King County Auditor's Office

KING COUNTY AUDITOR'S OFFICE

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Stormwater: Advancing Fee Structure, Oversight, and Spending Strategy Could Improve Results

JUSTIN ANDERSON
LUC POON
CINDY DRAKE

EXECUTIVE SUMMARY

King County's surface water management (SWM) fee and discount structure is dated and does not consistently align a parcel owner's fees with the parcel's contribution to King County's stormwater burden. In addition, some mining parcels receive significant discounts but do not demonstrate compliance with discount requirements for stormwater mitigation. The Water and Land Resources Division (WLRD) uses SWM fees to fund efforts that mitigate the impacts of stormwater runoff and reduce pollution of local waterways and Puget Sound. However, the division has not implemented essential governance elements for the Surface Water Management Program, limiting the division's ability to direct SWM funds to achieve the surface and stormwater mitigation objectives set in King County Code. Finally, data gaps and planning deficiencies in the Stormwater Services Section hinder division-level decision-making, which is important in the context of potentially high costs to maintain the County's aging stormwater infrastructure.

Acknowledgment

The Water and Land Resources Division (WLRD) is taking steps to improve the management of Surface Water Management (SWM)-funded projects and programs. In 2024, WRLD created a centralized Capital Delivery Section to increase efficiency and consistency in delivering capital projects. One priority for the new section is a portfolio management initiative, including developing a capital project prioritization tool that will help leadership plan and prioritize projects across the division. Other key advances include implementing a centralized Data and Analytics Group, creating a data dashboard for tracking key program metrics, and convening a Code Change Group to identify and propose legislative changes to the King County Council.

WLRD has been successful in supplementing SWM fee revenues with grants in support of its habitat restoration, water quality, and fish passage efforts. Since 2019, WLRD has secured about $48.6 million in state and federal grants. Assuming an average county match of 25 percent, this means WLRD has turned about $12.1 million in SWM fee revenues into four times as much.

The Stormwater Services Section (SWSS) is making progress identifying its needs and priorities. Between 2024 and 2026, WLRD placed new individuals in key positions, including the SWSS section leader, and began several new initiatives in the section. Specifically, SWSS has made progress assessing the condition of its assets, developing a rubric to prioritize capital work, and creating a ten-year comprehensive plan for SWSS capital and operational projects. SWSS has also implemented a new enforcement program and contracted for an analysis of its residential and low-density SWM fee rate structure. Progress on these initiatives demonstrates a commitment to proactive continual improvement and the goal of minimizing the negative impacts of stormwater runoff.

REPORT HIGHLIGHTS

What We Found

King County's surface water management (SWM) fee and discount structure, which is set in King County Code, does not consistently meet the policy intent of basing charges on a parcel's contribution to King County's stormwater burden to the degree now feasible and widely practiced across jurisdictions. Additionally, some discounts may exceed the value of the benefits they provide. The Water and Land Resources Division (WLRD) does not ensure mining parcels meet discount requirements, increasing risk of environmental damage in an industry with documented ecological permit violations.

WLRD has not yet developed essential governance elements of the Surface Water Management Program, such as a strategy for allocating SWM fee revenues to the most essential efforts for reducing stormwater impacts. Relatedly, the Stormwater Services Section (SWSS) has not identified section-level goals or funding needs, hindering effective resource decisions at the section and division levels. Both WLRD and SWSS have taken steps to prioritize the needs of the program but have not yet completed their efforts. This work is especially important now because estimates for repairing King County's aging stormwater infrastructure show that costs are likely to be significant.

What We Recommend

We recommend WLRD establish governance structures for the Surface Water Management Program, to include strategies to guide and monitor its use of SWM fees and implement a capital project prioritization approach to help ensure the division funds the most essential work for managing stormwater impacts. We recommend WLRD conduct a comprehensive rate study to assess SWM rates, service charges, and the discount structure, and propose legislation to update charges and discounts and bring them in line with industry standards and county goals. We also recommend WLRD ensure sufficient oversight of mining operations.

Why This Audit Is Important

Annually, about 118 billion gallons of untreated stormwater carry toxins and pollutants into local waterways and Puget Sound, threatening the survival of native salmon, orca, and other wildlife. Stormwater can also contaminate drinking water and cause flooding, erosion, and sedimentation that can endanger human safety and property.

Accordingly, the federal Clean Water Act and the Washington State Department of Ecology require King County to manage untreated stormwater, and multiple county initiatives aim to reduce the impacts of runoff, including the King County Clean Water Health Habitat program and the King County Comprehensive Plan. Without governance structures to guide WLRD's varied efforts, King County risks ineffective and inefficient use of SWM fees to mitigate the effects of runoff.

Stormwater runoff carries pollutants into local waterways and Puget Sound, harming salmon and orcas.

Source: King County Auditor's Office

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Section 1: Questions & Answers

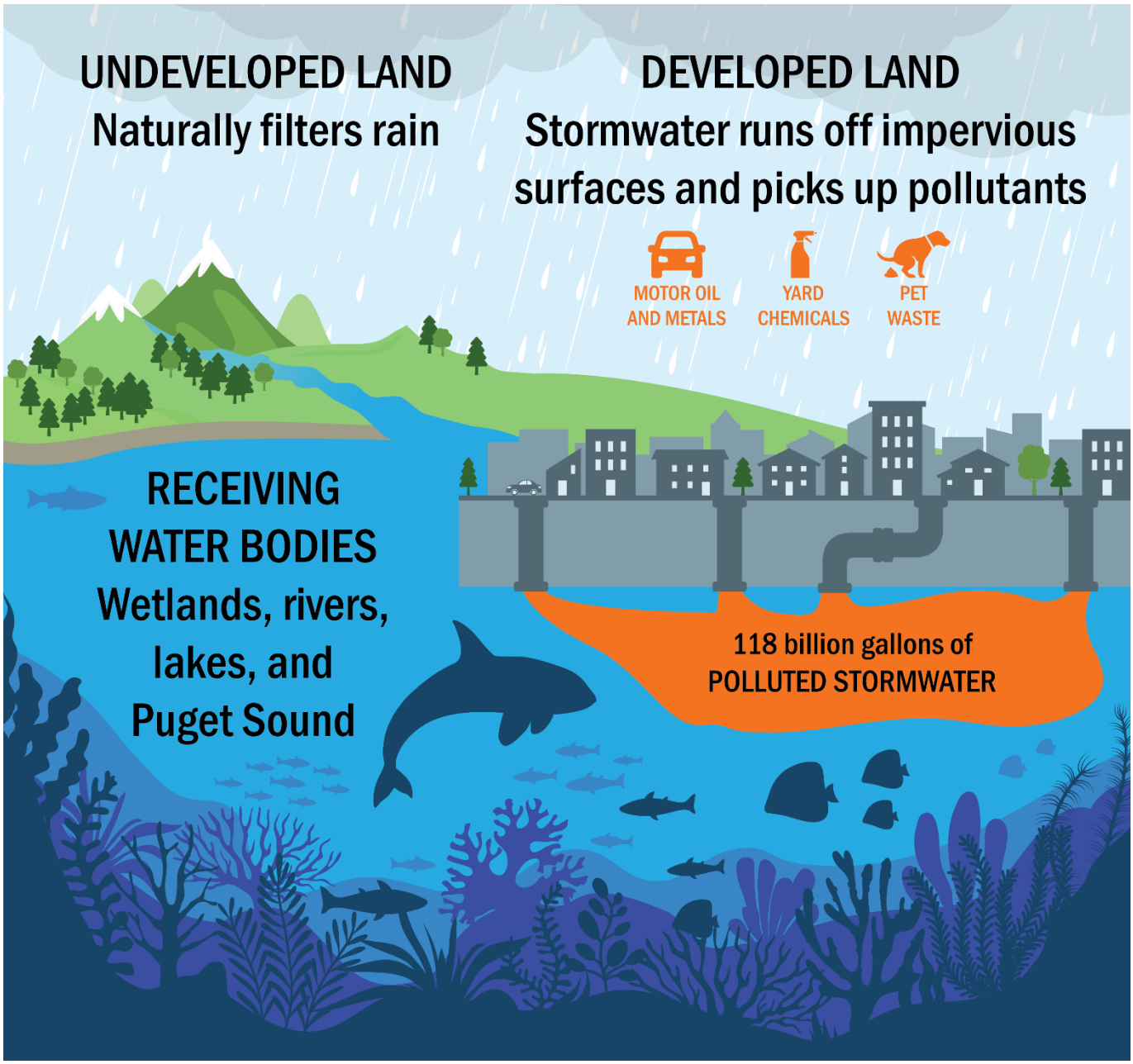
What is stormwater and what impact does it have?

Stormwater is rainfall that flows across developed land into ditches, streams, and storm drains, emptying into local streams and Puget Sound. When rain hits hard surfaces, such as rooftops or pavement, it does not soak into the ground. Instead, it runs off these surfaces as "stormwater" or "surface water," carrying pollutants like vehicle oil, toxic chemicals, pesticides, and harmful bacteria into local waterways and eventually into Puget Sound. Even lawns can have runoff, potentially introducing fertilizer and animal waste into stormwater. Stormwater pollution can contaminate drinking water, kill fish, and harm the environment. It is a primary threat to Puget Sound salmon and orcas (see exhibit A). In addition, unmanaged stormwater leads to flooding, erosion, and sedimentation, which can threaten safety and damage private property and public infrastructure.

See appendix A for actions you can take to reduce polluted stormwater runoff.[1]

[1] King County website about stormwater runoff pollution prevention.

EXHIBIT A: Stormwater washes pollutants off hard surfaces into local water bodies.



Source: King County Auditor's Office based on graphic in the King County Clean Water Healthy Habitat strategic plan

What is impervious surface and how does it relate to stormwater?

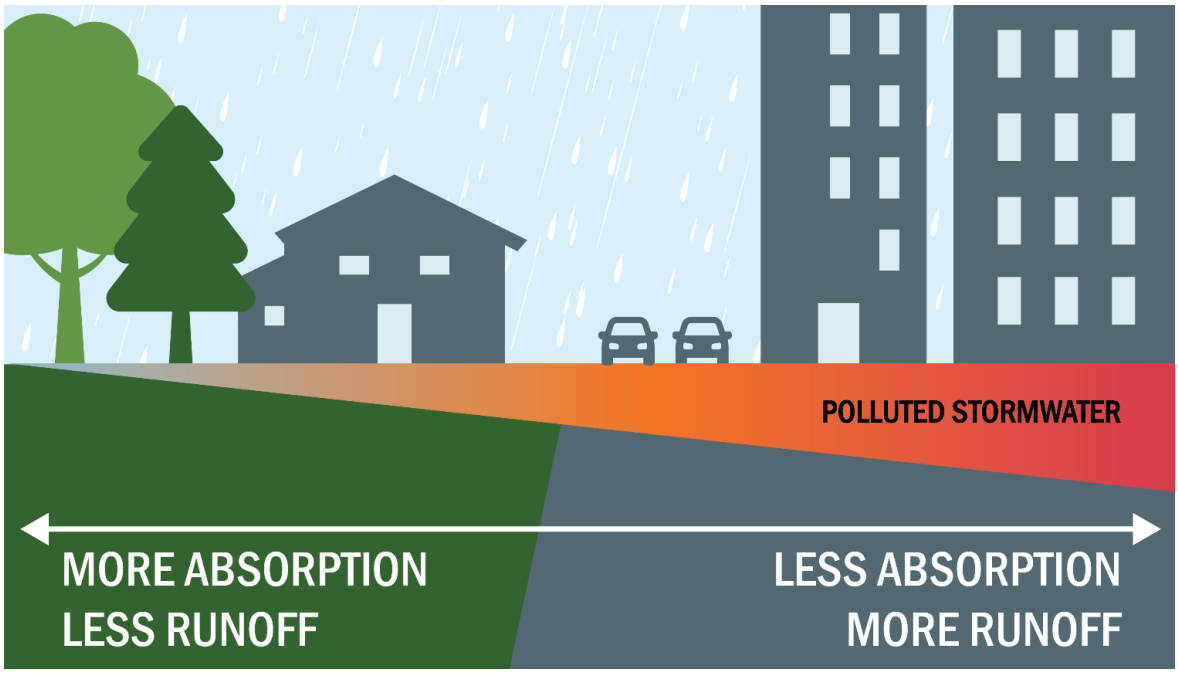
Impervious surfaces prevent rainfall from absorbing into the ground. "Impervious surface" is the technical term for hard surfaces that do not allow rainwater to pass into the soil. They increase stormwater runoff and the resulting

pollution and environmental damage. For this reason, managing stormwater means managing the impacts of rainfall on impervious surfaces.

In Western Washington, areas unchanged by human development are generally forested and "pervious," slowing rainfall and allowing it to infiltrate into the ground or evaporate. In contrast, modern developments include impervious surfaces like roads, parking lots, and rooftops that concentrate runoff, increasing the volume and speed of the water as it moves downstream (see exhibit B). Given their uses, impervious surfaces also often collect pollutants like motor oil and tire particles, which flow into runoff. The result is a polluted cascade of water, larger in volume and moving faster than downstream waterways would typically handle in a natural state.

Contemporary development regulations include stormwater requirements, but much of King County was developed before stormwater requirements were implemented. Consequently, most stormwater does not receive treatment. In King County, over 118 billion gallons of untreated stormwater carry pollutants into waterways each year.[2]

EXHIBIT B: Natural areas allow rainfall to absorb into the ground. The more development, the more impervious surface, which reduces stormwater absorption.



Source: King County Auditor's Office

[2] In 2018, staff in WLRD's Science and Technical Support Section estimated that about 118.6 billion gallons of untreated stormwater runoff from developed lands in King County enter receiving waters annually. WLRD has not updated this analysis since 2018.

What are state and county requirements for managing stormwater?

The US Environmental Protection Agency (EPA) and Washington State Department of Ecology — Municipal Separate Storm Sewer System (MS4) permit requires King County to take actions to manage stormwater in unincorporated King County.[3] The MS4 permit requires King County to develop and implement a stormwater management program to minimize impacts caused by stormwater runoff, including:

- strategic planning to protect waterways that receive stormwater
- reducing runoff impact from existing development (including county roads) and areas of new development
- educating property owners and enforcing best management practices to reduce pollutants in runoff
- preventing illegal discharges, such as sewage and industrial drainage, into the stormwater system
- operating and maintaining county-owned stormwater facilities and annually inspecting private commercial stormwater facilities.

If King County does not comply with MS4 permit terms, the State can issue administrative orders and fines.

In addition, King County Code, Title 9 requires the Water and Land Resources Division (WLRD) within the Department of Natural Resources and Parks (DNRP) to administer a comprehensive Surface Water Management Program to mitigate the negative effects of stormwater. King County Code states that the program must establish and operate a "comprehensive approach to surface and stormwater problems which would reduce flooding, erosion and sedimentation, prevent and mitigate habitat loss, enhance groundwater recharge and prevent water quality degradation." It specifies that this comprehensive approach can include:

- basin planning
- land use regulation
- construction of facilities, retrofits, and habitat restoration
- surface and stormwater facility maintenance
- public education

[3] King County's Phase I Municipal Stormwater Permit is under the National Pollutant Discharge Elimination System (NPDES) and Washington State Waste Discharge General Permit for Discharges from Large and Medium Municipal Separate Storm Sewer Systems.

- provision of surface and stormwater management services.

For this reason, although WLRD's Stormwater Services Section (SWSS) has primary responsibility for managing King County's stormwater program, WLRD has a range of additional environmental programs working to restore water quality and marine habitats in the region. Examples include the Fish Passage Restoration Program, which removes barriers that block salmon from returning to essential spawning habitat, and the Habitat Restoration Unit, which builds and manages habitat improvements in local waterways to support salmon population recovery.

How does King County fund stormwater management?

Parcel owners in unincorporated King County have paid an annual surface water management (SWM) fee since 1987. The County calculates the fee for each parcel using a tiered class system based on parcel type and the ratio of impervious surface to parcel size. Residential parcel owners pay an annual flat fee regardless of their parcel size, which in 2026 was $379 per parcel. Owners of non-residential (commercial) parcels with under 10 percent impervious surface pay the same $379 flat fee.

There are five additional rate classes for non-residential properties. WLRD places parcels into a rate class based upon the percentage of their parcel covered by impervious surfaces. In 2026, commercial properties placed in the "Light" impervious surface rate paid $1,053.70 per acre per year, and commercial properties placed in the "Very Heavy" impervious surface rate paid $5,768.85 per acre per year. Because the County uses a rate structure that bases service charges on the ratio of impervious surface on a parcel, it has a "density of development" methodology. We discuss King County's rate structure in detail in the next section. We discuss WLRD's processes for allocating funds among the various elements of stormwater management in section 4.

Section 2: Surface Water Management Fee Rate and Discount Structure

SECTION SUMMARY

King County's SWM fee rate structure is outdated, resulting in less consistency in fees and limiting ratepayer incentives to mitigate stormwater impacts in comparison with newer approaches that better align service charges with runoff volume. County code defines the basis for each property's SWM service charges as its "relative contribution of increased surface and stormwater runoff" to the stormwater management system. Jurisdictions use different methodologies for estimating runoff, and King County's structure, introduced in 1986, does not take advantage of newer approaches that better align charges with impervious surface data. In addition, as development standards have become more stringent over time, some of the County's fee discounts intended as incentives for stormwater mitigation are overvalued relative to the environmental benefit they currently provide.[4] In this section, we discuss how the County's rate structure and discounts misalign charges from stormwater runoff for commercial and residential parcels, and we describe the benefits of different fee structures that more consistently align charges with stormwater runoff and its negative effects. Because SWM rate classes and discounts are set in county code, we discuss how WLRD should work with DNRP and County Executive leadership to develop and propose legislation to update the SWM rate and discount structure, so it better achieves King County's goal of aligning fees with runoff.

Assumptions driving the SWM rate methodology are outdated

King County has not changed the basic structure and assumptions of its SWM rate methodology since 1986, while many modern fee models have shifted to basing rates directly on impervious surface area. Since the introduction of the SWM service charge and the seven rate classes in 1986, the County has implemented rate increases and discounts but has not changed the underlying rate classes or the practice of using a ratio of impervious surface to parcel size to determine a parcel's

[4] Our audit assessed the value of discounts in comparison to the level of environmental benefits they provide, such as whether discounts require property improvements that go beyond the development regulations that are in place today. We did not assess the value of discounts at the time they were first implemented. The County has made modifications to rates and discounts since 1986. However, the County has not changed the methodology underlying the classes in the SWM rate structure. See appendix 2 for details.

rate class.[5] This means that the structure of the rate classes and their relationships to one another are still based on assumptions from 1986. For example, residential parcels pay a flat fee, which presumes an average parcel size and amount of impervious surface for all residential parcels. WLRD completed an analysis of the Residential (class 1) and Very Light (class 2) rates in 2025 but hasn't updated the assumptions behind the residential rate or analyzed how that rate compares to the fees charged other rate classes, even though lot sizes and development practices have changed since 1986. Instead, SWM rate structure changes have largely focused on the introduction of discounts and rate adjustments. See appendix 2 for the legislative timeline of the SWM rates and discount structures.

SWM rate structure uses assumptions about runoff and wide rate classes, resulting in inconsistent charges across parcels

King County's SWM rate structure for commercial parcels relies on the assumption that less dense development results in less stormwater runoff. This is not always the case. For commercial properties, King County's SWM fee methodology calculates the ratio of impervious surface to parcel size and then uses this ratio to assign the parcel to a rate class (e.g., Light, Moderate, Heavy). The method then multiplies the class's rate by the acreage of the parcel to determine the parcel's service charge. Exhibit C shows the SWM rate classes, defined by ratios of impervious surface to parcel size, and their 2026 rates. This method for setting SWM fees is commonly called a "density of development" approach in industry literature and includes elements that can result in two unintended outcomes.[6] Specifically, (1) basing rates on a **ratio** of impervious surface to parcel size makes assumptions about the rest of the parcel's ability to absorb rainwater that may be inaccurate, and (2) basing charges on **ranges** of impervious surface in each rate class allows parcels with more impervious surface to pay the same amount as those with less. We discuss each of these issues below.

[5] King County Ordinance 7590, introducing King County's SWM fee structure, became law on May 2, 1986, with SWM charges due beginning in 1987. Accordingly, the SWM fee structure dates to 1986, while charges date to 1987.

[6] This approach is also called an intensity of development rate model, and King County Code 9.08.060 refers to "intensity of development."

EXHIBIT C: King County's surface water management fees are based on classes of impervious surface coverage.

Fee class description	Percent of parcel covered by impervious surface	Annual surface water management fee in 2026
Residential	Not measured	$379 regardless of parcel size
Very Light Commercial	Up to 10%	$379 regardless of parcel size
Light Commercial	Above 10 to 20%	$1053.74 per acre
Moderate Commercial	Above 20 to 45%	$1972.43 per acre
Moderately Heavy Commercial	Above 45 to 65%	$3365.89 per acre
Heavy Commercial	Above 65 to 85%	$4688.81 per acre
Very Heavy Commercial	Above 85 to 100%	$5769.06 per acre

Source: King County Water and Land Resources Division

Differences in stormwater absorption limit accuracy of ratio-based rate structures

King County's SWM rate structure is limited by dated presumptions of uniform runoff absorption from parcels' pervious surfaces. As described in industry studies and literature, rate models using a density of development approach, like King County, are based on the assumption that the rest of the parcel (i.e., any *pervious* surfaces) helps to mitigate the stormwater impact from its *impervious* surface. A weakness with this approach is the difficulty in assessing the impact of individual parcel characteristics on reduced runoff, especially in relation to a parcel's impervious surface. For example, two lots with the same ratio of impervious to pervious surface area may have different amounts of runoff if one is dense forest while the other is lawn. For another example, a high-density parcel could have less impact from runoff than a lower-density one if the high-density parcel incorporates leading practices for flow control and water quality improvements. To address this weakness, most jurisdictions base SWM fees on impervious surface area alone instead of using a ratio of impervious surface to parcel size.

Wide rate class ranges lead to inconsistent charges for impervious surface

The wide ranges of impervious surface in King County's SWM rate classes allow for inconsistent pricing of impervious surface, disconnecting fees from stormwater impact more than newer approaches that better align service charges with runoff volume. In King County's SWM rate structure, most rate classes correspond to a wide range of impervious surface ratios, while a parcel's particular service charge is calculated according to its acreage. As a result, parcel owners with the same area of impervious surface but different parcel sizes can pay different SWM fees, while owners paying the same amount and with the same size parcel can have different areas of impervious surface. Exhibit D shows the latter result. In addition, parcels on either side of a rate class cutoff pay very different fees. For example, in 2026 a parcel with 45 percent impervious surface is charged $1,972.43 per acre, while a parcel with 46 percent impervious surface is charged $3,365.89 per acre. This 1 percent difference in the impervious surface ratio corresponds to a 70 percent higher charge.

EXHIBIT D: Two different parcels with the same SWM fee and same acreage can have very different amounts of impervious surface.

Source: King County Auditor's Office analysis

SWM fee structure may encourage sprawl

Density of development SWM fee models, like King County's, can inadvertently encourage sprawl. Because the County's SWM fee model increases charges as development density grows, it can create an economic incentive for lower-density development. For this reason, the US EPA has observed that SWM fee approaches like King County's can "discourage urban infill and inadvertently encourage sprawl."

Other jurisdictions have updated their SWM fee models to ones based actual impervious surface area

In alignment with leading practices, many jurisdictions in Washington state have adopted fee models based directly on impervious surface area, improving fee accuracy and consistency. Density of development SWM fee methods were common when King County introduced its fee structure in 1986. Over time, however, most jurisdictions have adopted rate structures based directly on area of impervious surface or made changes to reduce the ranges within their rate classes.[7] The City of Seattle, for example, added multiple additional tiers for residential and commercial properties in 2025, while the cities of Maple Valley and Woodinville each adopted fee methodologies based on impervious surface area in 2021 and 2023, respectively.[8]

A 2023 report sponsored by the Washington State Department of Ecology found that, of 62 local governments across Washington state, 48 (almost 80 percent) base their stormwater rates solely on impervious surface area instead of using a ratio of impervious surface area to parcel size. Similarly, according to the US EPA, more than 80 percent of stormwater utilities nationally use rate structures based directly on impervious surface area. The American Public Works Association also states that basing SWM rates on impervious surface area is a leading practice.[9] Although King County has increased SWM rates and introduced discounts since 1986, it has not updated its basic density of development methodology — its rate classes, impervious surface ratios, and ranges are unchanged. Revisiting the SWM rate methodology could help the County ensure it meets the intended policy to charge SWM fees based on each parcel's "relative contribution of increased surface and stormwater runoff."

[7] For example, in a 2023 report sponsored by the Washington State Department of Ecology, 25 jurisdictions changed their SWM fee structure in the last 20 years; of those, roughly 10 moved to an impervious area-based approach, while none moved to a density of development approach.

[8] Both jurisdictions now use the "equivalent service unit" method. This method establishes an average area of impervious surface for residential parcels at a standard rate, then charges commercial parcels for their proportional impervious surface area at that rate.

[9] *Financing Stormwater Utilities, Third Edition*. See section 5: Selecting the Rate Structure and Estimating Service Charge Revenues for a Stormwater Utility Program. American Public Works Association, 2026.

Other jurisdictions use rate studies to assess and update their fee models

Nationally, many stormwater utilities have conducted comprehensive rate studies to identify program needs and propose rate structures that better align ratepayers' charges with their stormwater impacts. WLRD's 2025 analysis of rates of the Residential and Very Light classes represents an initial step toward a comprehensive study. Rate studies are financial evaluations that identify program needs and costs along with funding strategies to meet them. Stormwater utility rate studies typically include assessments of stormwater rate methodologies based on the specific needs and circumstances of the jurisdiction.[10] For example, Pierce County conducted a rate study in 2026 and used the results to update its stormwater rate structure, moving to a simpler model using impervious surface area.

In WLRD's 2025 analysis, a consultant independently reviewed King County's two flat fee rate classes, Residential and Very Light (lowest impact commercial), recommending three new rate classes based on impervious surface area to better address variations in stormwater runoff within the two current classes. However, the analysis reviewed only the current two flat fee rate classes and did not include an assessment of program needs or the SWM rate model as a whole, including discounts. We make Recommendation 1, below, for WLRD to perform a comprehensive rate study.

The SWM rate methodology is outdated for residential ratepayers

Current residential SWM fees may not align with their average stormwater impact, requiring an update of the SWM rate model to ensure rate consistency. Most jurisdictions charge flat rates for residential stormwater fees. However, leading practice is to ensure those charges are based on averages that reflect the number of residential parcels and their collective share of the jurisdiction's total impervious surface and to periodically revisit those assumptions for accuracy. In comparison, King County has not revisited the assumptions supporting the SWM rate classes since 1986, including the basis for the flat fee paid by residential parcel owners. WLRD staff explained to us that the typical unincorporated King County residential parcel has changed since 1986, indicating that assumptions about residential parcels' average impervious surface area and corresponding stormwater impact are now out of date.

[10] For example, "Section 5: Selecting the Rate Structure and Estimating Service Charge Revenues for a Stormwater Utility Program" in *Financing Stormwater Utilities, Third Edition* includes three variations of the impervious surface area model, depending on the needs and capabilities of the particular jurisdiction. *Financing Stormwater Utilities, Third Edition*, American Public Works Association, 2026.

This raises the risk that some residential ratepayers may be paying proportionally more relative to their stormwater impacts than some commercial parcels.[11]

SWM discounts do not follow leading practices, increasing fee inconsistency

King County's discount program does not follow leading practices, amplifying the inconsistencies of the density of development SWM rate structure. Leading practices for stormwater fees include providing discounts or credits off a ratepayer's charges only for improvements that reduce the County's stormwater program costs.[12] Although many types of activities can provide environmental benefits, leading practices recommend that discounts not exceed the value of the benefit in lowering existing or future program costs. Leading practices also recommend that jurisdictions carefully evaluate discounts that reduce charges by over 40 percent from a cost-of-service perspective. This is because discounts that are misaligned with the benefit they provide create a disconnect between program cost and fee amount and, in turn, push the costs for the Surface Water Management Program unfairly onto other ratepayers. Lastly, leading practices recommend jurisdictions take into consideration the cost of administering the discount program when making choices about its design.

King County's current discount program, introduced in 2012, offers ten types of discounts to SWM fee ratepayers.[13] Some discounts are more valuable than others and can combine to reduce fees by up to 90 percent. In contrast with leading practice, the County's SWM fee structure does not set the value of the discounts in relation to each other, the environmental benefit justifying the discount, or the administrative cost associated with offering the discounts. These gaps limit the effectiveness of the discounts as incentives for parcel owners to invest in environmental mitigation measures and intensify the inconsistencies already present in the SWM fee model, as explained further below.

[11] Because the current SWM rate structure inconsistently prices impervious surface area, direct comparison is not possible. In addition, WLRD does not maintain impervious surface area data for residential parcels. We compared the cost basis of the current residential flat fee with each of the commercial rate classes' total fees against impervious surface area after discounts. We then compared the proportional value of the residential flat fee relative to those area costs and the summary figures in WLRD's residential rate study. The analysis indicated that residential parcels may be paying more than the lower classes of commercial parcels relative to their impervious surface area.

[12] Leading practices include material published in a June 2023 comprehensive stormwater rate and credit study commissioned by the Washington State Department of Ecology and City of Tacoma.

[13] A timeline of the legislative history of the SWM rate structure, including the current discount program, is included in appendix 2.

Valuable ongoing commercial SWM discounts are awarded for compliance, not extra mitigation

Several SWM fee discounts do not require property improvements beyond existing development regulations, undermining their effectiveness as incentives for additional stormwater mitigation investments. The purpose of the 2012 commercial SWM fee discounts was to incentivize parcel owners to install systems that improve runoff mitigation beyond what is already required. However, the SWM fee discount structure does not impose any additional, ongoing, or iterative requirements once the initial requirements for a commercial SWM fee discount are met beyond demonstrating continued eligibility. For example, the pervious surface absorption and water quality facility discounts together reduce a parcel's SWM fees by up to 40 percent for meeting existing design requirements, and the basic flow control discount reduces a parcel's SWM fees by up to 20 percent for any flow control system, regardless of age. Similarly, the modern flow control discount provides up to a 20 percent SWM fee reduction for properties that have flow control facilities meeting 1990-era standards, which are less stringent than 2026 requirements. The National Pollutant Discharge Elimination System (NPDES) permit discount (worth a 10 percent SWM fee reduction) assumes that the monitoring and mitigation required by an NPDES permit reduces the cost of stormwater burdens to King County, requiring no additional proof of compliance with state or federal permit requirements.

As shown in exhibit E, below, runoff mitigation discounts are stackable such that a single parcel can earn multiple discounts. As a result, some ratepayers receive 90 percent off their SWM service charge each year by meeting conditions required when the parcel was developed. These ongoing discounts totaled over $2.98 million in 2025.

EXHIBIT E: King County Code offers stackable surface water management fee discounts for meeting runoff mitigation requirements rather than incentivizing efforts beyond development standards.[14]

RUNOFF MITIGATION DISCOUNT CRITERIA	DISCOUNT VALUE	NUMBER OF PARCELS CLAIMING DISCOUNT	TOTAL DOLLARS DISCOUNTED IN 2025
Basic Flow Control has facilities meeting any current or previous King County surface water design standard from 1969 to present	20% discount when runoff controlled on at least 50% of parcel	**307**	**$935,565**
Modern Flow Control has facilities meeting design requirements from 1990 or later	20% discount when runoff controlled on at least 50% of parcel	**185**	**$679,775**
Pervious Surface Absorption has required flow control or infiltration facilities that use pervious areas such as bioswales to encourage runoff absorption and dispersion	20% discount when runoff controlled on at least 50% of parcel	**88**	**$443,527**
Water Quality Facility has required facilities that remove pollutants from runoff prior to entering the surface or ground water system	20% discount when runoff controlled on at least 50% of parcel	**207**	**$730,769**
National Pollutant Discharge Elimination System Permit Discount parcels regulated by the Washington State Department of Ecology under its own permit	10% discount	**56**	**$191,514**
Total dollars of stackable runoff mitigation discounts in 2025:			**$2,981,150**

Source: King County Auditor's Office analysis of King County Code, Chapter 9.04; Water and Land Resources Division (WLRD) Surface Water Management (SWM) Fee Protocols; and WLRD SWM billing data

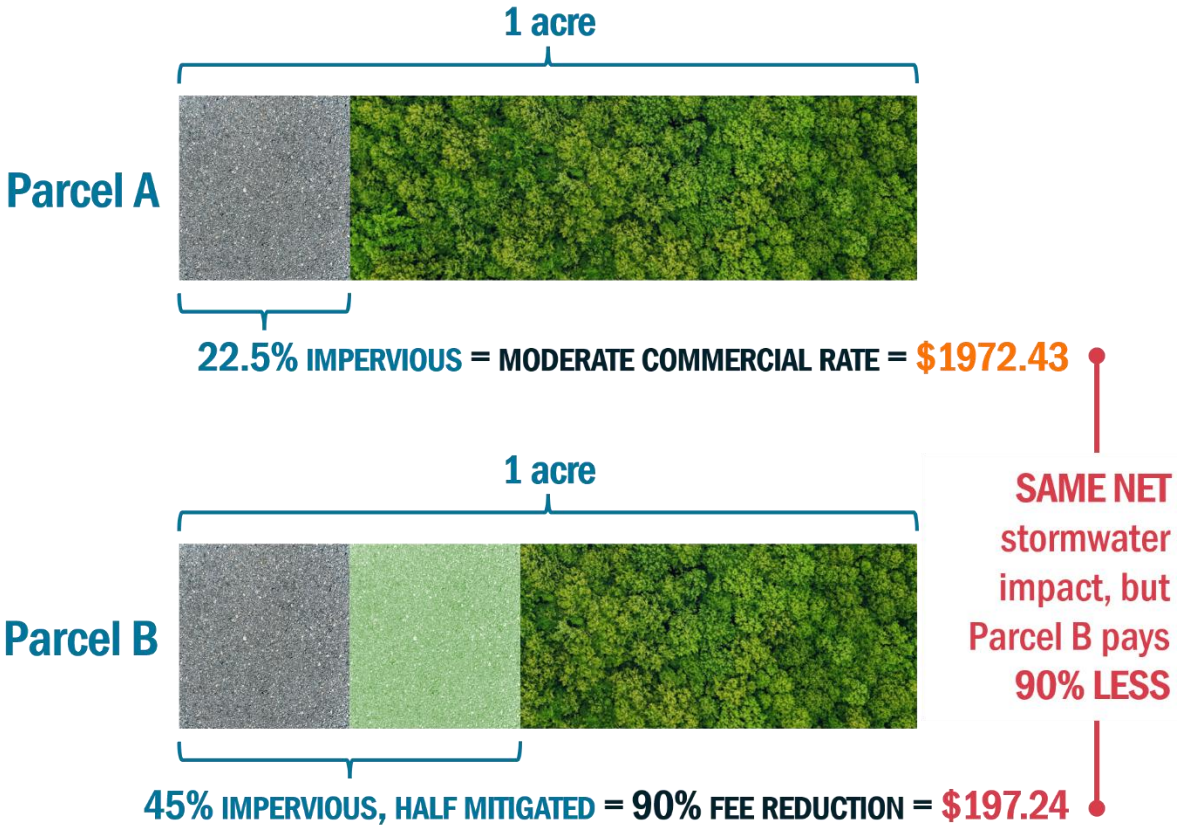
[14] The first four stackable discounts are prorated from 4 to 20 percent of the discount value based on the amount of the parcel's impervious surface that is served by the stormwater control eligible for discount.

Parcel owners receive discounts for mitigating runoff from only half of impervious surface area

Commercial ratepayers can receive the full value of runoff mitigation discounts for mitigating only half of their impervious surface, meaning discounts can be larger than the environmental benefits they provide. For four of the five stackable discounts intended to encourage stormwater mitigation (see exhibit E, above), King County uses a sliding scale to determine the discount value relative to the amount of impervious surface mitigated. However, the scale can award a higher percentage discount than the percentage of impervious surface mitigated. For example, a parcel owner could receive up to a 90 percent fee reduction for mitigating only 50 percent of their property's impervious surface. This means the combined value of some discounts, in terms of lost revenue, may outweigh their benefit. It also means there is little financial incentive for ratepayers to mitigate runoff for all of their property's impervious surface.

Additionally, parcel owners could end up paying much lower total SWM fees by increasing their impervious surface and then mitigating the impact of some of the additional area. For example, as shown in exhibit F below, a site with twice as much impervious surface as another can have the same net stormwater impact after mitigation but pay one tenth of the SWM fee.

EXHIBIT F: Parcels receiving discounts can pay much lower fees than parcels without discounts for the same net impact on the stormwater system.



Source: King County Auditor's Office analysis

Modernizing the SWM rate and discount structure to improve consistency and effectiveness will require detailed, system-wide planning. In the section above, we discussed several ways in which King County's rate structure falls short of modern approaches to stormwater utility financing. WLRD's 2025 analysis of the two flat fee rate categories (Residential and Very Light) is a step in the right direction. The agency should build on this step with a thorough and comprehensive approach to updating its methodology for funding the Surface Water Management Program.

Recommendation 1

The Water and Land Resources Division should conduct a comprehensive rate study of King County's surface water management (SWM) fee and discount structure. The rate study should assess all parcel types, rate classes, and discounts.

The rate study should identify alternative SWM fee and discount structures that are consistent with leading stormwater utility practices and county goals. Alternative fee and discount structures should align with the following principles:

a) SWM fees should be based on measurements of impervious surface area rather than density of development.

b) SWM fees should align with a parcel's stormwater impact and be consistent across all parcel types.

c) Any discounts should result in post-discount fees that are consistent with stormwater impact.

d) Discounts should not be given for required stormwater mitigation elements.

SWM fee changes will require changes to county code

WLRD has taken steps to begin addressing some problems in the SWM rate structure. However, lasting improvements will require a proposal to change county code. WLRD's consultant work to review the fixed fee rate classes is a solid step toward addressing the problems in King County's SWM rate methodology. It also demonstrates WLRD's awareness of the larger issues with the County's approach. For example, despite its limited focus, the consultant report comments on the current discount program, noting other jurisdictions focus discounts on improvements that exceed requirements or provide a regional or system-wide benefit.

WLRD leadership explained that the consultant analysis was a first step into looking at the SWM charges and discounts, and it is initiating a comprehensive rate study that will assess all the rate classes. Leadership also emphasized that county code established the SWM rate and discount structure and that changes will require legislation. WLRD leadership has not yet articulated a plan for implementing its consultant recommendations or those from the future comprehensive rate study. To help make lasting improvements, WLRD should use the results of its consultant analyses to propose SWM rate and discount structure changes to the King County Council.

Recommendation 2

Using the results of the comprehensive rate study described in Recommendation 1, the King County Executive should propose revisions to Title 9.08 of the King County Code for a new surface water management (SWM) fee and discount structure. The proposed code revisions should ensure King County's SWM fee and discount structure includes the elements specified in Recommendation 1.

The legislative package should include the comprehensive rate study and any additional analysis supporting the development and selection of the preferred model, including the basis for all proposed changes in fee methods, rates, parcel classes, and discounts.

Section 3: Case Study — Mining Parcels Receive Surface Water Management Discounts Without Adequate Inspection

SECTION SUMMARY

Mining case study: SWSS does not ensure mining parcels meet discount requirements, resulting in reduced oversight in an industry with documented environmental violations. SWSS depends on Department of Local Services, Permits Division (Permits) staff to conduct annual inspections of mining parcels but has not provided clear and detailed information on how to verify discount eligibility. In turn, Permits staff provide SWSS with extremely limited information about the mining parcels they inspect, but SWSS often grants discounts anyway. In at least one case, this resulted in a mine receiving large discounts despite King County's awareness of operations that have resulted in environmental damage.

Unstructured inspections provide insufficient verification

SWSS partners with Permits staff to verify stormwater discount eligibility on mining parcels, but the informal process does not yield enough information to verify discounts. Because access to mining parcels is restricted, SWSS partners with Permits staff to conduct annual SWM fee discount inspections when Permits staff visit mines to check if they are operating according to their permits. Per an unwritten agreement with SWSS, Permits staff should verify stormwater discount eligibility while on site. SWSS staff indicated that this agreement was at the request of mine operators to reduce the total number of inspections (and necessary coordination) by combining permitting and stormwater visits.

At the end of each year, Permits staff send SWSS a spreadsheet with comments indicating whether staff saw any stormwater problems during their visits. However, in our review of these spreadsheets from 2021 through 2025, most parcels do not have updated information listed each year. Mines can be large and often include several parcels, sometimes receiving SWM discounts on some but not all parcels, and SWSS does not provide Permits staff information on which parcels receive discounts, what the discounts are for, or how to verify them. Permitting staff said that they review drainage, water flow, and water quality facilities but do not have detailed knowledge

on what to look for to verify eligibility for SWM discounts. The information that Permit's spreadsheet provides is often at the full mine level, not per parcel, and is often limited to statements like "Site operating. No stormwater problems noted." This level of detail is insufficient to verify continued eligibility for SWM fee discounts.

Site-specific knowledge and detailed inspections can be necessary for ensuring compliance with discount requirements. As described in exhibit G, below, SWSS staff who accompanied us on a visit to a mine during the audit pointed out issues with two stormwater facilities that they said should have disqualified the parcel from receiving at least some of its discounts. However, the permitting inspection report for 2025 did not find the issues and the mine received a 90 percent SWM fee discount, reducing the total SWM fee billed from $125,550 to $12,880.

Specifically, the first photo below shows a grate covering an oil-water separator that mine operators are supposed to clean every year. SWSS staff said that it looked like the grate had not been opened in more than a year and the mine operator could not produce maintenance records. The infiltration pond in the second picture has blue-gray water and aquatic plants growing in it. This indicates that the pond contains sediment particles and the water level stays high instead of filtering and dispersing runoff into the ground as intended. At the time of our visit, seasonal fall rains had not begun, yet the pond was mostly full, indicating that it had little capacity to infiltrate stormwater. This means that extra runoff would flow downhill directly into nearby streams before the infiltration pond could filter out pollutants.

EXHIBIT G: This unmaintained oil-water separator (under the grate, left) and infiltration pond full of stagnant water, right, should have disqualified the parcel from receiving surface water management fee discounts.

Source: King County Auditor's Office site visit photos

Mines received $8.1 million in SWM discounts between 2019 and 2025, despite lack of compliance data

SWSS gives discounts to mines without adequately verifying that they meet requirements, increasing environmental risks and reducing SWM revenue. SWSS staff said that mines have received runoff mitigation discounts since King County introduced them in 2013. In 2025, more than half (56 parcels) of the 96 eligible mining parcels received discounts.[15] Most of those (36 parcels) got the maximum possible discounts, or 90 percent off their SWM fee. The discounts on mining parcels were about $1.6 million in 2025 and totaled almost $8.1 million between 2019 and 2025. SWSS staff told us that they depend on Permits to check mine compliance and provide annual information to validate the discounts as required by the SWM Fee Protocols. However, as discussed above, the partnership with Permits is not sufficiently developed to provide adequate information for SWSS to verify discounts. Mining operations are known to threaten water quality if they do not manage runoff properly. For example, a WLRD internal memo documents that SWSS staff were aware of one mine discharging sediment into a nearby creek on multiple occasions. The memo notes that sediment discharges would not occur if the site were

[15] There are about 40 mines in unincorporated King County, but most include more than one parcel of land. Some include 20 or more parcels, not all of which may be in use for mining. Parcels the King County Assessor designates as Forestland are not eligible for SWM fees or discounts.

complying with its discount requirements.[16] Runoff from sand and gravel mines often carries high-pH water and sediment that can threaten salmon and other aquatic life. The parcel mentioned in the memo received a 90 percent discount on its SWM fees in five of the six years since 2020, totaling more than $640,000 in savings. Staff indicated that they are aware that mines are receiving discounts without adequate information to verify that they are following discount requirements, but staff noted that they do not have the capacity to take action.

Recommendation 3

The Water and Land Resources Division should develop, document, and implement a process to ensure that mining parcels do not receive surface water management fee discounts without verification that the parcel has met discount requirements.

[16] The mining parcel discussed in the internal memo is not part of the mine shown in exhibit G.

Section 4: Management Issues at the Division and Section Levels

SECTION SUMMARY

WLRD has not developed essential governance elements for the SWM fee-funded Surface Water Management Program, limiting its ability to strategically manage SWM fee revenues across its component programs. In addition, SWSS has not yet identified section-level priorities and funding needs, limiting effective management at both the section and division levels. Instead of managing SWM funds according to a documented strategy to meet the code-defined purpose of the Surface Water Management Program, WLRD has relied on a combination of historic precedent, maximizing grant funding, and reacting to emergent issues to distribute SWM funds across its programs. As of mid-2026, division leaders had drafted decision-making criteria for prioritizing capital projects across programs but had not yet applied the criteria to the budget process. In addition, SWSS has not defined the programming and capital resources needed to achieve its long-term goals. Without a strategy that prioritizes program goals and projects and then ties the allocation of resources to those priorities, WLRD has limited ability to ensure it is using SWM funds most effectively to achieve King County's Surface Water Management Program goals. Analysis is especially important now because early estimates for repairing and maintaining King County's aging stormwater infrastructure show that costs may be significant.

WLRD has not developed governance structures for the Surface Water Management Program

WLRD has not developed essential governance structures for the Surface Water Management Program, hindering the division's ability to ensure it achieves the greatest benefit to the stormwater system. King County Code defines the purpose of SWM fees as funding a Surface Water Management Program that takes a comprehensive approach to protecting water quality and habitat and reducing damage caused by water runoff. Multiple WLRD groups and sections play a role in realizing the aims of what code envisioned as the Surface Water Management Program. For example, code emphasizes the need to help restore threatened populations of Chinook salmon and bull trout by expanding stormwater control efforts in the Surface Water Management Program, and WLRD's

Fish Passage and Habitat programs help achieve this objective.[17] Similarly, WLRD's Stormwater Services Program is responsible for implementing the MS4 permit, which requires various stormwater management activities (see section 1). SWSS also maintains King County's stormwater assets that convey runoff to prevent erosion and protect water quality.

WLRD has not documented a strategy, goals, or performance metrics to coordinate and prioritize the varied efforts that comprise the Surface Water Management Program. Under WLRD, the Surface Water Management Program is essentially a funding source for a collection of programs whose work intersects surface water management. However, the programs are in different groups with different sponsors who set priorities using a variety of criteria. For example, the Habitat Restoration Unit prioritizes its efforts based on the salmon recovery plans developed by the Water Resource Inventory Areas, while the Fish Passage program prioritizes projects according to its multi-year work plan and strategic plan. Coordinating diverse efforts to achieve the mission articulated in county code requires strong governance structures, including Surface Water Management Program-level goals, objectives, strategies, and output and outcome measures. Tools such as these would provide a framework for managing competing priorities and ensuring funds are used as effectively as possible toward achieving the purpose set in county code. We make Recommendation 4, below, to address this gap.

WLRD has not set fund-level goals to guide SWM fund allocation

WLRD has not developed a strategy to allocate SWM funds across the Surface Water Management Program, limiting the division's ability to ensure it is using SWM funds to achieve the greatest positive impact for the program. Agency management stated that the basis for allocating SWM funds is historic precedent and meeting emergent needs. From the starting point of the previous year's budget, managers modify each program's share of SWM funds through a process in which they weigh decision package requests from sections for additional funding for staff, programming, or capital projects. Managers said that they make funding decisions by evaluating each proposal's merit, considering executive priorities and funding sources, especially grant opportunities.[18] This approach can

[17] King County Code 9.08.060.S

[18] Decisions could also lead to a proposal to increase SWM fees. For example, in 2018, the County Executive proposed a 20 percent increase in SWM fees and requested that $6.8 million of the additional revenues go to the new Fish Passage program for the 2019–20 biennium.

help ensure that funds support important, cost-effective projects and programs. However, using historic precedent and year-by-year adjustments to allocate funds misses the opportunity to strategize spending to achieve Surface Water Management Program objectives defined in county code.

In King County's rubric for assessing organizational progress, WLRD's SWM fund management is at the preliminary level of maturity, where organizational units plan and prioritize independently. More mature organizations deliver services where needs are greatest by evaluating needs across lines of business. To guide decision-making across lines of business, organizations implement processes such as strong portfolio management to ensure they fund the work that is most likely to help them achieve their goals and objectives.[19] Although WLRD documented some general goal statements in its last business plan (developed for the 2021–22 budget), it has not completed other key elements of portfolio management as shown in exhibit H, below.[20] We make Recommendation 5, below, to address the lack of portfolio management for the SWM fund.

EXHIBIT H: Water and Land Resources Division (WLRD) is missing key elements of portfolio management that could improve effective use of surface water management (SWM) fees.

Management element	WLRD's progress toward implementation	
Document portfolio- or division-level goals and objectives		WLRD's most recent business plan (2021–22) has general goal statements but does not have clearly written objectives that give direction toward achieving the goals.
Establish metrics for assessing performance		WLRD has section-level metrics but does not have performance metrics at the SWM fund or Surface Water Management Program level.
Create business planning documents that describe the approach to achieving the goals and objectives		Lacking clear portfolio- or division-level goals and objectives, WLRD does not have business planning documents that describe how to achieve them.

[19] The Project Management Institute defines a portfolio as a collection of projects and programs managed to achieve a strategic objective. Portfolio management is a centralized process through which an organization invests its resources to achieve that objective.

[20] 2021–22 was the last budget cycle in which King County required agencies to develop business plans.

Define need, which is the gap between existing capabilities and those for meeting goals and objectives		WLRD has proposed SWM rate increases in response to the budget needs of individual sections, but it has not analyzed need at the SWM fund or Surface Water Management Program fund level for achieving portfolio-level goals and objectives.
Parameters and criteria for assessing and ranking projects by how well they meet portfolio and division need		WLRD has drafted criteria for prioritizing projects across the division but has not yet used these criteria to assess and rank projects.

Source: King County Auditor's Office analysis

WLRD has been working on a method for prioritizing capital projects since mid-2025

WLRD leadership directed staff to develop a methodology to prioritize capital projects across programs, but the effort is still being implemented. WLRD plans to apply its new criteria in the 2028–29 budget process. WLRD combined capital projects staff from four sections into one section in 2024 to improve operational efficiency and increase consistency in capital project management rigor. In 2025, leadership tasked the new capital group with developing a way to compare and prioritize capital project proposals from the Stormwater, Habitat, and Fish Passage programs, and staff have drafted decision-making criteria that the division can use to prioritize capital projects. Management told us that they plan to apply the criteria as part of the 2028–29 biennium budget process.

As shown in exhibit H, above, establishing parameters and criteria for assessing and ranking projects is a key step in decision-making for various types of programs.[21] However, before an organization can effectively apply a prioritization methodology, it must first complete strategic and business planning steps, including defining goals and objectives and documenting program need, which is the gap between existing conditions and the capability to meet its goals. WLRD's criteria draft includes examples of division priorities, such as meeting MS4 permit requirements or protecting health and safety, but it does not articulate specific portfolio-level goals or the other elements of portfolio management described in exhibit H.

[21] Project Management Institute Portfolio Management and King County Auditor's Office 2021 Alternatives Analysis Technical Paper.

SWSS planning and information gaps have hindered effective management

WLRD makes funding decisions without key information from SWSS, making it difficult for leaders to make informed decisions about tradeoffs. A 2025 consultant review of stormwater asset management reported that capital planning is reactive, often driven by asset failures or regulatory deadlines rather than strategic prioritization. Unlike WLRD's other capital groups, SWSS did not prioritize its capital project requests, instead providing capital staff with an informal list of unranked project ideas. This made it difficult for capital staff to push projects forward.

In 2023, the Washington State Department of Ecology issued King County an Administrative Order for failure to meet maintenance requirements. SWSS did not begin to investigate the condition of King County's stormwater assets until 2025, leaving managers without key information about needs and priorities to support the system. This lack of information and planning hindered both SWSS's ability to maintain the County's stormwater infrastructure and WLRD's ability to strategically manage the SWM fund.

Stormwater resource needs may be significant

Recent estimates of stormwater infrastructure management costs may be significant and delays in maintenance could have environmental and safety impacts. SWSS managers stated that King County's stormwater assets are aging, and it is important to be proactive at planning for their repair or replacement. For example, early cost estimates for the capital work necessary to repair the five highest priority in-stream facilities (of the 79 King County owns) is more than $48 million. WLRD does not yet have a plan to pay for these necessary repairs. Preliminary estimates for costs to repair another 36 in-stream stormwater facilities ranged from $1 million to over $10 million per facility to correct maintenance problems and meet minimum standards.[22] WLRD management reported that SWSS received funding in the 2017–18 budget for term-limited temporary staff and $1.6 million in 2019–20 to support asset management efforts. Additionally, in the 2025 and 2026–27 budgets, SWSS was able to get one-time allocations that total $3.4 million to start to address the maintenance backlog. SWSS has not yet requested funds for the remainder of the work because it has not yet gathered complete information to estimate costs.

SWSS managers stated that they have begun using closed-circuit television (CCTV) equipment, including a specialized CCTV truck acquired in spring 2026, to assess the

[22] King County constructed in-stream facilities (which are mostly ponds but also include a few culverts and bioswales) between 1969 and 2022. Standards enforced by the Washington Department of Fish and Wildlife require that in-stream facility retrofits be fish passable, while the MS4 permit requires the County to maintain facilities' stormwater mitigation function. SWSS staff explained to us that the two standards can be in conflict with each other and solutions that comply with both can be costly.

County's 71 miles of aging stormwater conveyance pipes and collect the data needed to predict repair costs. This work is especially important because some potentially corroded pipes run under residential neighborhoods. In addition to safety and environmental risks from failing infrastructure, the County also risks non-compliance with its MS4 permit, which requires regular inspections and maintenance as well as retrofits to install stormwater infrastructure in areas that were developed prior to modern regulations. SWSS managers stated that they are prioritizing assessment and inventory efforts to support future budget requests.

As explained above, WLRD has managed SWM funds from a bottom-up perspective instead of the programmatic top-down perspective defined in code. Addressing this issue would improve King County's ability to deploy SWM funds efficiently and effectively to mitigate the negative impacts of uncontrolled surface water and stormwater.

Recommendation 4

The Water and Land Resources Division (WLRD) should develop, document, and implement essential governance elements for the Surface Water Management Program defined in King County Code 9.08.040, including:

a) surface water management (SWM) fund-level goals, objectives, and metrics to measure performance
b) strategy for balancing the work of WLRD's programs and initiatives to achieve Surface Water Management Program goals
c) needs assessment for the Surface Water Management Program
d) prioritization methodology for capital projects and programs that receive SWM funds
e) regular schedule for updating these documents.

SWSS has not identified a target level of service, hindering long-range planning and budgeting. According to industry experts, establishing a target level of service for stormwater involves defining, measuring, and managing the performance expectations of stormwater infrastructure in a way that aligns with community needs, regulatory requirements, and available resources. SWSS has not yet established a level of service, relying instead on the requirements of King County's MS4 permit to provide a framework for the stormwater program. While the detailed permit has many requirements, it does not provide jurisdiction-specific guidance on:

- a target level of effort or service
- how to manage assets and resources effectively and efficiently
- how to balance county and community goals and needs.

These elements determine what resources SWSS needs to run King County's stormwater program sustainably. Without defining and communicating expectations, SWSS is missing the broader framework necessary to prioritize its efforts and communicate its needs to division and department leadership.

Recommendation 5

The Stormwater Services Section should specify a target level of service for operations that includes performance expectations that align with community needs, regulatory requirements, and county priorities.

New managers are working to improve planning

SWSS plans to complete a 10-year comprehensive plan by March 2027, potentially providing the strategic approach needed to articulate resource needs and prioritize efforts. Between 2024 and 2026, SWSS and WLRD placed new individuals in key management positions, including the SWSS section leader. With the influx of new expertise, SWSS began important initiatives in 2025 and 2026. Specifically, the section took steps toward gathering information on asset conditions, developing a rubric to prioritize capital work, and laying a strategic foundation for a more sustainable approach to stormwater management by:

- conducting phase one of an asset condition assessment
- developing an asset management plan
- establishing CCTV program to investigate stormwater pipe conditions
- developing an in-stream facilities plan
- building a capital project prioritization tool
- developing a 10-year stormwater comprehensive plan for capital and operations.

These actions address many of the concerns noted in this section. In particular, the stormwater comprehensive plan will include defining performance measures, developing a 10-year capital plan for asset preservation and replacement, and

projecting future resource needs. If completed, SWSS's initiatives could fill key planning and information gaps that have hindered effective stormwater management.

Recommendation 6

The Stormwater Services Section should complete program and project planning work it has begun, including:

a) asset condition assessment and management plan identifying section-wide goals and priorities
b) capital project prioritization tool
c) long-range capital investment plan analyzing gaps between existing resources and resources needed to meet programmatic and capital goals.

CONCLUSION

Though the King County Council formally created the Surface Water Management Program in 1986, the Water and Land Resources Division has not yet implemented the governance structures necessary to ensure the program achieves its purpose. The division uses surface water management funds to support a variety of efforts that mitigate negative impacts of surface water and stormwater as directed by King County Code, but it lacks the guiding strategy and outcome tracking that would help WLRD ensure it uses limited SWM funds to achieve its highest priorities for surface water and stormwater management. Improved planning at both the section and division levels can help WLRD optimize its use of SWM funds, especially as the Municipal Separate Storm Sewer System permit increases requirements beginning in 2027. The SWM fee and discount structure defined in county code has multiple weaknesses that result in inconsistent fees across parcels while also demanding a high level of effort to administer. King County can make use of modern technology and updated analysis to replace the old system with one that is easier to administer, more accurately reflects the surface water and stormwater costs to the County, and produces more consistent results for rate payers. Taken together, these efforts will help ensure SWM fee equity and sustainable funding for the various green and gray elements that work together to control runoff and protect King County's land and water.

Appendix 1: Actions to Reduce Polluted Stormwater Runoff

To learn more about stormwater in King County, please visit Stormwater services and information — King County, Washington. Here are some actions that will help reduce pollution in King County stormwater runoff:

1. Maintain your car or truck. Never dump anything down a storm drain. Always recycle used oil, antifreeze, and other fluids. Fix oil leaks in your vehicles.
2. Wash your car at a commercial car wash rather than in the street or in your driveway. If you wash your car at home, wash it on your lawn.
3. Drive less. Leave your car at home at least one day each week and take a bus, carpool, or bike to work. Combine errands when you drive. Get vehicle emissions checked and repaired. Buy a low-emission vehicle.
4. Cut down on fertilizers, pesticides, and herbicides. If you use these chemicals, follow directions and use them sparingly. Don't fertilize before a rainstorm. Consider using organic fertilizers. Let your lawn go golden brown in the summer months; it will rebound in the fall. Compost or mulch lawn clippings. Preserve existing trees or plant new ones — trees hold rainfall and help manage stormwater.
5. Remove part or all of your lawn. Lawns require a lot of watering, mowing, and caring. Replace part of your lawn with native, drought-resistant plants. Add compost to planting soil and dress it with mulch to improve plant growth and reduce stormwater runoff.
6. If you are on a septic system, maintain the system. Septic systems require regular inspections, maintenance, and pumping, or they will fail, cost a lot of money to fix, and could pollute nearby lakes and streams. Have a professional inspector check your system regularly and have it pumped out when needed.
7. Pick up after your pets and keep animals out of streams. Scoop your dog's poop and properly dispose of it. Also, make sure fences and other structures are keeping cows, horses, and other animals out of streams. Compost manure in a designated area so that it doesn't wash off into nearby waterways.
8. Reduce impervious surfaces at home and increase the vegetated land cover of your property. Impervious surfaces include your roof, driveway, patios, and lawn. Reduce rooftop runoff by directing your downspouts to vegetated areas, and not to the storm drain on your street. For

your driveway and patios, consider putting in permeable paving or patterns of cement and brick that allow water to filter through it.

9. Support your local storm or surface water program. Programs to maintain a community's stormwater system, prevent flooding, and protect natural resources may cost money in the short run but save money for damages to public and private property in the long-term. Take advantage of opportunities to educate yourself and your family about your local watershed. Consider volunteering for stream restoration or other local volunteer projects.
10. Make smart growth choices. Choose to live in a neighborhood that provides you with all conveniences: low maintenance homes and lawns, nearby shopping, walking paths, easy access to buses and trains, and green, open spaces to enjoy.

Appendix 2: Legislative Timeline of Surface Water Management Rate and Discount Structure

Since the creation of the Surface Water Management Program with Ordinance 7590 in 1986, ten ordinances have changed service charge rates for at least one of the program's seven classes. Multiple ordinances have also modified the types and values of discounts available to qualifying parcels. However, the basic structure of the program's rate classes has remained the same. Non-residential parcels are placed into a rate class based on their ratio of impervious surface to total parcel acreage. Residential and Very Light class parcels pay a flat rate service charge, while Light through Very Heavy classes pay service charges based on parcel acreage. The ratios of impervious surface to total parcel size that determine the class for each parcel have not changed since 1986.

Exhibit 2.1 lists the surface water management (SWM) service charge rate classes in place since 1986. Exhibit 2.2 lists each ordinance that has amended an element of the Surface Water Management Program. Exhibit 2.3 displays service charge rates over time.

EXHIBIT 2.1: Surface water management service charge rate classes

Class	Class #	Impervious Surface %	Rate Type
Residential	1	NA	Flat rate service charge
Very Light	2	0 to less than or equal to 10%	Flat rate service charge
Light	3	greater than 10% to less than or equal to 20%	Service charge based on parcel acreage
Moderate	4	greater than 20% to less than or equal to 45%	Service charge based on parcel acreage
Moderately Heavy	5	greater than 45% to less than or equal to 65%	Service charge based on parcel acreage
Heavy	6	greater than 65% to less than or equal to 85%	Service charge based on parcel acreage
Very Heavy	7	greater than 85% to less than or equal to 100%	Service charge based on parcel acreage

Source: King County Code 9.08.070 (C)

EXHIBIT 2.2: Ordinances that revised the Surface Water Management Program since its creation in 1986, with a brief description of impact.

Ordinance	Year	Impact
7590	1986	Created Surface Water Management Program with storm drainage control rates and charges; established seven rate classes based on impervious surface percentage; created discounts for senior/disabled individual-owned residential parcels, open space parcels, educational facilities, and retention/detention facilities
7817	1986	Created a new code title for the Surface Water Management Program
8373	1988	Addressed delinquent charges; set rates for the State Department of Transportation
8626	1988	Addressed annexations; introduced a maximum charge for mobile homes
10187	1991	Clarified terminology, fiscal management, duties of the public works director; increased rates
11015	1993	Addressed annexations; prohibited proration of debt service
13695	1999	Moved functions to Department of Natural Resources and Parks; created rural drainage program
14261	2001	Created 65-10 and pervious surface discounts; clarified retention/detention discount as for flow control or water quality treatment; increased rates
15638	2006	Increased rates
16958	2010	Increased rates
17451	2012	Revised previous flow control, water quality, and pervious surface discounts into four "stackable" discounts with percentage ratio discount values (explained in section 2); increased rates
18401	2016	Increased rates
18836	2018	Increased rates
19543	2022	Increased rates
19847	2024	Increased rates
20005	2025	Increased rates

Source: King County Auditor's Office analysis of King County legislative history

EXHIBIT 2.3: Summary of surface water management service charge rate changes since program creation in 1986.

		RATE CLASS						
Ordinance	**Year**	**1 RESIDENTIAL**	**2 VERY LIGHT**	**3 LIGHT**	**4 MODERATE**	**5 MODERATELY HEAVY**	**6 HEAVY**	**7 VERY HEAVY**
7590	1986	$26.07	$26.07	$60.83	$126.01	$243.33	$308.51	$404.10
10187	1991	$85.02	$85.02	$198.40	$410.98	$793.60	$1,006.16	$1,317.94
14261	2001	$102.00	$102.00	$255.01	$544.02	$918.03	$1,258.05	$1,598.06
15638	2006	$111.00	$111.00	$277.39	$597.85	$1,005.67	$1,363.76	$1,737.74
16958	2010	$133.00	$133.00	$320.61	$702.61	$1,199.36	$1,641.53	$2,046.72
17451	2012	$151.00	$151.00	$363.89	$797.46	$1,361.27	$1,863.37	$2,323.03
18401	2016	$240.44	$240.44	$647.96	$1,251.59	$2,133.78	$2,955.98	$3,669.84
18836	2018	$289.00	$289.00	$803.51	$1,504.04	$2,566.60	$3,575.37	$4,399.10
19543	2022	$323.00	$323.00	$898.04	$1,680.99	$2,868.55	$3,996.00	$4,916.64
19847	2024	$361.00	$361.00	$1,003.69	$1,878.75	$3,206.03	$4,466.12	$5,495.07
20005	2025	$379.00	$379.00	$1,053.74	$1,972.43	$3,365.89	$4,688.81	$5,769.06

Source: King County Auditor's Office analysis of King County legislative history

Appendix 3: Executive Response

King County | Office of the Executive

Executive Girmay Zahilay
Chinook Building, CNK-EX-0800
401 Fifth Avenue, Suite 800
Seattle, WA 98104-2391

August 28, 2026

Kymber Waltmunson
King County Auditor
Room 1033
King County Courthouse

Dear Ms. Waltmunson:

Thank you for the opportunity to review and comment on the proposed audit report "Stormwater: Advancing Fee Structure, Oversight, and Spending Strategy Couple Improve Results". I appreciate your office's acknowledgement of the efforts underway to improve the County's surface water management (SWM) program by the Department of Natural Resources and Parks (DNRP)/Water and Land Resources Division (WLRD) and your recommendations to strengthen that work.

We believe your SWM recommendations can bolster and accelerate actions that improve surface water management for water quality, salmon recovery, farmers, tribes, and the communities we serve. While WLRD can implement most of the recommendations independently, Recommendation 2 requires the Executive to propose legislation that would revise Title 9.08 of King County Code as well as Council approval. We look forward to engaging Council to secure their support for modernizing a SWM fee that is more administratively feasible and better addresses stormwater impacts.

We appreciate your diligence regarding the SWM fee billing and administration to ensure your findings are complete and accurate. Please let us know if there is anything the Executive Office can do to facilitate clearer communication and coordination between your office and County departments.

The Executive Office has worked closely with WLRD throughout this audit. We share their commitment to improving the impact of the Surface Water Management program consistent with the recommendations set forth in the report. Please reach out to WLRD Division Director, Josh Baldi, should there be any questions and/or need for additional follow-up.

Sincerely,

Aaron Rubardt
Budget Director, King County Executive Office

Recommendation 1

The Water and Land Resources Division should conduct a comprehensive rate study of King County's surface water management (SWM) fee and discount structure. The rate study should assess all parcel types, rate classes, and discounts.

The rate study should identify alternative SWM fee and discount structures that are consistent with leading stormwater utility practices and county goals. Alternative fee and discount structures should align with the following principles:

a) SWM fees should be based on measurements of impervious surface area rather than density of development.

b) SWM fees should align with a parcel's stormwater impact and be consistent across all parcel types.

c) Any discounts should result in post-discount fees that are consistent with stormwater impact.

d) Discounts should not be given for required stormwater mitigation elements.

AGENCY RESPONSE

CONCURRENCE	**CONCUR**
IMPLEMENTATION DATE	September 2026 through June 2027
RESPONSIBLE AGENCY	WLRD
COMMENT	Building on its 2025 residential rate study, WLRD has identified the FCS Group as the preferred consultant to conduct a comprehensive rate study. Negotiations with FCS were initiated in mid-August and we expect a contract to be finalized in September. The study is anticipated to take six to nine months to complete. WLRD will include the four principles recommended by the Auditor as part of a broader suite to inform comprehensive study.

Recommendation 2

Using the results of the comprehensive rate study described in Recommendation 1, the King County Executive should propose revisions to Title 9.08 of the King County Code for a new surface water management (SWM) fee and discount structure. The proposed code revisions should ensure King County's SWM fee and discount structure includes the elements specified in Recommendation 1.

The legislative package should include the comprehensive rate study and any additional analysis supporting the development and selection of the preferred model, including the basis for all proposed changes in fee methods, rates, parcel classes, and discounts.

AGENCY RESPONSE

CONCURRENCE **CONCUR**

IMPLEMENTATION DATE June 2028

RESPONSIBLE AGENCY Executive Office

COMMENT Upon completion of the comprehensive rate study, WLRD/DNRP estimates it will take about nine months to review the recommendations of the study and engage with Executive office to draft proposed revisions to Title 9.08 of the King County Code for a new surface water management (SWM) fee and discount structure. WLRD also plans community and tribal engagement as part of this process.

Recommendation 3

The Water and Land Resources Division should develop, document, and implement a process to ensure that mining parcels do not receive surface water management fee discounts without verification that the parcel has met discount requirements.

AGENCY RESPONSE

CONCURRENCE **CONCUR**

IMPLEMENTATION DATE August 2026

RESPONSIBLE AGENCY WLRD and DLS Permitting

COMMENT WLRD and the Department of Local Services' Permitting Division signed on August 28, 2026, an "Interdepartmental Agreement for Mineral Extraction and Related Activities Site Permitting and Discounts." This agreement specifies oversight roles and responsibilities to ensure mining parcels that receive surface water management fee discounts are verified. The Permitting Division performs this role on behalf of the County given that gravel mines effectively have ongoing active clearing and grading permits.

Recommendation 4

The Water and Land Resources Division (WLRD) should develop, document, and implement essential governance elements for the Surface Water Management Program defined in King County Code 9.08.040, including:

a) surface water management (SWM) fund-level goals, objectives, and metrics to measure performance
b) strategy for balancing the work of WLRD's programs and initiatives to achieve Surface Water Management Program goals
c) needs assessment for the Surface Water Management Program
d) prioritization methodology for capital projects and programs that receive SWM funds
e) regular schedule for updating these documents.

AGENCY RESPONSE

CONCURRENCE **CONCUR**

IMPLEMENTATION DATE June 2027

RESPONSIBLE AGENCY WLRD

COMMENT WLRD will institute a decision-making process governed by divisional leadership and managers from the SWM-funded programs as part of the biennial budget process. Specific fund-level goals will be clarified for surface water management program responsibilities that support long-term planning goals consistent with King County Code 9.08.040 and County priorities identified in initiatives such as the Strategic Climate Action Plan, Fish Passage Program, Land Conservation Initiative, salmon recovery plans, etc. WLRD will balance competing goals through a portfolio management approach informed by criteria drawn from King County Code as well as the six-year prioritization framework currently being piloted through the SWM-funded capital programs. This new process will be used to inform WLRD's 2028-29 budget proposal and continuously improved and applied each biennium thereafter.

Recommendation 5

The Stormwater Services Section should specify a target level of service for operations that includes performance expectations that align with community needs, regulatory requirements, and county priorities.

AGENCY RESPONSE

CONCURRENCE **CONCUR**

IMPLEMENTATION DATE April 2027

RESPONSIBLE AGENCY WLRD

COMMENT Stormwater Services is currently developing a Comprehensive Stormwater Management Plan. This plan will identify and plan for regulatory requirements, county priorities, and ensure operations and capital goals align with community needs.

Recommendation 6

The Stormwater Services Section should complete program and project planning work it has begun, including:

a) asset condition assessment and management plan identifying section-wide goals and priorities

b) capital project prioritization tool

c) long-range capital investment plan analyzing gaps between existing resources and resources needed to meet programmatic and capital goals.

AGENCY RESPONSE

CONCURRENCE **CONCUR**

IMPLEMENTATION DATE December 2026

RESPONSIBLE AGENCY WLRD

COMMENT a) Stormwater Services developed an asset management plan with support of HDR Engineering in 2025. This plan detailed steps required to proactively manage the County's stormwater assets.
b) Stormwater Services completed development of a capital prioritization tool in the second quarter of 2026. This tool prioritizes projects based on risk, impact, and opportunity to serve frontline communities.
c). Stormwater Services completed a draft six-year capital investment plan in August 2026. Additional projects are being prioritized during Q4 to complete a ten-year capital investment plan.

Appendix 4: Statement of Compliance, Scope, Objective & Methodology

Statement of Compliance with Government Auditing Standards

We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Scope of Work on Internal Controls

We reviewed internal controls as they relate to control environment and activities, risk assessment, monitoring, and information and communication. In particular, we assessed the extent to which the Water and Land Resources Division (WLRD) has sufficient internal controls to ensure that the surface water management (SWM) fee rate and discount structures align with leading practices and the objectives set for the Surface Water Management Program in King County Code. We assessed controls for directing SWM fee revenues to the most essential efforts for meeting program objectives and reducing the impact of stormwater runoff. We also reviewed risk assessment, control activities, and monitoring of SWM discounts, particularly at mines. The audit identified gaps in each area, which we describe in the audit report.

Scope

This audit examined King County's surface and stormwater activities and its efforts to meet related county equity and environmental goals and to comply with the National Pollutant Discharge Elimination System (NPDES) Phase 1 Municipal Separate Storm Sewer (MS4) Permit. The audit includes information from 2019 to present with a focus on current operations.

Objectives

1. To what extent does WLRD use complete and accurate information about the costs of providing surface and stormwater services when managing priorities for the Stormwater Management Program and setting SWM fees?
2. To what extent does WLRD structure and manage SWM fee discounts to maximize equity and program benefits?

3. To what extent does WLRD take a risk-based and equitable approach to enforcing compliance with stormwater regulations for non-county-owned facilities?

Methodology

To understand how WLRD manages priorities for surface and stormwater management, we reviewed King County Code Title 9 and the SWM fee Protocols, budget justification narratives, a consultant study of flat fee rate categories commissioned by WLRD, and asset management and in-stream facility studies. We reviewed King County's MS4 Permit and associated plans and documents, including non-compliance "G20" notifications from WLRD to the Washington State Department of Ecology (Ecology) and the Administrative Order issued by Ecology to King County in 2023. In addition, we interviewed managers and staff in WLRD's Finance and Administration Section and Stormwater Services Section (SWSS), as well as analysts in King County's Budget Office.

To evaluate the SWM fee rate structure and the fee discount program, we reviewed the legislative record of SWM fee changes back to 1987 and analyzed SWM finance and billing data between 2019 and 2025. We compared the SWM fee rate and discount structures to King County Code 9.08 and leading practices such as the June 2023 Comprehensive Stormwater Rate Structure & Rate Credit Evaluation Report conducted by the State Department of Ecology and the City of Tacoma. We reviewed the Surface Water Design Manual and interviewed SWSS discount administrators and engineering staff. We went on site visits to a high school and a mine, where we walked around with SWSS inspectors for required inspections to view stormwater facilities receiving SWM discounts.

To assess enforcing compliance with stormwater regulations for non-county-owned facilities, we did a special case study of mining properties because their operations can pose environmental risks without stormwater mitigation. We worked with WLRD staff to pull data from the CityWorks system on service requests and work orders relating to mining parcels and analyzed them with respect to both SWM billing data and inspection data from Permits Division staff. While on our site visit to the mine, we spoke with the mine operator and the company's environmental manager to learn about their perspectives.

Appendix 5: List of Recommendations

Recommendation 1

The Water and Land Resources Division should conduct a comprehensive rate study of King County's surface water management (SWM) fee and discount structure. The rate study should assess all parcel types, rate classes, and discounts.

The rate study should identify alternative SWM fee and discount structures that are consistent with leading stormwater utility practices and county goals. Alternative fee and discount structures should align with the following principles:

a) SWM fees should be based on measurements of impervious surface area rather than density of development.

b) SWM fees should align with a parcel's stormwater impact and be consistent across all parcel types.

c) Any discounts should result in post-discount fees that are consistent with stormwater impact.

d) Discounts should not be given for required stormwater mitigation elements.

Recommendation 2

Using the results of the comprehensive rate study described in Recommendation 1, the King County Executive should propose revisions to Title 9.08 of the King County Code for a new surface water management (SWM) fee and discount structure. The proposed code revisions should ensure King County's SWM fee and discount structure includes the elements specified in Recommendation 1.

The legislative package should include the comprehensive rate study and any additional analysis supporting the development and selection of the preferred model, including the basis for all proposed changes in fee methods, rates, parcel classes, and discounts.

Recommendation 3

The Water and Land Resources Division should develop, document, and implement a process to ensure that mining parcels do not receive surface water management fee discounts without verification that the parcel has met discount requirements.

Recommendation 4

The Water and Land Resources Division (WLRD) should develop, document, and implement essential governance elements for the Surface Water Management Program defined in King County Code 9.08.040, including:

a) surface water management (SWM) fund-level goals, objectives, and metrics to measure performance

b) strategy for balancing the work of WLRD's programs and initiatives to achieve Surface Water Management Program goals

c) needs assessment for the Surface Water Management Program

d) prioritization methodology for capital projects and programs that receive SWM funds

e) regular schedule for updating these documents.

Recommendation 5

The Stormwater Services Section should specify a target level of service for operations that includes performance expectations that align with community needs, regulatory requirements, and county priorities.

Recommendation 6

The Stormwater Services Section should complete program and project planning work it has begun, including:

a) asset condition assessment and management plan identifying section-wide goals and priorities

b) capital project prioritization tool

c) long-range capital investment plan analyzing gaps between existing resources and resources needed to meet programmatic and capital goals.

Advancing Performance & Accountability

KYMBER WALTMUNSON, KING COUNTY AUDITOR

MISSION Improve government performance, accountability, and transparency by providing impactful, independent analyses

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The King County Auditor's Office is committed to equity, social justice, and ensuring that King County is an accountable, inclusive, and anti-racist government. While planning our work, we develop research questions that aim to improve the efficiency and effectiveness of King County government and to identify and help dismantle systemic racism. In analysis we strive to ensure that communities referenced are seen, not erased. We promote aligning King County data collection, storage, and categorization with just practices. We endeavor to use terms that are respectful, representative, and people- and community-centered, recognizing that inclusive language continues to evolve. For more information, see the King County Equity and Social Justice Strategic Plan, King County's statement on racial justice, and the King County Auditor's Office Strategic Plan.

ABOUT US The King County Auditor's Office was created by charter in 1969 as an independent agency within the legislative branch of county government. The office conducts oversight of county government through independent audits, capital projects oversight, and other studies. The results of this work are presented to the Metropolitan King County Council and are communicated to the King County Executive and the public. The King County Auditor's Office performs its work in accordance with Government Auditing Standards.

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