\$80,263	\$85,079	\$90,184	\$95,595	\$101,330	\$107,410	\$113,855	\$120,686	\$127,927	\$135,603
2008 \$1,700,000 bond issue								\$51,494	\$54,584	\$57,859	\$61,330	\$65,010
2011 \$3,450,000 bond issue											\$87,737	\$93,001
2017 \$2,200,000 bond issue												
Total principal payment		\$75,720	\$80,263	\$85,079	\$90,184	\$95,595	\$101,330	\$158,904	\$168,439	\$178,545	\$276,995	\$293,614
Less SDC income		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net principal payment		\$75,720	\$80,263	\$85,079	\$90,184	\$95,595	\$101,330	\$158,904	\$168,439	\$178,545	\$276,995	\$293,614
No of ERU's		16446	16857	17278	17710	18153	18607	19072	19549	20038	20539	21052
Annual principal payment per ERU		\$4.60	\$4.76	\$4.92	\$5.09	\$5.27	\$5.45	\$8.33	\$8.62	\$8.91	\$13.49	\$13.95

Table 9

Calculation of SDC reduction for debt principal payment

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Debt service at present costs												
2001 \$1,763,000 bond issue	-\$181,500	-\$181,500	-\$181,500	-\$181,500								
2008 \$1,700,000 bond issue	-\$123,400	-\$123,400	-\$123,400	-\$123,400	-\$123,400	-\$123,400	-\$123,400	-\$123,400	-\$123,400	-\$123,400		
2011 \$3,450,000 bond issue	-\$210,260	-\$210,260	-\$210,260	-\$210,260	-\$210,260	-\$210,260	-\$210,260	-\$210,260	-\$210,260	-\$210,260	-\$210,260	-\$210,260
2017 \$2,200,000 bond issue					-\$134,960	-\$134,960	-\$134,960	-\$134,960	-\$134,960	-\$134,960	-\$134,960	-\$134,960
Total debt service	-\$515,160	-\$515,160	-\$515,160	-\$515,160	-\$468,620	-\$468,620	-\$468,620	-\$468,620	-\$468,620	-\$468,620	-\$345,220	-\$345,220
Remaining principal												
2001 \$1,763,000 bond issue	\$485,608	\$333,245	\$171,739	\$544								
2008 \$1,700,000 bond issue	\$839,246	\$766,200	\$688,772	\$606,699	\$519,701	\$427,483	\$329,732	\$226,116	\$116,283	-\$140		
2011 \$3,450,000 bond issue	\$1,762,730	\$1,658,234	\$1,547,468	\$1,430,056	\$1,305,599	\$1,173,675	\$1,033,836	\$885,606	\$728,482	\$561,931	\$385,387	\$198,250
2017 \$2,200,000 bond issue				\$917,983	\$838,102	\$753,428	\$663,674	\$568,534	\$467,686	\$360,788	\$247,475	\$127,363
Annual principal payment												
2001 \$1,763,000 bond issue	\$143,739	\$152,364	\$161,505	\$171,196								
2008 \$1,700,000 bond issue	\$68,911	\$73,045	\$77,428	\$82,074	\$86,998	\$92,218	\$97,751	\$103,616	\$109,833	\$116,423		
2011 \$3,450,000 bond issue	\$98,581	\$104,496	\$110,766	\$117,412	\$124,457	\$131,924	\$139,839	\$148,230	\$157,124	\$166,551	\$176,544	\$187,137
2017 \$2,200,000 bond issue					\$79,881	\$84,674	\$89,754	\$95,140	\$100,848	\$106,899	\$113,313	\$120,112
Total principal payment	\$311,231	\$329,905	\$349,699	\$370,681	\$291,336	\$308,816	\$327,345	\$346,986	\$367,805	\$389,873	\$289,857	\$307,248
Less SDC income	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net principal payment	\$311,231	\$329,905	\$349,699	\$370,681	\$291,336	\$308,816	\$327,345	\$346,986	\$367,805	\$389,873	\$289,857	\$307,248
No of ERU's	21578	22117	22670	23237	23818	24413	25023	25234	25234	25234	25234	25234
Annual principal payment per ERU	\$14.42	\$14.92	\$15.43	\$15.95	\$12.23	\$12.65	\$13.08	\$13.75	\$14.58	\$15.45	\$11.49	\$12.18

Table 9**Calculation of SDC reduction for debt principal payment**

	2026
Debt service at present costs	
2001 \$1,763,000 bond issue	
2008 \$1,700,000 bond issue	
2011 \$3,450,000 bond issue	-\$210,260
2017 \$2,200,000 bond issue	-\$134,960
Total debt service	-\$345,220
Remaining principal	
2001 \$1,763,000 bond issue	
2008 \$1,700,000 bond issue	
2011 \$3,450,000 bond issue	-\$114
2017 \$2,200,000 bond issue	\$45
Annual principal payment	
2001 \$1,763,000 bond issue	
2008 \$1,700,000 bond issue	
2011 \$3,450,000 bond issue	\$198,365
2017 \$2,200,000 bond issue	\$127,318
Total principal payment	\$325,683
Less SDC income	\$0
Net principal payment	\$325,683
No of ERU's	25234
Annual principal payment per ERU	\$12.91