# Ongoing Surface Water Management Participation in Funding Roadway Drainage Projects

Prepared in accordance with Ordinance 17941, Section 77, Proviso P1

**June 2016** 



Department of Natural Resources and Parks
Water and Land Resources Division
and
Department of Transportation
Road Services Division

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## Introduction

Ordinance 17941, Section 77, Proviso P1 requires the King County Executive to transmit to the Council a plan regarding ongoing surface water management participation in funding roadway drainage projects and a motion that approves the plan.

Specifically, the Ordinance requires that the plan include, but not be limited to:

- Information on the amount of surface water management revenue received and estimated to be received at the current rate from the state highway and county roads division for the ten year period from 2011 to 2020;
- A plan describing how expenditures of state funding comply with state law;
- A plan for continued use of revenues for investments in drainage projects in King County unincorporated area rights of way;
- A plan for replenishing the operating rate stabilization reserve, the rainy-day reserve and the capital reserve, consistent with the county's comprehensive financial management policies;
- A review of the state law and county ordinance regarding the amount paid for state and county roads and recommendations on changing the county's ordinance regarding this fee; and
- A plan and schedule for future rate changes for the period from 2016 to 2021, as well as anticipated revenues from these rates, and identifying the anticipated revenues from the state and county roads division.

If this plan recommends any King County Code changes, a proposed ordinance that would implement those changes shall be transmitted at the same time as the plan required by the proviso.

This report addresses each requirement under a separate heading that corresponds to the particular requirement.

## **Executive Summary**

This report provides background on the legal basis and policy basis for collecting Surface Water Management (SWM) fee revenues from the Washington State Department of Transportation and the Road Services Division (Roads) of the King County Department of Transportation. Additionally, this report provides revenue and rate impacts for different alternatives for expenditures of SWM revenue in the Roads Right of Way (ROW). This report does not provide any proposals to change current guiding legislation or discount structures for the SWM fee. It does provide information to support decision-making on the SWM fee rate and the programs it will fund in the 2017/2018 budget development process.

## Overview of Managing Drainage Assets in Unincorporated King County

The unincorporated King County road network, like many other road networks, conveys more than just vehicles. The public road rights of way (ROW) is also used as a pathway for public and private utilities (water, sewer, cable, electricity, gas, and fiber optics) and is a primary means of conveyance for stormwater. As development in unincorporated King County occurred, stormwater management included routing stormwater through the road system for conveyance purposes, and roads were designed with this in mind. At one time King County had a public works department that managed county roads as well as all public stormwater infrastructure, both within and outside of the ROW. When the county government was re-organized and the public works department was eliminated, the Road Services Division (Roads) in the Department of Transportation took responsibility for public drainage infrastructure within the ROW and the Water and Land Resources (WLR) Division of the Department of Natural Resources and Parks took responsibility for public drainage infrastructure outside of the ROW and outside of property owned by other County agencies.

The Road Services Division is primarily funded by the unincorporated area property tax levy assessed on all property in unincorporated King County. This amount is limited by state law to growth of 1 percent a year plus new construction or capped at \$2.25 / \$1000 assessed value, whichever is highest (it is currently at the capped limit). The WLR Division's stormwater program is primarily funded by the surface water management (SWM) fee, which is charged to non-residential property owners based on the parcel size and percentage of impervious surface on the property; all residential parcels are charged a flat rate (currently \$171.50). This rate is set by the King County Council.

As a result of annexations reducing the property inventory and the recent recession which caused decline in total assessed value of property in unincorporated King County, the amount of property tax collected is increasingly insufficient to meet the demands of an aging road network and its associated maintenance and repair. Roads has made substantial reductions in staff and service levels as revenues decreased. The division is also finding more efficient ways of doing business, seeking creative ways to reduce inventory, changing its service model, and looking for new revenue to help address the existing funding gap.

Roads is the largest single payer of the SWM fee due to the large area of impervious surface that makes up the roadway. If the SWM fee is increased to provide more revenue to fund drainage work, Roads would have to pay more as a ratepayer in the current rate structure. Conversely, if the rate structure is changed such that Roads does not pay a SWM fee, the costs of programs funded by this fee are shifted to the remaining rate payers. Rate payers include other public entities, non-profit property owners, commercial and investment property owners, and owners of single family homes.

### **Report Requirements**

SWM Revenue Received from State Highways and County Roads

The SWM revenue received and projected at the current rate from the Washington State Department of Transportation (WSDOT) and Roads for the ten-year period from 2011 to 2020 is as follows:

Table 1: SWM revenue from WSDOT and Roads (\$ millions)

	2011/2012	2013/2014	2015/2016	2017/2018	2019/2020
WSDOT	\$ 1.59	\$ 1.96	\$ 2.08	\$ 2.08	\$ 2.08
Roads	\$ 7.59	\$ 8.87	\$ 9.31	\$ 9.23	\$ 8.70
Total	\$ 9.18	\$ 10.83	\$ 11.39	\$ 11.31	\$ 10.78

The SWM rate for 2011 and 2012 was \$133 for a single family residence (SFR), in 2013 the rate was \$151.50, and since 2014, the fee has been \$171.50 per SFR. Rates for non-residential properties are tiered, based on impervious surface, and are adjusted proportionately with residential rates. The decrease in SWM revenue from Roads in 2017/2018 and 2019/2020 is due to a reduction in County lane miles as unincorporated areas annex into cities.

A Plan Describing How Expenditures of State Funding Comply with State Law State law requires that funds collected from the state must be used solely for stormwater control facility purposes. The authorizing statute was amended by the 2015 legislature to remove the previous requirement that the jurisdiction submit a plan to WSDOT showing how funds were to be expended. Also by striking "state highway" in a clause describing how funds must be spent, the statute appears to remove the previous requirement that funds collected from WSDOT had to be spent on WSDOT facilities. The full discussion of the legal basis for the SWM fee rate as applied to state and county roads is below.

## A Plan for Continued Use of Revenues for Drainage Projects in the Right of Way and a Plan for Replenishing Reserves

The 2015/2016 adopted budget appropriated \$4 million of SWM revenues to be transferred to Roads for drainage projects in the ROW. While \$4 million has been programmed for drainage projects in the ROW, there is only \$2 million in SWM revenues that can be transferred without either cancelling approved WLR stormwater and water quality programs or depleting the reserves in the SWM fund in 2015/2016. The selected drainage projects in the ROW do not require that all \$4 million be spent in 2015/2016, however, so the transfer of more than \$2 million will be carried over into the 2017/2018 biennium for specified projects. The 2017/2018 SWM rate can be developed to include enough revenue to complete these projects. This would eliminate the need to deplete reserves and thus not require a plan to replenish reserves. The rate impact of an additional \$2 million expenditure for 2017/2018 is \$7 per single family residential payer a year, a 4 percent increase above the current rate.

In addition to the carryover to support drainage projects programmed in 2015/2016, there are additional drainage projects that can be funded with SWM revenue in 2017/2018 and beyond. A consultant report studying the inventory of drainage trunk lines in the road ROW determined that it would cost between \$355 and \$500 million over a 10-year period to adequately maintain and preserve drainage assets that are 24 inches or greater in size. This report also identifies \$25.7 million of work in the next 10 years for assets evaluated as in critical condition out of the 15 percent of assets that were visually inspected. This estimate does not include needed inspection, preservation, and maintenance of drainage assets that were not inspected as part of the study. A report summarizing this inventory study was transmitted to the King County Council on May 27, 2016 in response to a proviso in the 2015/2016 adopted budget (Ordinance 17941, Section 53, Proviso P1). Potential changes in the SWM fee will be considered as part of the 2017/2018 budget process. To fund the adequate maintenance and preservation of drainage assets 24 inches or greater with the SWM fee would necessitate increasing the fee by up to \$251 – \$354 per single family residential payer a year, a 150 – 200 percent increase above the current rate.

### Review of Legal Basis for SWM Rate and State and County Roads

Under King County Code (KCC) Chapter 9.08, a SWM fee is collected based on a system of classification of properties using percentage of impervious surface as the basis. The KCC also allows for discounts to properties that utilize various mechanisms to manage stormwater onsite. Revised Code of Washington (RCW) 36.89.080 is the statutory authority for collection of the SWM fee.

RCW 90.03.525 provides that local governments charging SWM fees to WSDOT for state road rights of way within the local jurisdiction are to charge no more than 30 percent of the rate for comparable real property. This translates into a minimum 70 percent discount for WSDOT road ROW. The statute also provides that WSDOT cannot be charged a rate higher than what the local jurisdiction charges for its own road ROW. Finally, the statute requires that the funds collected from the state must be used solely for stormwater control facility purposes.

KCC 9.08.060.O. contains a series of findings applicable to both county and state roads and concludes that the service charge for county and state roads is to be calculated in accordance with RCW 90.03.525. Thus both county and state roads pay a maximum of 30 percent (or receive a discount of 70 percent) of what would be paid by a comparable property.

No changes are proposed to authorizing legislation regarding the classification system on which the SWM fees are charged. The King County Executive expects to propose an option for changes to the SWM fee rate in a separate ordinance that will support different service level choices in the 2017/2018 proposed budget. The budget ordinance may contain changes regarding the expenditure of SWM funds for Roads drainage facilities in the road ROW. However, it is not currently anticipated that proposals will include any changes in the discount structure for WSDOT or Roads.

## SWM Rate Plan, Schedule, and Forecast

The SWM fee rate will be developed to take into account the following:

- The expenditure level for WLR programs;
- The amount of SWM fee that Roads pays; and
- The amount of SWM fee revenue that is spent on drainage in the ROW.

### WLR Division programs address the following priorities:

- Maintain existing county assets and drainage infrastructure this includes maintenance and operations of stormwater facilities such as pipes, ponds, culverts, and catch basins to meet requirements of the federal Clean Water Act as delineated in the state National Pollutant Discharge Elimination System (NPDES) stormwater permit.
- Support local agriculture and rural residents this includes the agriculture drainage assistance program (ADAP) and responding to natural flooding events.
- Restore critical habitat, support salmon recovery forums (i.e., multi-stakeholder interjurisdictional partnerships commonly referred to as the Water Resource Inventory Areas (WRIAs)), and continue basin stewardship to improve water quality.
- Be the Best Run Government this includes complying with regulations and NPDES permit requirements, and assisting businesses and residents with their stormwater management.

These programs are supported by the current SWM fee revenues as well as grants. The last rate increase was in 2013/2014, however, and because of inflation, the current fee can no longer fully fund these programs.

In addition, there are a number of programs that can be expanded to better achieve these priorities. These include:

- Implementing proactive asset management of existing stormwater facilities to prevent costly failures in the future;
- Expanding capacity to respond to natural flooding events in rural areas;
- Boosting agricultural production by expanding ADAP;
- Increasing the number of [capacity to implement] habitat restoration and water quality improvement projects;
- Improving the ability to maintain King County assets by implementing standardized tools, systems, and processes;
- Offering a fee discount to low-income property owners;
- Providing grants for community projects that improve water quality.

In addition to the programs in WLR, there are the Roads drainage capital projects that are programmed with SWM funding that are not yet backed by SWM revenue. As any increase in the SWM rate under the current rate structure would increase the amount that Roads pays in SWM fees, impacts of a rate increase for Roads are also taken into consideration. If the SWM rate increases and there is no additional funding for ROW drainage projects, Roads would need to cut other programs to pay this increased fee amount. Even using the SWM fee to support drainage projects in the ROW could take

away from other Roads programs if they did not have planned drainage work at the level of the fee. Other planned work might have to be deferred to pay the fee, and if the fee dollars were returned to Roads for regional drainage work in the ROW, those dollars would be restricted for that purpose.

The funding and rate implications of these various programs are noted below in Table 2:

Table 2: Potential Funding Packages for the SWM Fee

Rate Component	2017/2018 Costs (\$ Million)	2017/2018 Annual fee for a single family residence	% Increase of Rate
Existing services funded with current rate	48.5	171.50	0%
Inflation to maintain existing services	4.9	17.32	10%
Implement asset management for WLR assets	6.5	23.12	13%
Expand programs to support agriculture and rural residents	2.3	8.02	5%
Habitat restoration and water quality improvement capital program expansion	1.7	6.00	4%
Programs that improve performance - best run government	2.5	8.67	5%
Sub-total for WLR programs	66.4	234.63	37%
2015/2016 unfunded carryover transfer for ROW drainage projects	2.0	7.07	4%
Funding to mitigate impacts of fee increase for Roads	4.6	16.26	9%
Respond to imminent failure in ROW	3.4	12.02	7%
Total	76.4	269.98	57%

Below are a series of scenarios that takes into account different decision levers and their impact on the rate. The impact of these scenarios on revenue generated from the SWM fee, the SWM fee rate, the expenditure levels in the different programs, and the amount of SWM fee paid by Roads is included in Table 3.

#### Scenarios:

- 1. Status quo rate of \$171.50; this would require a reduction in current programming as it does not cover inflationary impacts.
- 2. Fund existing programs taking into account only inflationary impacts.
- 3. Enhance / expand existing programming in WLR (detailed below).
- 4. Do not charge Roads and WSDOT a SWM fee; fund programming in Scenario 3.
- 5. Allocate the amount of SWM fee paid by Roads associated with the fee increase to drainage in the ROW; cover the 2015/2016 carryover, and fund WLR programming from Scenario 3.

- 6. Add funding to respond to potential for imminent failure of drainage assets in the ROW in addition to elements in Scenario 3.
- 7. Spend the amount of fee collected from Roads in the ROW in addition to elements in Scenario 3.

**Table 3: Different Funding and SWM Fee Scenarios** 

Scenario	Total Revenue Raised (\$ M)	Rate (\$ / SFR / Yr.)	Spend for WLR Programs	Spend for ROW Drainage	Roads SWM Payment
1	48.5	171.50	46.5	2.0	9.1
2	55.4	195.87	53.4	2.0	10.4
3	66.3	234.52	66.3	0.0	12.5
4	66.3	306.01	66.3	0.0	0.0
5	73.0	258.00	66.3	6.6	13.7
6	76.3	269.77	66.3	10.0	14.4
7	81.7	288.86	66.3	15.4	15.4

Figure 1 shows these different scenarios in a bar graph. For each scenario, all of the colored bars align with the left vertical axis that indicates the amount of revenue needed to support different scenarios' program expenditures. The blue bar represents the amount of revenue that would be required to generate the funding for existing program expenditures. The green bar represents the amount of funding required for expanded programs in WLR. The purple bar represents funding for drainage work in the ROW. The hashed bars represent the amount of the total SWM revenues collected that are paid for by Roads. The black bar and line represent the SWM fee that would be needed to generate sufficient revenue for the programming in each respective scenario. The fee is aligned with the right vertical axis. While for most of the scenarios the fee and the revenues/expenditures track together, in scenario 4 the fee is significantly increased because it assumes that other rate payers would need to pay the portion of the fee that would otherwise by paid by Roads and WSDOT.

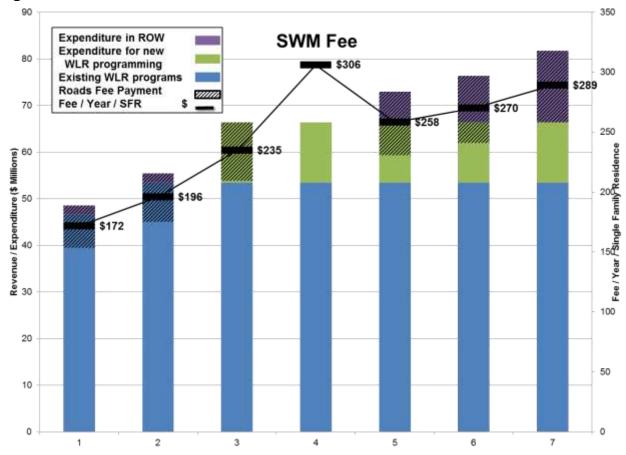


Figure 1: SWM Fee Scenarios

The SWM fee rate will be set to fund programmed expenditures. Decisions about what services will be funded out of the next SWM rate will be determined during the 2017/2018 budget process. To prepare for these decisions, Figure 2 shows a forecast of Scenario 6 to demonstrate how different expenditure packages could affect the rate over time. As with Figure 1, in Figure 2 all of the colored bars align with the left vertical axis that indicates the amount of revenue needed to support the scenario's program expenditures. The first set of expenditures (blue) represent existing programming funded by SWM fee revenues that is adjusted for inflation. Layered on top of the existing programming is the carryover of appropriation for drainage projects in the ROW from the 2015/2016 budget (red). The next layer (green) represents the funding for the expansion of programs for WLR drainage assets and water quality improvement programs. The last layer (purple) represents funding for additional drainage work in the road right of way. These cost packages illustrate what could be included in a SWM rate.

The right vertical axis shows the rate for a single family residence that would generate those revenues. The rate in each year is represented by a black bar. These rates are shown as biennial rates to align with the biennial budget process, but rates do not need to be set biennially; they could be established as annual rates or with durations longer than two years. The rate jump from 2016 to 2017/2018 is a function of both additional programming and the fact that there are accumulated inflationary impacts on existing

programs since the rate was last adjusted in 2014. A primary driver of the rate increase from 2017/2018 to 2019/2020 is a result of anticipated annexations. These annexations would not significantly change expenditure needs, but would reduce the number of ratepayers, shifting the cost burden to a smaller number of payers.

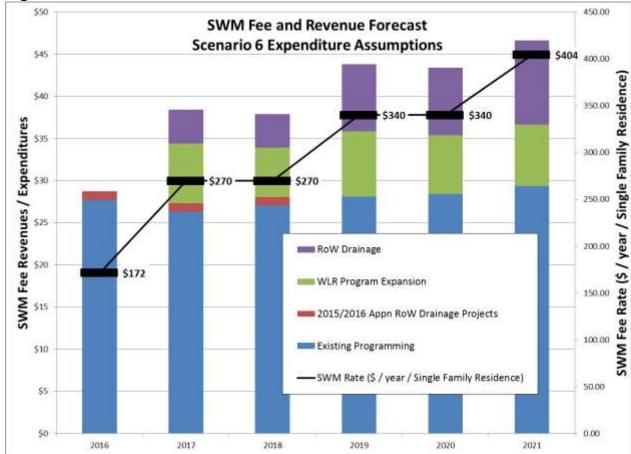


Figure 2: SWM Fee and Revenue Forecast

**Table 4. SWM Fee and Revenue Forecast** 

	2016	2017	2018	2019	2020	2021
Existing WLR SWM-Funded						
Programming	27.7	26.3	27.1	28.1	28.4	29.4
2015/2016 Carryover Drainage						
Projects in ROW	1.0	1.0	1.0			
WLR Program Expansion		7.1	5.8	7.7	7.0	7.3
Respond to Failure in ROW		4.0	4.0	8.0	8.0	10.0
SWM Rate (\$ / year / Single						
Family Residence)	171.50	269.87	269.87	340.00	340.00	404.33
WSDOT SWM Payments	1.0	1.7	1.7	2.2	2.2	2.6
Roads SWM Payments	4.6	7.2	7.2	9.1	8.4	10.0

Note: all numbers are in millions of dollars with the exception of the SWM rate which is the total fee per year for a single family residence.

## **Conclusion and Next Steps**

This report provides background to inform discussions about the SWM rate and drainage in the ROW that will occur as part of the 2017/2018 budget process. The rate process will include a public outreach component and a detailed rate proposal will be transmitted in connection with the 2017/2018 Proposed Budget in September 2016.