King County currently spends about $150 million each year to operate and maintain the existing wastewater system, repay money borrowed to construct capital projects, and implement wastewater management programs. Of the $150 million spent each year, approximately $30 million is used for asset replacement. The Executive’s Preferred Plan proposes new capital facilities and associated maintenance and operation activities that will add to this ongoing cost. Table 3 estimates the present value of these new costs through the year 2030. These costs are based on assumptions in population growth and increases in the level of inflow and infiltration in the system and that there are no added costs for uncertainties such as the Endangered Species Act. They could either increase or decrease if actual circumstances differ from these assumptions.

Several large facilities account for the majority of the treatment and conveyance costs shown in the table. These include the new North Treatment Plant, the facilities for pumping and conveying flows from the existing system to the plant, and the new outfall system for the North Treatment Plant.

### TABLE 3

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>$262,000,000</td>
</tr>
<tr>
<td>Conveyance</td>
<td>$489,000,000</td>
</tr>
<tr>
<td>CSO</td>
<td>$230,000,000</td>
</tr>
<tr>
<td>Biosolids</td>
<td>$85,000,000</td>
</tr>
<tr>
<td>Water Reuse</td>
<td>$20,000,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$1,086,000,000</strong></td>
</tr>
</tbody>
</table>

Note: All numbers are calculated in 1998 net present value. The total includes the net present value of new capital facilities and additional operating expenses stemming from these new facilities.
Currently, the County uses some general obligation bonds that are secured by the property tax base in King County. This enables the County to acquire lower interest bonds which keeps rates lower. The County will continue looking for methods such as this to obtain lower interests in borrowing, but future costs and rates shown here do not assume the use of general obligation bonds.

Collecting Revenue

King County’s monthly charges are its primary means of funding the costs of constructing, maintaining, and operating the County’s regional wastewater system. In keeping with current practices and contracts, the plan proposes to pay for ongoing costs and the added costs from new facilities using the same revenue sources it currently employs—monthly rates and capacity charges. A secondary means of funding the costs is from collecting a capacity charge from new connections.

Monthly Rates

King County is a wastewater wholesaler; that is, the County sells capacity in its regional system to local sewer agencies. It charges local agencies each month based on the total number of households and commercial customers in their districts. This monthly charge is the County’s primary means of funding the costs for constructing, operating, and maintaining the existing wastewater system (generating over 95 percent of actual annual revenues). The local agencies, in turn, bill each customer in their service area.

The breakdown on how the monthly rate of $19.10 per customer is used, both by expenditure and program type, is shown in Figures 9 and 10.

The proposed facilities in the Executive’s plan create additional capital, operation, and maintenance costs, increasing the amount to be recovered from the rates. Figure 11 shows projected future monthly rates. The shape of this line is affected by two additional factors—population and debt retirement. Over the next decade, the rate increases steadily as we add new facilities to accommodate growth, and at the same time, make payments on existing debt. At 2015, the line drops as we pay off a large share of that debt and the line continues to decline as the population grows and we have more customers to share the costs of the system.

The average monthly rate necessary to support the plan over the period 1999-2015 is $19.92 in today’s dollars. Because of the debt retirement and growth of customers noted above, the average monthly rate needed over the period 1999-2030 would be $18.97 in today’s dollars. However, just as the price of a home, groceries, and other consumables goes up with inflation, so will the monthly sewer bill. Figure 12 shows the what rates may be when inflation is included, assuming a 3 percent inflation rate (actual inflation rates may vary over time).

King County’s Wastewater Treatment Division has implemented a number of programs that have resulted in cost savings and lower rates for our ratepayers. Presently, the Division is undertaking a number of benchmarking studies with similar wastewater utilities on the West Coast to identify ways to become more efficient while still delivering high quality services. King County will continue to evaluate opportunities to increase efficiencies as this plan is implemented.
**Capacity Charge**

In addition to charging monthly rates on all households, King County also charges for each new connection to the wastewater system to help offset the added impacts of population growth on the system. The charge is linked to the cost of excess capacity of existing facilities, and is assessed monthly for 15 years to households or businesses with new connections to the sewer. Unlike the monthly rates, the capacity charge is billed directly by King County to the individual household or business. The County’s current capacity charge is $10.50 per month per customer—the maximum allowed by state law.

The terms of existing state law will provide an increasingly restrictive limitation on future capacity charge levels that can be assessed under the Executive’s Preferred Plan. To enable King County to capture an equitable share of future costs through capacity charges, this plan proposes that the County continue its recent legislative initiatives to attain greater flexibility in setting these charges and working with our customers in refining the capacity charge program, and to ensure that growth pays for growth.

The rates projected in this plan assume the existing capacity charge authority under state law. Right now the capacity charge is $10.50, but this may drop as low as $7.00 if changes are not made to existing state law. If the County is successful in changing the state legislation and having a higher capacity charge which reflects the true cost of growth, the corresponding monthly rates will be somewhat lower than what is shown in this plan.

**FIGURE 11 – Projected Monthly Wholesale Rates (without inflation)**

**FIGURE 12 – Projected Monthly Wholesale Rates (with inflation)**