HERRERA

TECHNICAL MEMORANDUM

Date: August 14, 2017

To: King Conservation District, K4C-KCD Sustaining Urban Forests Working Group

From: Rebecca Dugopolski, PE, Herrera Environmental Consultants

Subject: Stormwater Utility Rates Supporting Urban Tree and Urban Forest Planning, Planting, and Management

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INTRODUCTION

The King County-Cities Climate Collaboration (K4C) is a collaboration of King County and 13 cities that are working on enhancing the effectiveness of local government climate and sustainability action. K4C program areas include green building, using and producing renewable energy, sustainability outreach and education, and alternative transportation. King Conservation District (KCD) and a subset of K4C cities developed a working group focused on sustaining urban forests. The K4C-KCD Sustaining Urban Forests Working Group (which includes KCD, City of Snoqualmie, City of Normandy Park, City of Burien, City of Sammamish, and recently the City of Kirkland) was interested in developing an ordinance and code language that included urban tree and urban forest planning, planting, and management as a viable stormwater program component, to authorize expenditure of stormwater or surface water utility rates on urban tree and urban forest planning, planting, and management. This memorandum summarizes approaches taken by other Pacific Northwest and East Coast jurisdictions related to this topic and includes an implementation plan for developing municipal code language revisions. This memorandum is organized into the following sections:

- Background
- Documents Reviewed
- Summary of Findings
- Urban Forestry and Stormwater Program Budget Comparison
- Recommendations
- Implementation Plan
- Work Products (attachments):
    - Code Template
    - Ordinance Template
    - Council Report Template

BACKGROUND

City and County stormwater or surface water utility funds support a wide variety of activities related to stormwater management, but are often not well documented in the City/County municipal code language. Several cities and counties are interested in providing clarity to rate

payers regarding the broad range of stormwater management activities that are supported by their stormwater/surface water utility rate.

The cities participating in this working group are required to comply with the National Pollutant Discharge Elimination System (NPDES) Phase II Municipal Stormwater Permit, which includes requirements for public education and outreach, public involvement and participation; illicit discharge detection and elimination; controlling runoff from new development, redevelopment, and construction sites; and municipal operations and maintenance. The NPDES Phase II Municipal Stormwater Permit also includes measures to minimize loss of native vegetation as one of the three primary goals to be addressed during the integration of low impact development (LID) principles into local development-related codes, rules, standards, and enforceable documents that was recently completed by most of the Phase II permittees.

The *2012 Stormwater Management Manual for Western Washington* (SWMMWW), prepared by the Washington State Department of Ecology (Ecology) and amended in 2014, recognizes the importance of preserving native vegetation and retaining trees to provide stormwater flow control benefits such as interception, transpiration, and increased infiltration. Jurisdictions that adopt Ecology's 2012 SWMMWW, as amended in 2014, must allow provisions for providing a flow control credit for retained and newly planted trees. The flow control credit is applied only to trees that meet setback requirements, are protected during construction activities, are viable for long-term retention (i.e., in good health and compatible with proposed construction), and have a canopy overhanging proposed or existing impervious surfaces.

The goal of this project was to review municipal code language and supporting documents from several Pacific Northwest jurisdictions and East Coast jurisdictions with strong urban forestry programs and funding to determine how the linkage between stormwater/surface water utility funding; habitat restoration; and urban tree and urban forest planning, planting, and management is currently being made. This information, and working sessions with the working group, was used to develop a set of work products that can be implemented by those in the working group as well as by other interested jurisdictions in the Pacific Northwest.

Documents Reviewed

Municipal code language and Urban Forest Management Plans from the following jurisdictions were reviewed:

- City of Redmond, Washington
- City of Vancouver, Washington
- City of Everett, Washington
- City of Kirkland, Washington

- City of Tacoma, Washington
- City of Longview, Washington
- City of Portland, Oregon
- City of Fairview, Oregon
- City of Gresham, Oregon
- City of Milwaukee, Wisconsin
- Baltimore County, Maryland

SUMMARY OF FINDINGS

City of Redmond, Washington

The City of Redmond's Urban Forestry program operates with a $435,000 per year budget for maintenance and management activities for trails, street trees, support facilities, restoration-related activities, and support to volunteers (T. Kluver, personal communication, March 28, 2017). The City's Tree Fund is managed by an interdepartmental team composed of staff from Parks and Recreation, Planning and Community Development, and the Natural Resources Division of Public Works. The Tree Fund can be used for planting trees, planting preparation, and work to save existing canopy trees threated by invasive species.

The City of Redmond does not include specific language regarding Urban Forestry as part of their Stormwater Management Utility code (Chapter 13.18); however, their 20-year Forest Management Plan (Green Redmond Partnership 2009) includes the following language:

- "Much of the funding that the Natural Resources Division uses for stream buffer restoration and volunteer events comes from the Stormwater Fund, which is maintained by a standard fee levied on all Redmond residents and businesses as a fee per impervious unit. It is managed by Natural Resources and can be used for stormwater issues, outreach and education, planning, research, or maintaining water quality related to stormwater."

- "The Stormwater Fund can be used for stormwater issues, education, planning, research, or maintaining water quality relating to stormwater. This funding could potentially be directed toward stream or wetland restoration in parks where stormwater management is a concern."

City of Vancouver, Washington

Funding for the City of Vancouver's Urban Forestry Program comes from surface water management fees (97 percent) and compensatory mitigation via a Tree Fund (3 percent) (C. Ray, personal communication, July 6, 2016).

The City of Vancouver does not include specific language regarding Urban Forestry as part of their Stormwater Management – Regulations and Charges code (Chapter 14.09); however, their Urban Forestry Management Plan (Vancouver 2007) includes the following language:

- "In a renewed effort to not only protect the dwindling urban forest but also significantly restore canopy coverage, City Council approved a funding program for Urban Forestry in 2004, utilizing a portion of its surface water management fees in recognition of the green infrastructure and stormwater management benefits of trees."

- "Currently, Public Works supports Urban Forestry through dedication of a portion of the City's surface water management fees. These funds are used specifically to provide City services related to canopy restoration: coordination of contractor and volunteer tree planting efforts, outreach and education to promote environmental stewardship, and enhanced customer service. The use of this funding source is in recognition of the importance of the urban forest for stormwater management functions, water quality protection, and Clean Water Act, Clean Air Act, and Endangered Species Act compliance."

City of Everett, Washington

The City of Everett's Urban Forestry program is currently funded by the Parks Department operating budget; however, one of the long-term funding sources that will be evaluated as part of the 20-Year Forest Management Plan (Green Everett Partnership 2013) includes:

- "Financial nexus establishment between the management of forested parkland as stormwater management infrastructure and for other ecosystem services related to utility infrastructure."

The City of Everett does not currently list allowable expenditures of their surface water management rate in their municipal code (Chapter 14.60).

City of Kirkland, Washington

The City of Kirkland does not include specific language regarding Urban Forestry as part of their Surface Water Utility code (Chapter 15.56); however, their 20-year Forest Restoration Plan (Green Kirkland Partnership 2008) includes the following language:

- "The Surface Water Utility (SWU) is part of the Public Works Department. SWU interests intersect with Green Kirkland Partnership forest restoration efforts that directly contribute to water quality, stormwater management and habitat, especially near streams. Parks will collaborate with SWU when planning restoration events along streams. In return, SWU will provide guidance and support, continue public outreach and education on the importance of forested natural areas to water quality and other Public Works programs, engage volunteers in a water quality monitoring program for lakes and streams such as Forbes Lake, Totem Lake, and Forbes Creek, and conduct city-funded riparian and fish passage habitat improvements."

- Consider increasing "… fees or rates for utility ratepayers for management of forested natural areas as stormwater management (and other ecosystem services) infrastructure."

The City of Kirkland's Surface Water Utility currently supports a half-time (20 hours per week) Urban Forestry position ($47,558) and 50 percent of a full-time Field Arborist position (D. Powers, personal communication, July 13, 2016).

City of Tacoma, Washington

The City of Tacoma's Urban Forestry Program is funded through the storm and surface water sewerage charge. The Storm and Surface Water Sewerage Charge code (Chapter 12.08) does not include specific language regarding Urban Forestry; however, the City's website lists the following as supported by the City's surface water rate:

- Protection of Commencement Bay, Puget Sound and their tributaries from polluted runoff

- Operation and maintenance of stormwater structures, including 500 miles of pipe, 22,000-plus catch basins (storm drains), four pump stations and numerous detention ponds/structures protecting the area from flooding

- Innovative stormwater treatment systems

- Stormwater system inspections and monitoring

- Habitat restoration in wetlands, tidelands and uplands

The City of Tacoma's Tree Coupon Program for residential trees is also supported by the City's surface water rate. The Tree Coupon Program began in 2011 and is now in its fourth season (2015–2016).

City of Longview, Washington

The City of Longview's Urban Forestry Program operates with a $1,191,560 budget; $750,000 (63 percent) of which comes from the Storm Water Utility fund (C. Nedved, personal communication, September 22, 2016).

The City of Longview does not include specific language regarding Urban Forestry as part of their Stormwater Utility code (Chapter 15.80). The municipal code broadly states that the "storm water utility shall have authority and responsibility … for planning, design, construction, maintenance, administration, and operation of all city stormwater conveyances and facilities."

City of Portland, Oregon

The City of Portland's Urban Forestry Program is funded primarily through the general fund and grants; however, a portion of the Bureau of Environmental Services' "Grey to Green Initiative" uses sewer and stormwater fees to fund natural area acquisition and watershed revegetation, including tree planting (Portland State University 2010).

The City of Portland defines stormwater management services in their municipal code (Chapter 17.36) as the following:

- "Stormwater Management Services" means services and actions used to collect, convey, detain, retain, treat or dispose of stormwater. These services include managing stormwater runoff from public streets, mitigating flooding, preventing erosion, improving water quality of stormwater runoff, collecting and conveying stormwater runoff from private properties when runoff exceeds the capacity of private facilities to manage stormwater onsite, mitigating impacts to natural habitats caused by stormwater runoff, and protecting properties and natural habitats from hazardous soils and materials that are discharged from private properties and public rights-of-way."

City of Fairview, Oregon

The City of Fairview funds their Urban Forestry Program through stormwater fees and the City's general fund (Portland State University 2010). Urban forestry is not explicitly listed as an approved use for the storm drainage utility fund in the City's municipal code (Chapter 13.30); however, the language included in the City's code may be a useful model for this project. The City's Storm Drainage Utility Fund section of the municipal code states the following:

- "… money in the drainage utility fund shall be used for planning, design, construction, operation, maintenance and administration of storm drainage facilities, including repayment of indebtedness, and for all expenses for the operation and management of the storm drainage utility. Expenditures from this fund need not be identified to any particular revenue source."

City of Gresham, Oregon

The City of Gresham funds their Urban Forestry Program through stormwater fees, development fees, and grants (Portland State University 2010). The 2007–2008 operating budget for urban forestry was $600,000 (Portland State University 2010). Urban forestry is not explicitly listed as an approved use for the stormwater drainage utility fund in the City's municipal code (Chapter 3.60); however, the language included in the City's code may be a useful model for this project. The City's Storm Drainage Utility Fund municipal code states:

- "Money in the stormwater utility fund shall be used for planning, designing, and constructing the public stormwater system; for the regulation, maintenance, and administration of the public stormwater system; for providing all stormwater services, including the repayment of any indebtedness incurred before or after the effective date of this ordinance; and for all expenses related to the operation and management of the stormwater utility."

- Stormwater service is defined as "the operation of the city's stormwater utility in providing programs and facilities for maintaining, improving, regulating, collecting, and managing stormwater quantity and quality within the city's service area. This includes meeting regulatory requirements for protecting, monitoring, and reporting on water quality and on species listed under the Endangered Species Act."

City of Milwaukee, Wisconsin

The City of Milwaukee has been identified as a leader in funding their urban forestry program through its stormwater management fee (Gulick, undated). The City approved a small increase to their stormwater management fee and earmarked it for the urban forestry program. Urban forestry is not explicitly listed as an approved use for the stormwater management charge in the City's municipal code (Chapter 309); however, the language included in the City's code may be a useful model for this project. The City's Stormwater Management Charge municipal code states:

- "In order to protect the health, safety and welfare of the public, the common council establishes a storm water management charge to support operation and maintenance of the storm water management components of the city sewerage system. The city may use storm water management charge revenues to, without limitation by reason of enumeration, acquire, construct, lease, own, operate, maintain, extend, expand, replace, clean, dredge, repair, conduct, manage and finance such facilities as are deemed to be proper and reasonably necessary for management of storm water and other surface water discharge within the city. The common council further finds that those elements of the storm water management system that provide for the collection and disposal of storm water are of benefit to all real property within the city of Milwaukee, including property not presently served by that system. The costs of operating and maintaining the storm water management system and financing necessary repairs, replacement,

improvements and extensions of the system should, to the maximum extent possible, be allocated in direct relationship to contributions of storm water to the system."

Baltimore County, Maryland

Baltimore County's Urban Forestry Program receives funding through the stormwater remediation fee (Article 34, Title 4) does not include specific language regarding Urban Forestry; however, the County's website lists the following activities as supported by the stormwater remediation fund:

- Street sweeping
- Storm drain cleaning
- Stormwater facility inspection, maintenance and upgrades
- Shoreline stabilization
- Urban canopy tree planting
- Reforestation
- Stream restoration
- Monitoring, planning and programs

URBAN FORESTRY AND STORMWATER PROGRAM BUDGET COMPARISON

Table 1 was developed to compare the Urban Forestry Program budget, Stormwater/Surface Water Utility budget, Stormwater/Surface Water Utility rate for single-family residential properties, and population for cities where funding information was readily available and through personal communication with a few local jurisdictions.

Table 1. Urban Forestry and Stormwater/Surface Water Program Budget Comparison.

City	Urban Forestry Program Annual Budget	Storm/ Surface Water Utility Operating Budget (2015–2016)[a]	Storm/Surface Water Utility Single-Family Residential Rate (2016)	Population (2010 Census)
Redmond, WA	$435,000[b]	$29,941,265	$16.56	54,144
Vancouver, WA	$653,864[c]	$25,434,839	$8.79	161,791
Kirkland, WA	Not applicable; however does support 1 FTE[d]	$23,888,452	$16.87	48,787
Longview, WA	$1,191,560[e]	$6,484,000	$10.09	36,848
Gresham, OR	$600,000[f]	$6,025,910	$10.34	105,594

[a] Note: Operating budget does not include funding for Capital Improvement Program (CIP) projects.

[b] Source: T. Kluver, personal communication, March 28, 2017.

[c] Source: C. Ray, personal communication, July 6, 2016.

[d] Source: D. Powers, personal communication, July 13, 2016.

[e] Source: C. Nedved, personal communication, September 22, 2016.

[f] Source: Portland State University 2010.

RECOMMENDATIONS

Based on the jurisdictional code review for this memorandum, no specific examples linking urban forestry and stormwater utilities were found in the municipal code. Although urban forestry or associated components were not specifically listed as an allowable expenditure for the stormwater utility fee in the municipal code language, several Urban Forest Management Plans, studies, or jurisdictional websites listed the activities summarized in Table 2 as allowable stormwater utility expenditures related to urban forestry. None of the municipal code language reviewed explicitly prohibited stormwater utility fees being used to support urban forestry programs.

Table 2. Allowable Storm and Surface Water Expenditures Related to Urban Forestry.

Activity	Redmond, WA	Vancouver, WA	Kirkland, WA	Tacoma, WA	Portland, OR	Baltimore County, MD
Public Outreach and Education	X	X	X			
Stream or Wetland Restoration (Riparian Planting)	X	X	X	X		X
Watershed Revegetation					X	
Natural Area Acquisition					X	
Reforestation						X
Tree Planting		X		X	X	X

Code language from the City of Fairview, Oregon; City of Gresham, Oregon; or the City of Milwaukee, Wisconsin, were considered as potential models for listing allowable uses of a stormwater utility fee. All three jurisdictions provided a list of allowable uses (although fairly general in nature) for the stormwater utility fund.

Implementation Plan

The working group developed a set of implementation tools that can be modified and tailored to specific City/County needs. The three implementation tools developed as part of this project and included as appendices to this memorandum include:

1. Code Template
2. Ordinance Template
3. Council Report Template

The working group is also developing supporting tools to assist City/County staff with communicating and proposing the code, ordinance, and council report to decision makers and citizens in their communities.

Code Template

The code template developed for this project is included as Appendix A. Two levels of municipal code were developed: minimum recommended language and expanded language. The minimum recommended language includes a shorter purpose statement, a streamlined list of regulatory requirements, and fewer stormwater management services than the expanded

language. It was anticipated that this more streamlined code may be easier for some City/County councils to review and approve. The expanded language includes a more robust purpose statement, a more detailed list of regulatory requirements, and additional stormwater management services. Additional items in the expanded language are shown in blue text to highlight the differences between the two code templates.

Alternate terminology (City versus County, Stormwater versus Surface Water Utility Fund) is included in brackets in both code examples. Yellow highlighted text should be filled in by the City or County with the appropriate municipal code section reference. Both code templates include recommended language and terminology, but should be tailored by the City/County for consistency with terminology used by that jurisdiction.

Ordinance Template

The ordinance template developed for this project is included as Appendix B. A single ordinance was developed that includes two optional whereas statements for a more robust ordinance. Similar to the code template, alternate terminology is included in brackets; yellow highlighted text should be filled in by the City or County; and light blue text designates expanded language. The City/County will need to provide a local definition of urban tree and urban forest planning, planting, and management. A whereas statement was also included for each City/County to add specific tailored language regarding the importance of urban tree protection and management in their jurisdiction (e.g., Tree City USA designation, adoption of an Urban Forestry Management Plan).

Council Report Template

Several jurisdictions in the working group typically provide a short council report or memorandum along with request for code changes. A one-page council report was also developed for this project to serve this purpose and is included as Appendix C. Similar to the code template and ordinance, alternate terminology is included in brackets; yellow highlighted text should be filled in by the City or County; and light blue text designates expanded language. Each of the statements in the council report could be expanded upon for a longer council report or memorandum. For a more technical memorandum, specific values regarding tree leaf canopy rainfall retention could be added from a Stormwater Magazine article titled "Give Me the Numbers: How trees and urban forest systems really affect stormwater runoff" published in the October 2016 issue (Teague and Kuehler 2016). Specific information regarding local requirements and the importance of trees could be added for an expanded council report or memorandum.

REFERENCES

Green Everett Partnership. 2013. Green Everett Partnership 20-Year Forest Management Plan. Prepared by the City of Everett Parks and Recreation Department, Forterra, and American Forestry Management, Inc. March 2013.

Green Kirkland Partnership. 2008. 20-Year Forest Restoration Plan. Prepared by the City of Kirkland, Cascade Land Conservancy, and King Conservation District. March 2008.

Green Redmond Partnership. 2009. 20-Year Forest Management Plan. Prepared by the City of Redmond Parks and Recreation Department, Cascade Land Conservancy, and International Forestry Consultants. April 2009.

Gulick, J. Undated. Funding Your Urban Forest Program. A Guide for New and Seasoned City Foresters. City Trees.

Portland State University. 2010. Regional Urban Forestry Assessment and Evaluation for the Portland-Vancouver Metro Area. Prepared by Audubon Society of Portland and Portland State University's Department of Environmental Science and Management. June 2009, revised June 2010.

Teague, A. and E. Kuehler. 2016. Give Me the Numbers: How trees and urban forestry systems really affect stormwater runoff. Stormwater Magazine. October 5, 2016.

Vancouver. 2007. City of Vancouver Urban Forestry Management Plan. Prepared by the City of Vancouver and Conservation Technix, Inc. December 2007.

APPENDIX A

Code Template

CODE TEMPLATE

STORMWATER UTILITY RATES SUPPORTING URBAN TREE AND URBAN FOREST PLANNING, PLANTING, AND MANAGEMENT

Minimum Recommended Language

[*Alternate terminology is included in brackets*]

XX.XX.XXX Stormwater [*or Surface Water*] Utility Fund

A. In order to protect the health, safety, and welfare of the public; collect, convey, manage, and mitigate the quantity and quality of stormwater runoff; and meet the regulatory requirements of the National Pollutant Discharge Elimination System municipal stormwater permit, a Stormwater *[or Surface Water]* Utility Fund has been established to support City [*or County*] stormwater management activities.

B. The City *[or County]* may use Stormwater [*or Surface Water*] Utility fund revenues for planning, design, construction, operations and maintenance, replacement, and administration of the public stormwater system. Stormwater management services include, but are not limited to, public education and outreach; illicit discharge detection and elimination; stormwater site plan review; construction inspections; stormwater facility inspections; habitat restoration; and urban tree and urban forest planning, planting, and management.

Expanded Language

[*Additional terms are shown in blue text, alternate terminology is included in brackets*]

XX.XX.XXX Stormwater [*or Surface Water*] Utility Fund

A. In order to protect the health, safety, and welfare of the public; collect, convey, manage, and mitigate the quantity and quality of stormwater runoff; mitigate flooding; prevent erosion; and meet the regulatory requirements of the National Pollutant Discharge Elimination System municipal stormwater permit, Clean Water Act, Clean Air Act, Endangered Species Act, Shoreline Master Program, and the City [*or County*] critical areas ordinance; a Stormwater *[or Surface Water]* Utility Fund has been established to support City [*or County*] stormwater management activities.

B. The City *[or County]* may use Stormwater [*or Surface Water*] Utility fund revenues for planning, design, construction, operations and maintenance, replacement, acquisition, and administration of the public stormwater system. Stormwater management services include, but are not limited to, public education and outreach; illicit discharge detection and elimination; stormwater site plan review; construction inspections; stormwater facility inspections; design and installation of innovative treatment systems to reduce urban stormwater pollutant concentrations and runoff volumes; stormwater monitoring; street sweeping; shoreline stabilization; habitat restoration; urban tree and urban forest planning, planting, and management; and urban tree canopy assessment and monitoring.

APPENDIX B

Ordinance Template

ORDINANCE TEMPLATE

STORMWATER UTILITY RATES SUPPORTING URBAN TREE AND URBAN FOREST PLANNING, PLANTING, AND MANAGEMENT

ORDINANCE NO. XXXX

AN ORDINANCE of the City of XXX [*or County*], Washington, amending XXX to list specific activities that can be supported by the City [*or County*] Stormwater *[or Surface Water]* Utility Fund.

WHEREAS, the Stormwater *[or Surface Water]* Utility Fund supports a wide variety of activities related to stormwater management; and

WHEREAS, the City [*or County*] wants to provide clarity to rate payers regarding the broad range of stormwater management activities that are supported by their Stormwater *[or Surface Water]* Utility rate; and

WHEREAS, the City [*or County*] is required to comply with the National Pollutant Discharge Elimination System (NPDES) Phase II *[or Phase I]* Municipal Stormwater Permit, which includes requirements for public education and outreach; public involvement and participation; illicit discharge detection and elimination; controlling runoff from new development, redevelopment, and construction sites; and municipal operations and maintenance; and

[optional: **WHEREAS**, the NPDES Phase II *[or Phase I]* Municipal Stormwater Permit and included measures to minimize loss of native vegetation as one of the three primary goals to be addressed during the integration of low impact development principles into local development-related codes, rules, standards, and enforceable documents]

[*optional:* **WHEREAS**, the Washington State Department of Ecology recognizes that urban trees provide environmental benefits such as energy conservation, improved air quality, carbon sequestration, reduced heat island effect, pollutant removal, and habitat preservation or formation; and]

WHEREAS, the Washington State Department of Ecology Stormwater Management Manual for Western Washington recognizes the importance of preserving native vegetation and retaining trees to provide stormwater flow control benefits such as interception, transpiration, and increased infiltration; and

WHEREAS, several Pacific Northwest jurisdictions have recognized the importance of trees in relation to stormwater benefits and have designated a portion of their Stormwater *[or Surface Water]* Utility Fund to support urban tree and urban forest planning, planting, and management,

WHEREAS, several Pacific Northwest jurisdictions have recognized the impacts from stormwater runoff on surface water quality and have designated a portion of their Stormwater *[or Surface Water]* Utility Fund to support habitat restoration [*optional:* and shoreline stabilization] activities,

WHEREAS, the City [*or County*] defines urban tree and urban forest planning, planting, and management as XXX

WHEREAS, the City [*or County*] recognizes the importance of urban tree and urban forest planning, planting, and management [*optional:* through its Tree City USA designation and the adoption of an Urban Forestry Management Plan [*or Forest Management Plan, Forest Restoration Plan*]]

NOW, THEREFORE, THE CITY [*or County*] **COUNCIL OF XXXX, WASHINGTON DOES HEREBY ORDAIN AS FOLLOWS:**

Amend Chapter XX of the City [*or County*] **code. Chapter XX is hereby amended as follows:**

[*insert Stormwater Utility Rates Supporting Urban Forest Planning, Planting, and Management code template with preferred language here*]

APPENDIX C

Council Report Template

COUNCIL REPORT TEMPLATE

TO: XXXX, City *[or County]* Council

FROM: [name], [department]

DATE: [date]

SUBJECT: Stormwater *[or Surface Water]* Utility Rates Supporting Urban Tree and Urban Forest Planning, Planting, and Management

Background

The 2012 Stormwater Management Manual for Western Washington (SWMMWW), prepared by the Washington State Department of Ecology (Ecology) and amended in 2014, recognizes the importance of preserving native vegetation and retaining trees to provide stormwater flow control benefits such as interception, transpiration, and increased infiltration. In addition, the K4C-KCD Sustaining Urban Forests Working Group (comprising King Conservation District [KCD] and the Cities of Snoqualmie, Normandy Park, Burien, and Sammamish) supports the adoption of municipal code language that identifies urban forestry programs as a viable stormwater *[or surface water]* utility program component and, by extension, authorizes expenditure of stormwater *[or surface water]* utility funding on habitat restoration and urban tree and urban forest planning, planting, and management.

Analysis

Jurisdictions that adopt Ecology's 2012 SWMMWW, as amended in 2014, must allow provisions for providing a flow control credit for retained and newly planted trees. The flow control credit is applied only to trees that meet setback requirements, are protected during construction activities, are viable for long-term retention (i.e., in good health and compatible with proposed construction), and have a canopy overhanging proposed or existing impervious surfaces.

The 2012 Low Impact Development Technical Guidance Manual for Puget Sound stated that the annual stormwater reduction benefits from urban trees (dollars per gallon on construction and maintenance of stormwater facilities) ranged from approximately $37,000 to $496,000.

Urban trees have been shown to retain greater rainfall volume than trees in forests due to the greater leaf area of open-grown trees. Urban trees can retain as much as 80 percent of rainfall in regions with relatively light rainfall intensity and volume, such as the Pacific Northwest. Tree leaf canopy also delays the passage of water to the ground for less intense rainfall events from minutes to hours. Urban tree canopy assessment can help to determine the quantitative benefits of the existing tree canopy cover and set goals for future local ordinances, regulations, and comprehensive planning efforts.

Several jurisdictions in the Pacific Northwest, including Redmond, Vancouver, Tacoma, and Longview, Washington, and Gresham, Fairview, and Portland, Oregon, have recognized the importance of trees in providing stormwater benefits and currently support all or a portion of their urban forestry programs through stormwater/surface water utility rates.

Recommendation

The [department] recommends that the City [*or County*] Council approve Ordinance XXXX and encourages the Mayor/Commissioners to sign.

Budget

No funding is associated with this ordinance. However, the benefits of the City's [*or County's*] existing tree canopy could be further studied to help establish a baseline for quantifying the benefits of future urban tree and urban forest planning, planting, and management.