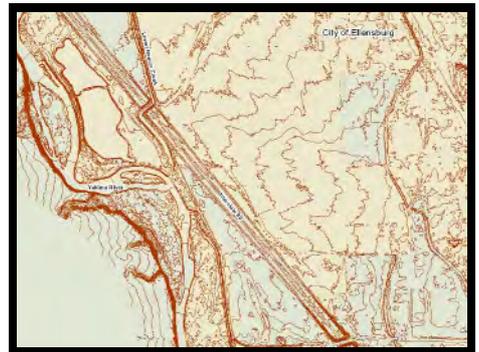


City of Ellensburg Stormwater Program Implementation Plan



Submitted to:



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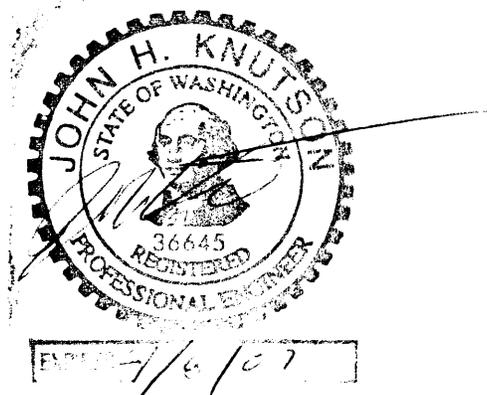
Acknowledgements

City of Ellensburg Stormwater Program Implementation Plan

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Section I—Background

As the City of Ellensburg (City) addresses the requirements and deadlines of an NPDES Phase II Permit, it will be important that tools be available to help the City know what needs to be done each year and track the status of what is being successfully implemented. A detailed breakdown (matrices) of required annual NPDES activities has been prepared for the City. The detailed annual listing of required activities, combined with estimates of needed equipment, staffing, and funding, represents an “Implementation Plan” that the City can use to track what needs to be done in any given year and make judgments about the resources needed to meet the requirements. The Implementation Plan matrices will also aid in: (1) tracking program implementation, (2) preparing the City’s required NPDES Phase II Stormwater Management Program, and (3) preparing and submitting required annual NPDES Phase II reports to the Washington State Department of Ecology (Ecology).

Along with the detailed description of annual activities, the Implementation Plan also discusses the annual funding and staffing needed to achieve regulatory compliance for the next five years (the term of the NPDES Phase II Permit). The activities described in the Implementation Plan address the February 2006 version of Ecology’s draft NPDES Phase II General Permit for Eastern Washington, assuming no stormwater requirements related to Total Maximum Daily Loads (TMDL) exists. Changes to the General permit may occur between the February 2006 version and the final permit (expected December 2006). Therefore, it is important that the City track the development of the NPDES Phase II Permit and modify their implementation approach as needed once the final permit is issued.

The Implementation Plan developed for the City represents the culmination of various work and related analyses performed to date. The work conducted as part of this process included: (1) documentation of the City’s existing stormwater program activities, services, and levels of funding; (2) a review of the most current stormwater requirements through a regulatory assessment; (3) performing a regulatory “gap analysis” to identify enhanced or new activities required for compliance; (4) development of cost estimates for enhanced or new activities, equipment, and projects; and (5) an evaluation of resource allocation, including staffing. The process is described further in Section 2.

Section 2—Summary of Stormwater Program Definition Process

The City's existing stormwater program has been documented based on various sources of data and information provided by the City. Information provided by the City included organizational charts, responsibility matrices, annual budgets, staff salaries and benefits, stormwater related ordinances, drainage standards, permit review fee structure, maps, inventories of existing storm system facilities and infrastructure, and other related information. A "stormwater program self-assessment questionnaire form" was also developed and used to establish a baseline understanding of the City's existing stormwater management activities and priorities. The questionnaire sought information about existing City activities related to the regulatory requirements, as well as existing equipment, capital project needs, and estimates of current expenditures. The questionnaire also asked whether or not the City believes that a new funding source is needed to pay for existing and new stormwater activities. A meeting was held with City staff on August 23, 2006 to review and complete the questionnaire form. A copy of the stormwater questionnaire with responses provided by City staff is attached (Appendix A). Note that more detail on existing stormwater program costs was provided after completion of the questionnaire and that the City believes that new funding will be needed. This additional detail is shown in the City's stormwater program gap analysis (Appendix B).

Local receiving water issues (303(d) listings, TMDLs, etc.) and other issues that may affect stormwater management requirements were downloaded from various agency sources and reviewed.

Section 3—Summary of Regulatory Gap Analysis Process and Results

The stormwater regulatory assessment was conducted based on review of the most current version of the NPDES Phase II Permit, along with guidance provided in the Model Municipal Program for Eastern Washington. Information about the City’s existing stormwater program activities, equipment, capital improvement projects, and funding levels were compared to the regulatory requirements to identify the “gap” between what is currently being done and what will need to be done each year to ensure compliance. The gap analysis and cost estimating process also considered additional activities and resources that will be needed to comply with the NPDES Phase II requirements, including funding program establishment and management and reserve fund build-up.

The detailed results of the Gap Analysis process are provided in Appendix B, and a brief summary is presented below for each major regulatory requirement.

Public Education and Outreach

Regulatory Requirements

The City must develop and implement a formal Public Education and Outreach (PE&O) Program aimed at distributing educational materials to the community about the impacts of stormwater discharges to water bodies and the steps that can be taken to reduce pollutants in stormwater. The City’s outreach and educational efforts must be targeted and presented to specific audiences within the community, including the general public, businesses, design professionals, contractors, developers, and City staff.

Status of Existing Activities and Needs

The City currently does not distribute stormwater educational materials to the community as part of a formal PE&O program. Past activities include limited storm drain stenciling with local Boy Scout groups, but no ongoing program is currently in place. The City will need to develop a PE&O strategy, identify target audiences within the community, and begin implementing the program. Education and outreach efforts recommended include distribution of stormwater brochures, storm drain stenciling with local volunteer groups, classroom education, presentations to local civic groups, and development of a stormwater webpage. City staff, local contractors, and design professionals will need to be educated on new ordinances, technical design standards, requirements for stormwater site plans and sediment and erosion control plans, stormwater Best Management Practices (BMPs), etc. It is expected that the City will coordinate with others as it implements the PE&O program.

Section 3—Summary of Regulatory Gap Analysis Process and Results

Continued

Pubic Involvement and Participation

Regulatory Requirements

The City must adopt a program or policy directive to create opportunities for the public to participate in the decision making process involving the development, implementation, and update of the City's Stormwater Management Program. The Pubic Involvement and Participation (PI&P) Program implemented by the City must comply with applicable state and local public notice requirements, and must also include provisions for consideration of public comments.

Status of Existing Activities and Needs

The City has not adopted an official public involvement program or policy specifically for stormwater. Opportunities for public and stakeholder participation in the development and implementation of the SWM Program may include serving on stormwater advisory panels (e.g., City's Environmental Commission), local committees, attending public hearings, participation in the development and adoption of regulatory ordinances and other required program elements, participation in volunteer opportunities, or other similar activities. The City may want to initiate pubic/stakeholder involvement early in the program development process to coincide with the development of ordinances and other related activities such as the development of a dedicated funding mechanism. Additional information and involvement efforts to be developed by the City include distributing news releases to local papers and posting an updated version of the SWM Program on the City's stormwater webpage. The City has the flexibility to choose from an array of PI&P approaches based on what is expected to work in the community.

Illicit Discharge Detection and Elimination

Regulatory Requirements

The City must develop, implement, and enforce a program to detect and eliminate illicit discharges into its MS4. This element of the SWM Program requires that the City: (1) develop and adopt an ordinance that prohibits non-stormwater (illicit) discharges and authorizes enforcement actions; (2) develop a map of the MS4, showing the location of all known connections to the MS4, outfalls, and receiving waters; (3) prioritize receiving waters and conduct field assessments; (4) develop procedures for characterizing illicit discharges, spills, or illegal dumping, and procedures for tracing and removing sources of illicit discharges; (5) establish a hotline for pubic reporting of spills and other illicit discharges and

Section 3—Summary of Regulatory Gap Analysis

Process and Results

Continued

maintain records of calls and follow-up actions taken; (6) implement procedures for program evaluation and assessment; and (7) provide adequate training to municipal staff.

Status of Existing Activities and Needs

The City does have some existing regulatory language that regulates stormwater and other discharges to the sanitary sewer. Streams within the City have been visually inspected, but no formal process exists for documenting findings, ensuring follow-up activities, enforcement, or record keeping. Source tracing and removal activities are limited and conducted on an as-needed basis. The City does have a fairly complete map of its MS4, including an inventory of existing storm system facilities and infrastructure. The City needs to adopt and enforce an ordinance specifically prohibiting non-stormwater (illicit) discharges to its MS4. A written IDDE Program plan needs to be developed and implemented to address the requirements stated above.

Construction Site Stormwater Runoff Control

Regulatory Requirements

The City must develop, implement, and enforce a program to reduce pollutants in stormwater runoff to its MS4 from construction activities, including private and public projects. This element of the SWM Program requires that the City: (1) develop and adopt an ordinance that requires erosion and sediment controls during construction-phase work, including sanctions to ensure compliance; (2) implement procedures for site plan review, including review of Stormwater Pollution Prevention Plans (SWPPPs) prior to construction; (3) implement procedures for site inspection and enforcement of construction stormwater pollution control measures; (4) provide adequate training for all permitting, planning, review, inspection, and enforcement staff; and (5) maintain records of activities related to site plan review, inspection, and enforcement.

Status of Existing Activities and Needs

Storm drainage plans and calculations are required by the City as part of their review and approval process; however, (SWPPPs) and erosion and sediment control (ESC) plans are not specifically required or reviewed at this time. In addition, ESC BMPs installed at construction sites are currently not inspected during required inspections. The City's existing ordinance relating to storm drainage standards (Section 4, Public Works Development Standards) needs to be updated and the standards enhanced to ensure consistency with (1) the minimum technical requirements for development and redevelopment specified in the final General NPDES II permit and (2) Ecology's Stormwater Management Manual for

Section 3—Summary of Regulatory Gap Analysis

Process and Results

Continued

Eastern Washington (SMMEW). Training will be needed to educate staff on the new ordinances, design standards, BMPs, inspection and enforcement procedures, record keeping, etc.

Post-Construction Stormwater Management for New Development and Redevelopment

Regulatory Requirements

The City must develop, implement, and enforce a program to address post-construction stormwater runoff to its MS4 from private and public new development and redevelopment projects. This element of the SWM Program requires that the City: (1) develop and adopt an ordinance that requires post-construction stormwater controls, including requirements for runoff treatment, flow control, source control, and ongoing long-term operation and maintenance of approved BMPs; (2) implement procedures for site plan review, including review of Stormwater Site Plans prior to construction to ensure that plans include stormwater pollution prevention measures; (3) implement procedures for site inspection and enforcement of post-construction stormwater control measures; (4) provide adequate training for staff; and (5) maintain records.

Status of Existing Activities and Needs

The City's existing ordinance relating to storm drainage standards does address post-construction stormwater management. However, the ordinance and existing standards need to be updated to meet NPDES Phase II requirements. Storm drainage plans are currently reviewed and post-construction inspections are performed during and after construction, but only on public projects. Inspections will need to extend to private projects as well. Required new and on-going staff training will be needed but is assumed to be integrated with the construction stormwater management training.

Pollution Prevention and Good Housekeeping for Municipal Operations

Regulatory Requirements

The City must develop and implement an operation and maintenance program (O&M Plan) aimed at preventing or reducing pollutant runoff from municipal facilities and/or activities. The O&M Plan shall include appropriate pollution prevention/good housekeeping (PP&GH) practices for various municipal operations (e.g., storm system maintenance, municipal building maintenance, parks and open space maintenance, etc.), and shall include

Section 3—Summary of Regulatory Gap Analysis

Process and Results

Continued

a schedule of inspections and record keeping requirements. In addition, the City must develop and implement a formal training program for all staff whose job functions may impact stormwater quality.

Status of Existing Activities and Needs

The City has a fairly aggressive street sweeping program in place. In addition, the existing operation and maintenance program likely meets the regulatory requirements for storm system maintenance. However, the current activities and policies need to be documented into a formal O&M Manual. In addition, numerous other City operation and maintenance activities (e.g., parks, municipal buildings, stormwater control facilities, etc.) need to be examined and modified as needed to protect water quality. A documented training program needs to be established.

Compliance with Total Maximum Daily Load Allocations

Regulatory Requirements

Ecology conducted a review of all TMDLs approved by EPA before February 15, 2006 to determine whether stormwater, including municipal stormwater sources, were identified in the TMDLs. Ecology did not identify any TMDLs with established load or waste load allocations for municipal stormwater discharges covered under the permit. Since Ecology has not identified any TMDLs with more specific requirements than those found in the NPDES II permit, compliance with the permit constitutes compliance with applicable TMDLs. However, the City is encouraged to participate in the development of local TMDLs to ensure that stormwater impacts are responsibly addressed and help control potential future costs.

Monitoring and Program Evaluation Requirements

Regulatory Requirements

Although water sampling or other testing is not specifically required during the first permit term, the City must annually report any stormwater monitoring or studies and investigations conducted by, on behalf of, or reported to the City. The City must also perform an annual assessment of the appropriateness of the BMPs identified for each SWM Program component. Further, the City must prepare and plan to implement future stormwater and SWM Program effectiveness monitoring.

Section 3—Summary of Regulatory Gap Analysis

Process and Results

Continued

Status of Existing Activities and Needs

These requirements will be fulfilled as the SWM Program is further developed and implemented. The City is encouraged to sponsor or participate with local agencies conducting routine or special water-quality studies (e.g., local conservation district). The City will need to develop, implement, and document a stormwater program monitoring and evaluation system.

Reporting and Record Keeping Requirements

Regulatory Requirements

The City is required to prepare and submit annual reports to Ecology. The reports must include the most current version of the City's SWM Program and status of compliance with the various conditions outlined in the permit. The annual reports must include the status of implementation of each SWM Program component, an assessment of the City's progress in meeting the minimum performance standards, a description of activities implemented (number and type of inspections, enforcement actions, PE&O activities, and illicit discharges detected and eliminated), and other requirements.

Status of Existing Activities and Needs

The City will need to develop and implement a formal on-going process for gathering, recording, maintaining, and using information to track the development and implementation of their SWM Program. Designated staff will need to itemize the types of record keeping needed for the various program components, meet with various departments/divisions to assess needs for new or enhanced processes, create record keeping forms and protocols, and work with staff at various levels to implement the process.

Section 4—Detailed Annual Stormwater Program Implementation Matrices

The City’s stormwater program activities can be divided into the following major categories: (1) NPDES Phase II requirements, (2) NPDES Equipment, (3) Capital Projects, and (4) Stormwater Program Funding Activities.

A detailed matrix of required annual stormwater activities is presented in Appendix B as part of the Gap Analysis. For convenience, a summary table has been provided for each of the requirements and the City’s expected activities over the 5-year permit term (Appendix C). Appendix C is in a check list format to assist the City in determining what needs to be done for a particular activity in a given year and to track the status of program implementation over time.

As discussed earlier, the annual matrices are based primarily upon the formal public comment draft NPDES Phase II General Permit for Eastern Washington. However, professional judgment and experience with similar projects has been used to “fill in the blanks” when necessary, such as describing the intermediate steps necessary to meet regulatory deadlines. The activities in the matrices reflect what NPDES II requires and when, not what the City may already be doing. In some cases, the City has already at least partially met NPDES requirements. It should also be pointed out that the schedule developed for the required activities generally reflects the minimum required timeframes (deadlines) for implementation over the 5-year term of the permit. However, some activities, such as ordinance development and adoption, will be started in earlier years based on anticipated level-of-effort, expected timeframes, and local preferences.

Section 5—Summary of Resources Needed for Ellensburg’s Updated Stormwater Program

Annual Revenue Needs

The estimated annual revenue for implementing the City of Ellensburg’s stormwater program over the 5-year term of the permit (2007-2011) is summarized in Table 1. The table includes a summary of estimated annual costs for each program area category, total annual program costs, and total 5-year program cost. Table 1 also includes a breakdown in revenue needed for the following major areas: (1) equipment; (2) capital projects; (3) staff, fees, overhead, and services; (4) reserve fund buildup; and (5) revenue from development review fees versus other sources. A detailed listing of the estimated annual costs for each of the required activities is presented in the Implementation Plan matrices in Appendix B.

The following list of assumptions was used in developing costs:

- A stormwater utility will be established in Permit Year 1; the effort to establish and administer a utility is included in the annual Implementation Plan matrices.
- The development of required ordinances is initiated early in Permit Year 1 based on local input. It is assumed to take at least two years to develop ordinances, involve the public/stakeholders, complete legal review, coordinate internally, complete adoption, and revise local codes.
- Currently funded activities, such as storm system maintenance and street sweeping, will be gradually phased-in to the stormwater program during Permit Years 2-5 and will be fully funded by Permit Year 5.
- Additional revenues from development review fees do not begin until Permit Year 3. The effort to update, implement, and administer a development permit fee system is included in the annual Implementation Plan matrices; however, based on input from the City, a formal cost of service analysis for activities related to stormwater plan review, inspection, and enforcement will be delayed until future years, as the City currently has an established permit structure and fee schedule.
- NPDES equipment funds will not be needed until Permit Year 2.
- A minimal capital improvement project fund of \$300,000 will be appropriated in Permit Years 2-5 to cover planned and unforeseen projects, including major equipment purchases.
- A reserve fund of \$140,000 is built up in Permit Years 2-3 (equal to 25% of the fully implemented program cost estimate).

Section 5—Summary of Resources Needed for Ellensburg’s Updated Stormwater Program

Continued

Table 5.1						
Summary of Estimated Annual Program Revenue Needs and Sources						
Program Area	Year 1 Cost	Year 2 Cost	Year 3 Cost	Year 4 Cost	Year 5 Cost	5 Year Total
1. NPDES						
A. General NPDES Requirements	\$3,500	\$3,600	\$4,000	\$4,500	\$5,000	\$20,600
B. Public Education and Outreach	\$0	\$0	\$5,500	\$35,500	\$22,500	\$63,500
C. Public Involvement	\$3,500	\$25,000	\$25,000	\$25,000	\$25,000	\$103,500
D. Illicit Discharge Detection & Elimin	\$15,000	\$35,500	\$31,500	\$136,500	\$55,000	\$273,500
E. Construction Site Stormwater Runoff	\$15,500	\$20,500	\$31,500	\$29,500	\$29,500	\$126,500
F. Post Construction Stormwater Mng	\$15,500	\$15,500	\$26,500	\$24,500	\$24,500	\$106,500
G. Pollution Prevent/Good Housekeeping	\$6,000	\$69,750	\$183,000	\$234,250	\$272,500	\$765,500
H. Compliance With Clean-up Plans	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$5,000
I. Monitoring and Program Evaluation	\$0	\$0	\$4,500	\$4,000	\$2,000	\$10,500
J. Reporting and Record Keeping	\$33,000	\$47,500	\$45,500	\$45,500	\$45,500	\$217,000
K. NPDES Equipment Funds	\$0	\$23,000	\$23,000	\$23,000	\$23,000	\$92,000
L. NPDES Capital Project Funds	\$0	\$75,000	\$75,000	\$75,000	\$75,000	\$300,000
2. STORMWATER PROGRAM FUNDING						
A. Implement Stormwater Utility	\$15,000	\$24,000	\$32,000	\$27,000	\$27,000	\$125,000
B. Implement SW Develop Permit Fees	\$0	\$3,000	\$3,000	\$3,000	\$3,000	\$12,000
C. Stormwater Program Reserve Fund	\$0	\$70,000	\$70,000	\$0	\$0	\$140,000
Annual Total	\$108,000	\$413,350	\$561,000	\$668,250	\$610,500	\$2,361,100
Equipment	\$0	\$23,000	\$23,000	\$23,000	\$23,000	\$92,000
Capital	\$0	\$75,000	\$75,000	\$75,000	\$75,000	\$300,000
Staff, Fees, Overhead, Services	\$108,000	\$245,350	\$393,000	\$570,250	\$512,500	\$1,829,100
Reserve	\$0	\$70,000	\$70,000	\$0	\$0	\$140,000
Funding from Development Fees	\$0	\$0	\$55,000	\$51,000	\$51,000	\$157,000
Funding from Utility/Other Source	\$108,000	\$413,350	\$506,000	\$617,250	\$559,500	\$2,204,100

Section 5—Summary of Resources Needed for Ellensburg’s Updated Stormwater Program

Continued

Staffing Needs

Development Review Staff

Assuming that Development Review Staff with benefits and overhead cost about \$100,000 per FTE (base salary of about \$65,000 per year), then approximately 0.5 FTE above current development review/inspection staffing will be needed to enhance efforts such as: (1) providing development customer service and stormwater technical assistance; (2) reviewing stormwater site plans and SWPPPs; (3) visiting and inspecting construction sites; (4) conducting enforcement actions; (5) attending periodic training; (6) maintaining records; and (7) administering the development permit fee finances and accounting (pay for City financial and accounting division support). This FTE estimate may also include higher level staff that manage other staff or become involved in stormwater development review issues, as needed. “Overhead” refers to the cost of providing an employee with things like space, electricity, heat, water, janitorial services, minor office supplies, human resources support, technology support, administrative support, safety supplies and programs, and so on (everything other than direct benefits such as health insurance, sick and annual leave, and retirement). The overhead cost per FTE was calculated by multiplying the base salary plus benefits by an assumed factor of 1.65.

Non Development Review Staff

Non Development Review Staff includes those involved in: (1) storm system inspection, maintenance, and source control functions; (2) illicit discharge detection and elimination activities and complaint response; (3) oversight of good housekeeping training and program implementation by various City departments; (4) stormwater public involvement processes; (5) stormwater public education and outreach efforts; (6) stormwater studies, engineering, design, and construction oversight; (7) record keeping and reporting; (8) funding mechanism customer service, administration, and finances; and (9) program planning and management. Given the wide array of activities, it is difficult accurately estimate FTEs for the individual categories listed above. However, for illustrative purposes, if we again assume that staff with benefits and overhead have an average cost of about \$100,000 per FTE, and we assume that miscellaneous services and fees (e.g., taxes, insurance, NPDES permit fee, legal services, consultant service agreements, etc.) consume about 20% of the “*Staff, Fees, Overhead, and Services*” budget, then approximately 3.75 FTE would be required for the above stated activities. A breakdown of additional FTEs needed by Permit Year 5 might include the following:

- Storm System Inspection Maintenance and Source Control—1.0 FTE
- IDDE activities and complaint response—0.5 FTE

Section 5—Summary of Resources Needed for Ellensburg’s Updated Stormwater Program

Continued

- Good housekeeping training and programs and support for program implementation—0.5 FTE
- Stormwater public involvement processes—0.25 FTE
- Stormwater public education and outreach efforts—0.25 FTE
- Stormwater studies, engineering, design, and construction oversight—0.25 FTE
- Administrative support and NPDES record keeping and reporting—0.25 FTE
- Funding mechanism customer service, administration, and finances—0.25 FTE
- Program planning and management—0.5 FTE

Note that this breakdown in FTEs is only for planning purposes. It will be important for the City program to adapt to conditions as they arise and to respond to how City leaders want implementation to occur as the process moves forward.

Appendix A—Existing City Stormwater
Program Questionnaire

Description of BMP/Activity Required for Permit Compliance	BMP/Activity Information Requested	Provide Information on Existing Activities that Meet BMP, Direction, and Assumptions <i>(include as much information as possible, such as responsible division, staff, estimated FTE, equipment used, etc.)</i>	Estimate of Current Expenditure	New Funding Source Needed (Yes or No)	Notes and Additional Information
NPDES					
Start-Up:					
BMP S1 - Self Analysis of Existing SW Program, Identify Local Compliance Needs, Priorities, Costs, Space, Staffing, Equipment, and Funding Needs		To be developed as part of the Ellensburg Stormwater Planning and Funding Project.			
BMP S2 - Develop Local SW Action Plan/Schedule		To be developed as part of the Ellensburg Stormwater Planning and Funding Project.			
BMP S3 - Adopt Needed Interlocal Agreements		To be developed as part of the Ellensburg Stormwater Planning and Funding Project. Agreements with CWU and/or County may be necessary as stormwater program is developed and implemented.			
BMP S4 - Create Local Funding Develop an acceptable response to NPDES permit requirements by creating adequate staffing & funding needed for implementation of regulatory compliance activities.		To be developed as part of the Ellensburg Stormwater Planning and Funding Project.			
Permit Compliance:					
1. Public Education and Outreach					
Required BMP 1.1 - Public Education and Outreach Program: Develop and implement a stormwater education and outreach program to distribute educational material to the community. Program must be targeted and presented to specific audiences. Includes educational and outreach activities required in other permit sections. Measureable Goal: By the end of Permit Year 3, identify and characterize target audiences within jurisdiction. No later than 180 days prior to the expiration of permit, develop and fully implement a public education and outreach strategy. (One time cost for strategy; ongoing program needed)	Has the City developed and implemented a stormwater educational and outreach strategy and distributed materials, in any form, to the community?	No			
BMP 1.1.1 - Stormwater Brochure: Develop and distribute a brochure for the general public about stormwater issues and hazards associated with illicit discharges and improper disposal or waste. Measurable Goal: By the end of Permit Year 5, distribute the brochure to 90% of the residences and businesses.	Has the City developed and distributed a stormwater brochure to the general public?	No			
BMP 1.1.2 - Targeted Stormwater Brochures: Develop and distribute stormwater brochures that address a variety of different target audiences. Measureable Goal: By the end of Permit Year 5, distribute targeted brochures according to education and outreach strategy and for each target audience identified in BMP 1.1.	Has the City developed and distributed a stormwater brochure to different target audiences within the community?	No			
BMP 1.1.3 - Storm Drain Stenciling: Plan and conduct storm drain stenciling projects. Measurable Goal: Beginning in Permit Year 3, stencil 20% of all storm drain inlets during each Permit Year.	Has the City or any local schools, community groups, or agencies conducted storm drain stenciling?	Limited; Local Boy Scout groups occasionally stencil for merit badges			

<p>BMP 1.1.4 - Classroom Education: Contact school districts to discuss opportunities for water quality educational materials; provide materials as requested.</p> <p>Measurable Goal: By the end of Permit Year 5, contact all school districts within the storm drainage system boundary.</p>	<p>Has the City provided or been asked to provide stormwater educational materials for school classrooms?</p>	<p>Limited; Education on local surface water related issues provided when requested</p>			
<p>BMP 1.1.5 - Volunteer Group Stormwater Education Projects: Contact volunteer orgs to discuss opportunities to integrate stormwater into existing educational projects.</p> <p>Measurable Goal: By end of Permit Year 5, contact at least 5 volunteer organizations to discuss/promote stormwater education.</p>	<p>Has the City worked with local volunteer groups conducting educational programs to incorporate stormwater issues into their existing programs.</p>	<p>Limited; When requested by local groups</p>			
<p>BMP 1.1.6 - Public Service Announcements: Broadcast stormwater public service announcements (PSAs) through the media.</p> <p>Measurable Goal: By the end of Permit Year 5, create a stormwater PSA and run this PSA on average 3 times per year.</p>	<p>Does the City broadcasted stormwater public service announcements?</p>	<p>No</p>			
<p>BMP 1.1.7 - Stormwater Website: Create a stormwater website that contains educational information for a variety of target audiences.</p> <p>Measurable Goal: By the end of Permit Year 5, complete a stormwater website; update monthly.</p>	<p>Does the City currently maintain a stormwater website (section within City website or independent site)?</p>	<p>No</p>			
<p>2. Public Involvement and Participation</p>					
<p>Required BMP 2.1 - Public Participation Program: Adopt a program or policy directive to create opportunities for public participation in decision making process, including development and implementation of a process for considering public comments.</p> <p>Measurable Goal: By the end of Permit Year 1, adopt program or policy. By May 31 each year beginning in 2008, make the latest updated version of SWMP available to the public.</p>	<p>Does the City currently have a public participation program for development and implementation of the proposed stormwater management program.</p>	<p>No</p>			
<p>BMP 2.1.1 - Public Review/Public Meetings: Hold public meetings and solicit public input on SWMP.</p> <p>Measurable Goal: During Permit Year 1, publish two public notices and hold two public meetings. Provide list of SWMP activities required and proposed for Permit Years 2-5.</p>	<p>Has the City recently conducted public meetings to solicit stakeholder input/review on the proposed stormwater management program?</p>	<p>No</p>			
<p>BMP 2.1.2 - News Releases: Develop and distribute news release.</p> <p>Measurable Goal: Starting in Permit Year 2, annually distribute one news release story on jurisdiction's SWMP to local papers.</p>	<p>Has the City developed and distributed news releases to the local newspapers in order to solicit interest to cover the new stormwater management program as a feature story?</p>	<p>No</p>			
<p>BMP 2.1.3 - Stakeholder Advisory Panel: Hold and solicit input from a stakeholder advisory panel.</p> <p>Measurable Goal: By the end of Permit Year 1, organize and convene a stakeholder advisory panel; hold meetings quarterly.</p>	<p>Has the City established a stakeholder advisory panel to solicit input on the development and implementation of the stormwater management program?</p>	<p>City does not currently have a formal stakeholder advisory panel for SWM Pogram; however, existing Environmental Commission will be utilized for this purpose</p>			

3. Illicit Discharge Detection and Elimination					
<p>Required BMP 3.1 - Develop Map of MS4: Develop a map showing the location of all known and new connections to MS4, known outfalls, and names and locations of all receiving waters.</p> <p>Measurable Goals: During Permit Years 3-5, complete 1/3 of total mapping per year. No later than 180 days prior to the expiration of permit, conduct field surveys to verify outfall locations and identify location of new outfalls. (One time cost)</p>	Does the City currently have a map of their storm drainage system (MS4) showing the location of known outfalls and the names and locations of all receiving waters?	Nearly complete			
<p>Required BMP 3.2 - Ordinance: Develop and adopt an ordinance that prohibits non-stormwater (illicit) discharges and authorizes enforcement actions, including on private property.</p> <p>Measureable Goal: By the end of Permit Year 2, adopt ordinance.</p>	Does the City currently have any regulatory language, with enforcement provisions, that prohibits non-stormwater discharges from entering the storm drainage system?	Limited; Regulatory language does exist to regulate SW and other discharges to the sanitary sewer (see Municipal Code Sec 9.20.180 - Municipal Sewer System). Needs to be updated to meet NPDES Phase II permit requirements			
<p>Required BMP 3.2.1 - Ordinance Enforcement Strategy: Develop an enforcement strategy and implement the enforcement provisions of the ordinance prohibiting non-stormwater discharges into the MS4.</p> <p>Measurable Goals: During Permit Years 3-5, develop an enforcement plan. (One time cost for strategy; ongoing enforcement needed)</p>	Does the City currently have an enforcement strategy that sets goals or courses of action that are carried out to meet regulatory provisions.	No			
<p>Required BMP 3.3 - Illicit Discharge Detection and Elimination (IDDE) Program: Develop and implement an ongoing program to detect and address non-stormwater discharges to the MS4, including spills, illicit connections, and illegal dumping.</p> <p>Measureable Goal: No later than 180 days prior to expiration of permit, develop and implement IDDE program. (One time cost for plan; ongoing program needed)</p>	Does the City currently have a program in place that actively seeks to detect and eliminate non-stormwater discharges to the storm drainage system, including spills, illegal dumping, and illicit connections?	Limited; City staff have walked all streams within City but have no formal process of documenting findings, followup actions, enforcement			
<p>Required BMP 3.3.1 - Field Assessments: During dry weather, visually inspect/screen priority outfalls in areas likely to have illicit discharges.</p> <p>Measureable Goal: By the end of Permit Year 3, prioritize receiving waters for outfall screening. By the end of Permit Year 4, field assess three high priority water bodies. Field assess at least one high priority water body each year thereafter.</p>	Does the City conduct routine visual inspections of outfalls during dry weather conditions? If so, were areas likely to have illicit discharges (based on land use, previous complaints, storage of materials) prioritized for field inspections/assessments?	Limited; City staff have walked all streams within City but have no formal process of documenting findings, followup actions, enforcement			
<p>Required BMP 3.3.2 - Illicit Discharge/Spill Response Plan Develop and implement a response plan to characterize and evaluate the nature of and threat posed by illicit discharges, including spills and illegal dumping.</p> <p>Measurable Goal: Once IDDE program is fully implemented, investigate within 7 days any complaints, reports, or monitoring information. Immediately investigate emergencies. (One time cost for plan; ongoing activities needed)</p>	Does the City currently respond to and investigate complaints or reports of spills, illegal dumping, or illicit connections within its municipal boundaries? If so, does the City have a formal spill response plan?	No			

<p>Required BMP 3.3.3 - Source Tracing and Removal: Develop and implement detailed inspection procedures to assess, identify, and remove illicit discharges and connections to MS4. Measurable Goal: Once IDDE program is fully implemented, initiate investigation within 21 days of report or discovery of a suspected illicit connection to determine source, the nature and volume of discharge, and party responsible. Ensure termination of connection within 180 days, using enforcement authority as needed. (One time cost for plan; ongoing activities and enforcement needed)</p>	<p>Does the City currently trace sources of illicit discharges using detailed inspection procedures (visual inspections, opening manholes, using mobile cameras, analyzing water samples, etc.)? If so, are procedures in place for actively removing/terminating such discharges?</p>	<p>Limited; Conducted on an as needed basis</p>			
<p>Required BMP 3.4 - Public Reporting: Publicly list and publicize a phone number for public reporting of spills and other illicit discharges. Measurable Goal: By the end of Permit Year 2, publish a phone number for public reporting.</p>	<p>Does the City currently have a published phone number for the public to report spills and illicit discharges?</p>	<p>No</p>			
<p>Required BMP 3.5 - Training: Provide training to all staff responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges, including spills, illegal dumping, and illicit connections. Measurable Goal: No later than 180 days prior to expiration of permit, train relevant staff; retrain annually.</p>	<p>Does the City currently provide or receive training related to identification, investigation methods, termination procedures/options, cleanup, and reporting of illicit discharges, including spills, improper disposal, and illicit connections?</p>	<p>No</p>			
<p>4. Construction Site Stormwater Runoff Control</p>					
<p>Required BMP 4.1 - Ordinance: Develop and adopt an ordinance that requires erosion and sediment controls, as well as sanctions to ensure compliance. Measurable Goal: By the end of Permit Year 3, adopt ordinance.</p>	<p>Does the City currently have any regulatory language or permitting requirements for erosion and sediment controls at construction sites?</p>	<p>No</p>			
<p>Required BMP 4.1.1 - Ordinance Enforcement Strategy: Develop an enforcement strategy and implement the enforcement provisions of the ordinance requiring erosion and sediment controls. Measurable Goals: During Permit Years 3-5, develop an enforcement plan. (One time cost for strategy; ongoing enforcement needed)</p>	<p>Does the City currently have an enforcement strategy that sets goals or courses of action that are carried out to meet regulatory provisions.</p>	<p>No</p>			
<p>Required BMP 4.2 - Site Plan Review: Review site plans subject to local ordinance prior to construction to ensure compliance. Measurable Goal: By the end of Permit Year 4, adopt and implement procedures for site plan review.</p>	<p>Does the City currently review construction site plans (erosion and sediment control plans or SWPPPs)?</p>	<p>Storm Drainage plans and calculations (required by City Standards, Section 4 - Storm Drainage) are reviewed as part of Development Plan submittal review process; however, ESC Plans and SWPPPs are not specifically required nor reviewed at this time</p>			
<p>Required BMP 4.2.1 - Staff Training: Provide adequate training for all staff involved in permitting, planning, and review. Emphasis on erosion and sediment control BMPs. Measurable Goal: By the end of Permit Year 5, train relevant staff; retrain annually.</p>	<p>Does the City currently have qualified/trained personnel to perform site plan review? Does the City provide on-going training for staff on erosion and sediment control BMPs and other related training?</p>	<p>Limited; Some training on ESC BMPs, need on-going training</p>			

<p>Required BMP 4.3 - Site Inspection: Inspect all construction sites subject to local ordinance during construction to ensure compliance. Enforce construction stormwater pollution control standards.</p> <p>Measurable Goal: By the end of Permit Year 4, adopt and implement procedures for construction site inspection and enforcement. Inspect all sites at least once during construction. Target inspection rate of at least 95%.</p>	<p>Does the City currently conduct construction site inspections?</p>	<p>Storm Drain System is inspected (required by City Standards, Section 4 - Storm Drainage) by Public Works Dept; however, ESC BMPs installed during construction are not currently inspected</p>			
<p>Required BMP 4.3.1 - Staff Training: Provide adequate training for all staff involved in plan review, field inspections, and enforcement.</p> <p>Measurable Goal: By the end of Permit Year 5, train relevant staff; retrain annually.</p>	<p>Does the City currently have qualified/trained personnel to perform site plan review, inspection, and enforcement? Does the City provide on-going training for staff on erosion and sediment control BMPs and other related training?</p>	<p>Limited; Some training on ESC BMPs, need on-going training</p>			
<p>Required BMP 4.4 - Operator Training: Provide information to local construction site operators on erosion and sediment control BMP training opportunities, how to apply BMPs in SWMM for E. WA, and compliance with other permit requirements.</p> <p>Measurable Goal: By the effective date of Permit, provide information to local construction site operators, upon request.</p>	<p>Does the City currently provide information to local operators on training opportunities, including sediment and erosion control BMPs and their application?</p>	<p>No</p>			
<p>Required BMP 1.5D - Public Reporting: Create and publish system for public reporting of construction site runoff issues, including spills and other illicit discharges. Develop process to convey information to field inspectors.</p> <p>Measurable Goal: By the end of Permit Year 2, publish a phone number or equivalent system for public reporting.</p>	<p>Does the City currently have a published phone number or equivalent system for the public to report construction site runoff issues, illicit discharge, spills, and other stormwater related concerns?</p>	<p>No</p>			
<p>5. Post-Construction Stormwater Management for New Development and Redevelopment</p>					
<p>Required BMP 5.1 - Ordinance: Develop and adopt an ordinance that requires post-construction stormwater controls, as well as sanctions to ensure compliance.</p> <p>Measurable Goal: By the end of Permit Year 3, adopt ordinance.</p>	<p>Does the City currently have any regulatory language or permitting requirements for post-construction stormwater control measures (runoff treatment, flow control, source control, ongoing long-term BMP O&M, etc.) at new development and redevelopment projects?</p>	<p>Limited; Regulatory language does exist in the form of City Storm Drainage Requirements (City Standards, Section 4 - Storm Drainage). Requirements for post-construction runoff treatment and control included. Needs to be updated to meet NPDES Phase II permit requirements</p>			
<p>Required BMP 5.1.1 - Ordinance Enforcement Strategy: Develop an enforcement strategy and implement the enforcement provisions of the ordinance requiring post-construction stormwater controls.</p> <p>Measurable Goals: During Permit Years 3-5, develop an enforcement plan. (One time cost for strategy; ongoing enforcement needed)</p>	<p>Does the City currently have an enforcement strategy that sets goals or courses of action that are carried out to meet regulatory provisions.</p>	<p>No</p>			
<p>Required BMP 5.2 - Post-Construction Runoff Plan: Develop a plan to address post-construction stormwater runoff during review and inspection process.</p> <p>Measurable Goal: By the end of Permit Year 5, develop and adopt a plan. (One time cost for plan)</p>	<p>Does the City currently have a plan to address post-construction stormwater runoff that considers key water quality and quantity issues? Does the City's existing comprehensive plan (under GMA) or development regulations include considerations for post-construction runoff?</p>	<p>No</p>			
<p>Required BMP 5.3 - Site Plan Review: Review site plans per BMP 4.2 prior to construction to ensure compliance.</p> <p>Measurable Goal: By the end of Permit Year 4, adopt and implement procedures for site plan review.</p>	<p>Does the City currently review construction site plans to ensure that the plans include post-construction stormwater control measures?</p>	<p>Yes; Post-construction stormwater control measures (treatment and flow control) are required as part of City Storm Drainage Requirements (City Standards, Section 4 - Storm Drainage). Storm Drainage Plans are reviewed as part of Development Plan submittal review process</p>			

<p>Required BMP 5.4 - Site Inspection: Inspect all construction sites subject to local ordinance during/after construction to ensure compliance. Enforce post-construction stormwater control measures.</p> <p>Measurable Goal: By the end of Permit Year 4, adopt and implement procedures for site inspection and enforcement. Inspect structural BMPs at least once during installation and at least once every five years after final installation.</p>	<p>Does the City currently conduct construction site inspections of structural BMPs during and after installation?</p>	<p>Storm Drain System is inspected (required by City Standards, Section 4 - Storm Drainage) by Public Works Dept. Post-construction structural BMPs inspected during and after construction on public projects but not on private property.</p>			
<p>Required BMP 5.5 - Staff Training: Provide adequate training for all staff involved in permitting, planning, review, inspection, and enforcement. Emphasis on post-construction stormwater control BMPs.</p> <p>Measurable Goal: By the end of Permit Year 5, train relevant staff; retarain annually.</p>	<p>Does the City currently have qualified/trained personnel to perform site plan review, inspection, and enforcement? Does the City provide on-going training for staff on post-construction stormwater control BMPs and other related training?</p>	<p>Limited; Some training on post-construction BMPs, need on-going training</p>			
<p>Required BMP 5.6 - Design Professional Training: Provide information to design professionals on training opportunities on how to apply BMPs in SWMM for E. WA and compliance with other permit requirements.</p> <p>Measurable Goal: By the effective date of Permit, provide information to design professionals, upon request.</p>	<p>Does the City currently provide information to design professionals on training opportunities, including post-construction stormwater control BMPs and their application?</p>	<p>No</p>			
<p>6. Pollution Prevention and Good Housekeeping for Municipal Operations</p>					
<p>Required BMP 6.1 - Municipal O&M Plan: Develop and implement a schedule of municipal operations and maintenance activities (O&M Plan). Includes pollution prevention/good housekeeping (PPGH) procedures for each of the various types of facilities and/or activities described below.</p> <p>Measurable Goal: By the end of Permit Year 3, develop and implement an O&M Plan. (One time cost for plan; ongoing program needed)</p>	<p>Has the City developed and implemented a municipal O&M plan that includes the application of specific BMPs to protect water quality during various municipal activities or facilities?</p>	<p>No; Activities performed but no formal documentation</p>			
<p>Required BMP 6.1.1 - Stormwater System: Per the O&M Plan, implement system cleaning, maintenance, structural BMP inspections, and other required PPGH practices.</p> <p>Measurable Goal: No later than 180 days prior to the expiration of permit, implement required maintenance activities.</p>	<p>Does the City currently perform routine inspections, cleaning, and maintenance of the stormwater collection and conveyance system? Are specific pollution prevention practices or BMPs employed to minimize impacts to water quality?</p>	<p>Nearly complete; O&M activities performed but no formal documentation</p>			<p>Catchbasins cleaned 1/yr</p>
<p>Required BMP 6.1.2 - Roads, Highways, and Parking Lots: Per the O&M Plan, implement PPGH practices for all municipal roads, highway, and parking lots with more than 5,000 sq ft of PSIG.</p> <p>Measurable Goal: No later than 180 days prior to the expiration of permit, implement all required PPGH practices established in O&M Plan.</p>	<p>Does the City employ pollution prevention/good housekeeping practices for O&M activities related to roads, highways, and parking lots? Includes deicing, anti-icing, and snow removal practices; snow disposal areas; matreial storage areas; etc. Does the City currently have a road and parking lot sweeping program?</p>	<p>Limited; PPGH practices need to be reviewed.</p>			<p>De-icing salts applied routinely within City during winter months - applied at recommended label rates. Sweep 1/wk in commercial business district; 1/6wks in residential areas. Street cleaning (sweeping) costs include unit replacement over 6 years</p>
<p>Required BMP 6.1.3 - Vehicle Fleets: Per the O&M Plan, implement publicly owned vehicle and equipment storage, washing, and maintenance practices.</p> <p>Measurable Goal: No later than 180 days prior to the expiration of permit, conduct all vehicle and equipment washing in a self-contained covered building.</p>	<p>Does the City conduct vehicle and equipment washing and maintenance in a self-contained covered building?</p>	<p>Mostly; Outdoor wash pad is not covered</p>			<p>Outdoor wash pad discharges to a swale after O/W separator</p>

<p>Required BMP 6.1.4 - Municipal Buildings: Per the O&M Plan, implement municipally owned building cleaning, washing, painting, and other related maintenance practices.</p> <p>Measurable Goal: No later than 180 days prior to the expiration of permit, implement all required PPGH practices established in O&M Plan.</p>	<p>Does the City employ pollution prevention/good housekeeping practices for O&M activities related to municipal building cleaning, washing, painting, and other related maintenance?</p>	<p>No</p>			
<p>Required BMP 6.1.5 - Parks and Open Space: Per the O&M Plan, implement PPGH practices for all municipally owned parks and open spaces.</p> <p>Measurable Goal: No later than 180 days prior to the expiration of permit, implement all required PPGH practices established in O&M Plan.</p>	<p>Does the City employ BMPs or practices at all park areas and open spaces? Includes proper application of fertilizers, pesticides, and herbicides; sediment and erosion control; BMPs for landscape maintenance and vegetation disposal; trash management; etc.</p>	<p>No</p>			<p>Include some money for Parks Department to implement required activities</p>
<p>Required BMP 6.1.6 - Construction Projects: Implement construction and post-construction stormwater controls at all public projects that require coverage under NPDES construction stormwater permit.</p> <p>Measurable Goal: By the effective date of Permit, select and implement stormwater controls at all public construction projects.</p>	<p>Does the City employ construction and post-construction stormwater controls during and after public construction projects?</p>	<p>Mostly; No post-construction O&M</p>			
<p>Required BMP 6.1.7 - Industrial Activities: Obtain coverage under NPDES industrial stormwater permit at all designated public facilities.</p> <p>Measurable Goal: By the effective date of Permit, obtain permit coverage. (One time cost to seek and obtain permit coverage)</p>	<p>Does the City currently operate industrial facilities that discharge stormwater runoff to surface water and/or storm drains? Are these facilities covered under Ecology's Industrial Stormwater General Permit?</p>	<p>Yes; City Maintenance Shop Facility, not permitted; WWTP, permitted</p>			
<p>Required BMP 6.1.8 - Material & Heavy Equipment Storage and Maintenance Areas: Develop and implement Stormwater Pollution Prevention Plans (SWPPPs) for municipal facilities <u>not</u> covered under an NPDES industrial stormwater permit.</p> <p>Measurable Goal: No later than 180 days prior to expiration of permit, develop and implement SWPPPs for select facilities.</p>	<p>Has the City developed stormwater plans for municipal facilities that would reasonably be expected to discharge contaminated runoff and are also not covered under Ecology's Industrial Stormwater General Permit?</p>	<p>No</p>			
<p>Required BMP 6.1.9 - Flood Management Projects: Assess water quality and site hydrology impacts of new flood management projects to storm drainage system.</p> <p>Measurable Goal: No later than 180 days prior to expiration of permit, implement provisions to assess impacts of new flood management projects. Prioritize existing flood management projects and review and evaluate at least five projects to determine if modifications are necessary to improve water quality.</p>	<p>Does the City incorporate water quality and/or site hydrology considerations in the review and evaluation of new flood management projects?</p>	<p>No</p>			
<p>Required BMP 6.1.10 - Other Facilities: Per the O&M Plan, implement BMPs at facilities likely to discharge contaminated runoff.</p> <p>Measurable Goal: No later than 180 days prior to expiration of permit, implement BMPs established in O&M Plan at identified facilities.</p>	<p>Does the City have additional facilities, not covered in BMPs 6.1.1 through 6.1.8, that would reasonably be expected to discharge contaminated runoff?</p>	<p>Yes; Senior Center, City swimming pool, animal shelter, substations, pump stations, wells</p>			

<p>Required BMP 6.2 - Stormwater Control Facility Inspection Per the O&M Plan, inspect all known stormwater treatment and flow control facilities on fixed schedule and after all major storm events. Measurable Goal: By the end of Permit Year 5, inspect a minimum of 95% of all known stormwater control facilities at least twice: once by the end of Permit Year 3 and again by the end of Permit Year 5. Conduct spot checks of facilities after all major storm events (>10-year recurrence interval), and if necessary, perform necessary repair or maintenance.</p>	<p>Does the City currently perform routine inspections of municipally owned and operated stormwater treatment and flow control facilities? Are spot checks conducted after major storm events to assess potential damage to facilities?</p>	<p>No; Municipal stormwater facilities are routinely mowed with observations of general site conditions most likely made</p>			
<p>Required BMP 6.3 - Staff Training: Provide adequate training for all construction, operations, and maintenance staff who perform required O&M Plan and related activities. Measurable Goal: By the end of Permit Year 5, train relevant staff. Follow-up training provided as needed to address changes in procedures, methods, or staffing.</p>	<p>Has the City provided training for relevant staff on operation and maintenance requirements, inspection procedures, ways to perform duties while minimizing impacts to water quality, and other relevant training?</p>	<p>No</p>			
7. Compliance with Total Maximum Daily Load Allocations					
<p>Required BMP 7.1 - Compliance with TMDLs: Comply with requirements of all applicable TMDLs approved by EPA on or before effective date of permit. Measurable Goals: Maintain ongoing records of TMDL related actions required by permit, provide annual status of TMDL implementation, and conduct monitoring where required.</p>	<p>Has the City initiated any activities towards implementation of the Wilson Creek Fecal Coliform TMDL or other applicable TMDLs?</p>	<p>Limited; Pet waste signs posted within City</p>			
<p>Recommended: <i>Monitor Outfall Quality for Discharges to Impaired Waters [303(d) listed waters]</i></p>	<p>Has the City (or other local agency) conducted water quality monitoring of impaired water bodies within the city limits, including stormwater outfalls?</p>	<p>No</p>			<p>Include some money to participate with KCCD or Kittitas County Water Purveyors</p>
<p>Recommended: <i>Actively Participate in Development of TMDLs for Receiving Waters within Jurisdiction</i></p>	<p>Has the City participated in the development of local TMDLs (e.g., Wilson Creek Fecal Coliform TMDL, Upper Yakima River Suspended Sediment and Organochlorine TMDL, Upper Yakima River Temperature TMDL).</p>	<p>No</p>			<p>Include some money to participate with KCCD or Kittitas County Water Purveyors</p>
<p>Recommended: <i>Establish Monitoring Program to Assess Baseline Conditions and Evaluate Program Effectiveness</i></p>	<p>Does the City currently have an established water quality monitoring program to assess baseline conditions?</p>	<p>Limited; City currently monitors turbidity, temperature, spec. conductance at Yakima River site. WWTP monitors select metals as part of its NPDES permit</p>			<p>Include some money to participate with KCCD or Kittitas County Water Purveyors</p>
8. Monitoring and Program Evaluation Requirements					
<p>Required BMP 8.1 - Preparation for Future Monitoring Prepare for development and implementation of future long-term monitoring program. Will include stormwater outfall monitoring, SWMP effectiveness monitoring, and runoff treatment BMP effectiveness monitoring. Measurable Goal: Stormwater Monitoring - By the end of Permit Year 4, identify two outfalls or conveyances where stormwater sampling will be conducted; map per BMP 3.1. SWMP Effectiveness Monitoring - By the end of Permit Year 4, identify two suitable questions to assess effectiveness, select monitoring sites, and develop monitoring plan. BMP Effectiveness Monitoring - Not applicable</p>		<p>To be developed during the first Permit cycle as part of the Ellensburg Stormwater Management Program.</p>			

9. Other Required Permit Compliance Activities

Required BMP 9.1 - Establish and Implement a Permit Administration, Management, Tracking, and Reporting Program		To be developed during the first Permit cycle as part of the Ellensburg Stormwater Management Program.			
BMP 9.2 - Fund, Develop, and Submit NOI Permit Application to Ecology		Completed			

Stormwater Program Equipment

Office Equipment: Per each new employee: ~ Desk and chairs ~ Computer ~ Software ~ Supplies ~ Bookshelf ~ Files ~ Telephone ~ Office space and utilities	List any "spare" office equipment available for potential future new staff.	No			
Field and Monitoring Equipment: ~ Vehicle ~ Water quality sensors/probes (pH, D.O., temp) ~ Water quality equipment such as a turbidimeter ~ Flow measurement equipment ~ Gaging station instrumentation ~ Sediment sieves ~ Spill response equipment ~ Safety equipment ~ Survey and GPS equipment	List any current monitoring and related equipment.	No			
Operations and Maintenance Equipment: ~ Vector trucks ~ Dump trucks ~ Street vacuum sweeper ~ Back hoes ~ Front-end loaders ~ Decant facility ~ Drying beds ~ Disposal site	List current major O&M equipment and any known needs.	Current equipmet list: vactor trucks (1), dump trucks (4), street vacuum sweepers (2), back hoes (7), front-end loaders (2)			

Stormwater Capital Projects

Identify Known Stormwater Capital Improvement Projects (CIP)	List any known drainage or water quality CIPs and approximate costs. It is expected that additional CIP needs will arise as the NPDES II program is implemented.	No known problems or costs. Planned projects include a decant facility and concentration of City outfalls (no costs presently)			
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Stormwater Program Coordination

Stormwater Program Coordination: Coordination and possibly agreements with other entities, including secondary NPDES II permittees such as CWU. May also involve coordination with County for SW standards within UGA.	Do you currently (or expect to) expend staff time for initial and ongoing coordination and possibly agreements with other entities related to stormwater program implementation? Please explain.	No			
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Appendix B—City Stormwater Program Gap
Analysis and Costs

YEAR 1

Summary of Regulatory Requirements	Notes & Assumptions	Summary of Existing Municipal Activities Aiding Compliance	Current Average Annual Expenditures	New Funding Method Needed?	Assessment of New Activities Needed for Compliance	Estimated Annual Cost to Comply
1. NPDES						
A. General NPDES Requirements						
A1. Prepare Notice of Intent (NOI).	Assume that City has prepared and submitted NOI.	None	None	N	NOI prepared and submitted.	\$0
A2. Pay Annual Permit Fee.	City of Ellensburg - \$3,500	None	None	Y	Pay fee.	\$3,500
B. Public Education and Outreach: General public, builders, businesses, engineers, developers, plan reviewers, etc.						
C. Public Involvement: Allow public and stakeholder involvement in program development and funding via committees, hearings, advisory panels, etc.						
C1. Adopt a program or policy directive to allow the public to participate in the process of developing and implementing the Stormwater Management Program (SWMP), including all ordinances. Must include consideration of public comments.	Note that it may be desirable for actual public/stakeholder involvement to begin in year 1 depending on preferences of local leaders. A formal policy must be developed and adopted by elected leaders by end of permit year 1.	None	None	Y	Develop and adopt official public involvement policy for stormwater. Assume involves staff time, discussions with leaders, approval at formal agenda.	\$3,500
D. Illicit Discharge Detection and Elimination: Develop, implement, and enforce program to detect and eliminate polluted non-stormwater discharges into the MS4.						
D2. Begin developing an ordinance that prohibits illicit discharges and authorizes enforcement actions. (Involve the public as required).	Assume that it takes up to two years to fully develop an ordinance, involve the public/stakeholders, complete legal review, coordinate internally, hold hearings, adopt ordinance, and place in local code. Assume staff time, possible consultant assistance, legal consultant review.	Some overlap with EMC 9.20, but a discrete IDDE ordinance is required to comply with requirements of NPDES.	None	Y	Begin IDDE Ordinance involving public and stakeholders, legal support.	\$15,000
E. Construction Site Stormwater Runoff: Develop, implement, and enforce program to reduce pollutants in runoff to the MS4 from construction sites one or more acres in size.						
E1. Begin developing an ordinance for Construction Stormwater Management that requires erosion and sediment controls and regulates sites at least 1+ acre in size (involve the public as required). Must allow access by Permittee staff to inspect site for compliance. Must include construction stormwater pollution prevention activities consistent with the statewide NPDES Construction SW General Permit, including use of approved BMPs, chemical monitoring, certified professionals, and so on. May allow Erosivity Waiver to be used, at the discretion of the local agency.	Per the direction provided by the City, ordinance development work will start earlier than what is stated/required in permit. Assume that it takes up to two years to fully develop an ordinance, develop an ordinance enforcement strategy, involve the public/stakeholders, complete legal review, coordinate internally, hold hearings, adopt the ordinance, and place in local code. Assume staff time, possible consultant assistance, legal consultant review.	City does not currently have any regulatory language requiring erosion and sediment controls at construction sites. A discrete ordinance is required to comply with requirements of NPDES.	None	Y	Begin developing Construction Stormwater Management ordinance involving the public, stakeholders, and legal support. Includes development of ordinance enforcement strategy.	\$15,000
E6. Provide information to construction operators about training available on stormwater pollution prevention for construction sites consistent with NPDES permit or E. WA Stormwater Manual.	Assume that operators are informed of available training opportunities as a normal part of the agencies construction permitting or approval process. Providing flyers on state or trade group training for example.	None	None	Y	Inform construction operators about available training on stormwater pollution prevention for construction sites.	\$500
F. Post Construction Stormwater Management: Develop, implement, and enforce program to address post construction stormwater runoff to the MS4 from sites 1+ acres in size.						
F1. Begin developing an ordinance for Post Construction Stormwater Management that requires stormwater controls and regulates sites at least 1+ acre in size (involve the public as required). Must allow access by Permittee staff to inspect site during and after construction to ensure compliance with BMP selection, design, installation, and O&M standards, consistent with E. WA Stormwater Manual. Encourage preservation of natural drainages and reductions in impervious surfaces. Must require source control BMPs. Include mechanism requiring owners to ensure long-term proper O&M of BMPs.	Per the direction provided by the City, ordinance development work will start earlier than what is stated/required in permit. Assume that it takes up to two years to fully develop an ordinance, develop an ordinance enforcement strategy, involve the public/stakeholders, complete legal review, coordinate internally, hold hearings, adopt the ordinance, and place in local code. Assume staff time, possible consultant assistance, legal consultant review.	City currently has limited regulatory language requiring post construction stormwater runoff treatment and controls. Existing ordinance needs to be updated to comply with requirements of NPDES.	None	Y	Begin developing/updating Post Construction Stormwater Management ordinance involving the public, stakeholders, and legal support. Includes development of ordinance enforcement strategy.	\$15,000
F6. Provide information to design professionals (engineering consultants) about training available on how to comply with stormwater analysis and design procedures and other technical stormwater requirements consistent with NPDES permit or E. WA Stormwater Manual.	Assume that this only involves providing information about training executed by Ecology or other entities, therefore a local training program is not implemented by the permittee. Assume that material is distributed during normal development permitting process.	None	None	Y	Obtain and provide information during normal development permitting and review process.	\$500

G. Pollution Prevention and Good Housekeeping for Municipal Operations: Develop and Implement an ongoing O & M and staff training program to prevent or reduce pollution from municipal operations.						
G3. City to continue performing existing storm system maintenance activities. Includes on-going inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection and maintenance, proper waste disposal.	Per the direction provided by the City, the costs for existing storm system maintenance activities will be ramped-up during years 2-5, with existing costs assumed by the SW Utility at increments of 25% per year. Costs for phasing-in full stormwater system maintenance and oversight by compliance staff who review and record practices and provide technical assistance will be included in years 3-5.	City currently performs routine storm system O&M, including inspection of inlets, annual cleaning of catch basins, cleaning of culverts and ditches as necessary. No formal documentation or record keeping.	SW System Maint: Avg 05-06: \$75	Y	City to continue existing storm system maintenance activities. Costs for existing activities ramped-up in permit years 2-5 and assumed by SW Utility.	\$0
G4. City to continue existing street sweeping program and other all season BMPs to reduce pollution into the MS4.	Per the direction provided by the City, the costs for the existing street sweeping program will be ramped-up during years 2-5, with existing costs assumed by the SW Utility at increments of 25% per year. Costs for phasing-in enhanced/changed practices, improved materials, and for stormwater compliance staff to review and record practices and provide technical assistance will be included in years 3-5.	City currently sweeps once/week in comm/business district and once/6 weeks in residential areas. Significant snow removal and ice control activities employed. Will need to review existing and additional practices required to ensure WQ is protected.	Sweeping Program: Avg 05-06: \$120K	Y	City to continue existing street sweeping program. Costs for existing program ramped-up in permit years 2-5 and assumed by SW Utility.	\$0
G8. As of the effective date of the permit, have reviewed existing and near-term municipal construction projects and sought coverage under statewide NPDES Construction SW General Permit for any projects meeting criteria for coverage. Use applicable source control and good housekeeping BMPs during all public construction projects after the effective date of the permit.	Assume that NPDES Construction SW permits are being sought as needed. Assume that projects not subject to NPDES permitting still include source control and good housekeeping BMPs as applicable. However, need to create and maintain records of such. Cost of seeking and compliance with permit will be borne by Department/Division executing project.	Assume currently seeking NPDES permits. Compliance with the new construction permit itself will be a cost borne by the project proponent.	N/A	Y	Need money and staff to create and maintain records of seeking and complying with construction permits for municipal projects. Technical assistance to project proponent would cost more.	\$1,000
G9. As of the effective date of the permit, have reviewed all municipal "industrial" facilities/sites and sought coverage under statewide NPDES Industrial SW General Permit for municipal sites meeting criteria for coverage.	Assume that this still needs to be accomplished and is conducted in year 1. Cost will be for NPDES MS4 Permit compliance staff to review facilities and recommend that the facilities seek coverage. Records of the process must be developed. Cost of seeking and compliance with permits will be borne by Department/Division being covered.	City Maintenance Shop facility identified as possibly needing to seek permit coverage. Other facilities/sites to be reviewed.	None	Y	Need money and staff to review facilities, assess need for permit, create and maintain records of seeking and complying with industrial stormwater permits for municipal facilities/sites.	\$5,000
H. Compliance With Total Maximum Daily Load Allocations: WRIA 39 - Wilson Creek, Upper Yakima River						
H1. Participate in the development of TMDLs.	Assume this is required to know and control municipal liability. Assume that this involves staff time to review material, attend meetings, prepare and submit correspondence.	Upper Yakima River Temperature TMDL.	None	Y	Participation in TMDL development may be desirable.	\$500
H2. Comply with applicable TMDL provisions (could involve monitoring outfalls, retrofitting treatment into existing storm drains, enhanced source control efforts, etc.).	Minimal estimate to allow minor compliance activities (no major construction projects).	None	None	N	None	\$0
H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on receiving waters.	Assume recording keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of annual report.	Signs posted reminding citizens to dispose of pet wastes.	Unknown	Y	Track status of TMDL implementation and keep records.	\$500
I. Monitoring and Program Evaluation Requirements						
I1. Recommend that City participate in or establish a local water-quality monitoring program to assess baseline conditions and to evaluate effectiveness of SWM Program or TMDL implementation activities. Includes monitoring outfall quality to receiving waters. Provide a description of any stormwater monitoring or studies conducted by or on behalf of the City and include in annual report.	Recommended activity for City to consider. Specific water sampling and testing not required during effective term of permit, unless required as part of applicable TMDL. Assume some participation by City with local agencies (KCCD, Kittitas Co Water Purveyor, others) conducting routine or special water quality monitoring studies.	Currently monitor Yakima River for limited water quality constituents.	None	Y	Participate in local water quality monitoring studies. Submit description of water quality monitoring studies with annual report to Ecology.	\$0
J. Reporting and Record Keeping Requirements						
J1. Develop written Stormwater Management Program (SWMP) for submittal in permit year 2 with annual report, follow program component format established by Ecology.	Must submit a copy of SWMP to Ecology with the Annual Report beginning no later than March 31, 2008. Assume that development of the SWMP begins during permit year 1.	Assume some overlap with ongoing stormwater planning.	None	Y	Prepare SWMP according to Ecology format. Assume a significant effort by multiple staff, public and stakeholder involvement per C1, review/approval by elected leaders.	\$25,000
J2. Develop and implement an ongoing process for gathering, recording, maintaining and using information to conduct planning, set priorities, track the development and implementation of the SWMP, evaluate permit compliance/noncompliance, and evaluate the effectiveness of SWMP implementation (develop measurable goals). Information to be provided in annual report includes tracking the number of inspection performed, enforcement actions taken, types of public education activities as required for each SWMP component.	Assume that this involves lead permit compliance staff: (1) itemizing the types of recordkeeping needed for each category of permit requirement; (2) meeting with various department/divisions to learn about current record keeping activities; (3) assessing the need for new processes or changes or enhancements to existing processes; (4) creating or modifying record keeping forms as needed; (5) and working with various directors/managers/staff to ensure implementation of the new processes.	None	None	Y	Itemize the types of recordkeeping needed for permit; meet with various department/divisions; assess need for new or changed processes; create record keeping forms/protocols; work with directors/managers/staff to implement. Significant effort by staff at multiple levels.	\$8,000

2. Stormwater Program Funding - Utility Assumed						
A. Stormwater Utility Implementation						
A1. Review Assessor and land use data (annexations, new developments, etc.), perform analysis (use impervious surface measurements conducted in neighboring jurisdictions to determine average percent impervious surface coverage for non-residential land uses), assign impervious surface coverage and ERUs for non-residential parcels in City based on assumed ERU, finalize SW Utility customer database and billing rolls, coordinate with City Utility Department staff to process billing rolls and send out utility bills (on monthly utility billing statements), develop public information material for Utility Department staff, train appropriate staff on customer response.	Per the direction provided by the City, an interim SW Utility rate structure shall be developed and implemented in years 1. A permanent SW Utility rate structure will be funded and developed in year 3 and will include a formal impervious surface analysis (ERU definition, impervious surface measurements on non-residential parcels). For the interim rate structure developed, assume that an annual process must be conducted to prepare updated and correct utility billing rolls. Assume that initial work will be completed in permit year 1. Assume some activities and costs overlap with City and consultant work and products.	None	None	Y	Review Assessor and land use data, perform simplified impervious surface coverage analysis, assign non-residential coverages and ERUs, develop customer database, billing rolls, arrange for Utility Department to send out utility bills, public information materials, train staff on customer response.	\$10,000
A2. General Financial Department services.	Payment to Financial Department staff for accounting services rendered to the utility to manage SW Utility fee finances and books.	None	None	Y	Pay Financial Department staff for accounting services rendered to the SW Utility.	\$5,000
A3. SW Utility account management. Includes processing requests for credits and waivers, response to customer questions and complaints, enforcing payment of utility fees.	Assume that there will always be some level of on-going customer service efforts.	None	None	Y	Assume no activity in permit year 1.	\$0
					SUM =	\$108,000
					Equipment	\$0
					Capital	\$0
					Staff, Fees, Overhead, Services	\$108,000
					Reserve	\$0
					Funding from Development Fees	\$0
					Funding from Utility/Other Source	\$108,000
						\$108,000

YEAR 2

Summary of Regulatory Requirements	Notes & Assumptions	Summary of Existing Municipal Activities Aiding Compliance	Current Average Annual Expenditures	New Funding Method Needed?	Assessment of New Activities Needed for Compliance	Estimated Annual Cost to Comply
1. NPDES						
A. General NPDES Requirements						
A2. Pay Annual Permit Fee.	City of Ellensburg - \$3,600	None	None	Y	Pay fee.	\$3,600
B. Public Education and Outreach: General public, builders, businesses, engineers, developers, plan reviewers, etc.						
C. Public Involvement: Allow public and stakeholder involvement in program development and funding via committees, hearings, advisory panels, etc.						
C2. Implement the program or policy directive adopted in C1 allowing the public to participate in the process of developing and implementing the SWMP, including all ordinances. Assume this involves an advisory body, open house, and news release.	Funding will be shown here to account for broader information and involvement efforts including: open house meetings, work anticipated from public response to open house (inspection, rectifying problems reported, equipment costs), news releases, and convening a stakeholder advisory panel/group. Assume that the cost of some involvement work is included in the cost of a particular activity (e.g., developing ordinances).	None	None	Y	News release (one), open house (one), advisory body meetings (three).	\$19,500
C3. Respond to public calls.	Identified as an additional activity that will reasonably be expected by the City. Public calls assumed to be generated from information posted in news releases, website, and other sources. Does not include costs associated with response to public calls generated by other permit elements (e.g., illicit discharge hot line; complaints about utility fees, standards, and other requirements; etc.).	None	None	Y	Respond to public calls received.	\$5,000
C4. Post updated written SWMP on local agency website and/or deliver to Ecology for posting on their website.	Assume costs for coordination and posting of updated SWMP on website. Costs associated with annual updates to SWMP covered elsewhere.	None	None	Y	Post updated SWMP on website.	\$500
D. Illicit Discharge Detection and Elimination: Develop, implement, and enforce program to detect and eliminate polluted non-stormwater discharges into the MS4.						
D2. Complete and adopt an ordinance that prohibits illicit discharges and authorizes enforcement actions. (Involve the public as required).	Assume that it takes up to two years to fully develop an ordinance, involve the public/stakeholders, complete legal review, coordinate internally, hold hearings, adopt ordinance, and place in local code. Assume staff time, possible consultant assistance, legal consultant review.	Some overlap with EMC 9.20, but a discrete IDDE ordinance is required to comply with requirements of NPDES.	None	Y	Complete IDDE Ordinance involving public and stakeholders, legal review, hearing comments and responses, revisions, formal adoption, placement in code.	\$20,000
D3. Begin developing written IDDE Program Plan that addresses ordinance enforcement, staff training needs, priority areas & businesses, field assessments, complaint handling, discharge characterization methods, hazard assessment, spill response and containment, tracing methods, sampling/analyzing techniques, removal methods, interface with other agencies, program evaluation methods.	Assume that once ordinance is on the books, enforcement activities are phased-in starting in Yr 3. Assume that written guidance is needed for orderly implementation. Assume preparation involves multiple divisions and takes a significant amount of staff time for most of a year. Funding estimate is only for lead compliance staff.	The City does not have a formal IDDE Plan. Source tracing and removal are currently conducted on an as needed basis. Staff have walked streams within City, but have no formal process of documenting findings, follow-up actions, enforcement.	None	Y	Develop IDDE Plan using guidance documents from Center for Watershed Protection, Ecology, and other jurisdictions as an aid. Ordinance Enforcement and Spill Response plans included with IDDE Plan. Involve multiple staff as needed.	\$15,000
D6. Publicize a hotline or other local phone number for public reporting of spills and illicit discharges.	Assume that hotline or other local phone number is publicly listed and publicized by end of year. Assume calls are received from public in the following year and require follow-up activities (inspection; source tracing, identification, removal; enforcement activities; and response to public). Assume costs for follow-up activities covered in D7. Records of all calls and follow-up activities must be maintained.	None	None	Y	Publish hotline for pollution reporting in subsequent years.	\$500
E. Construction Site Stormwater Runoff: Develop, implement, and enforce program to reduce pollutants in runoff to the MS4 from construction sites one or more acres in size.						
E1. Complete and adopt an ordinance for Construction Stormwater Management (involve the public as required).	Per the direction provided by the City, ordinance development work will start earlier than what is stated/required in permit. Assume that it takes up to two years to fully develop an ordinance, develop an ordinance enforcement strategy, involve the public/stakeholders, complete legal review, coordinate internally, hold hearings, adopt the ordinance, and place in local code. Assume staff time, possible consultant assistance, legal consultant review. Assume that ordinance will require a local construction stormwater permit or approval to be obtained.	City does not currently have any regulatory language requiring erosion and sediment controls at construction sites. A discrete ordinance is required to comply with requirements of NPDES.	None	Y	Complete Construction Stormwater Management ordinance involving the public, stakeholders, legal review, hearing comments and responses, revisions, formal adoption, and placement in code.	\$15,000

E6. Continue providing information to construction operators about training available on stormwater pollution prevention for construction sites consistent with NPDES permit or E. WA Stormwater Manual.	Assume that operators are informed of available training opportunities as a normal part of the agencies construction permitting or approval process. Providing flyers on state or trade group training for example.	None	None	Y	Inform construction operators about available training on stormwater pollution prevention for construction sites.	\$500
E7. Adopt procedures for receipt and consideration of construction site problems reported by the public, including publicizing a hot line phone number.	Assume hot line is the same one as in D6/D7. Assume that some calls require significant staff time to address, including multiple site visits, record keeping, correspondence with property owners, resolution of problems, and possible enforcement actions.	None	None	Y	Respond to pollution reporting hotline, visit sites and resolve problems and conduct enforcement as needed to eliminate any construction pollution problems.	\$5,000
F. Post Construction Stormwater Management: Develop, implement, and enforce program to address post construction stormwater runoff to the MS4 from sites 1+ acres in size.						
F1. Complete and adopt an ordinance for Post Construction Stormwater Management (involve the public as required).	Per the direction provided by the City, ordinance development work will start earlier than what is stated/required in permit. Assume that it takes up to two years to fully develop an ordinance, develop and ordinance enforcement strategy, involve the public/stakeholders, complete legal review, coordinate internally, hold hearing(s), adopt the ordinance, and place in local codes. Assume staff time, possible consultant assistance, legal consultant review. Assume that ordinance will require a local post-construction stormwater permit or approval to be obtained.	City currently has limited regulatory language requiring post construction stormwater runoff treatment and controls. Existing ordinance needs to be updated to comply with requirements of NPDES.	None	Y	Complete Post Construction Stormwater Management ordinance involving the public, stakeholders, legal review, hearing comments and responses, revisions, formal adoption, and placement in code.	\$15,000
F6. Continue providing information to design professionals (engineering consultants) about training available on how to comply with stormwater analysis and design procedures and other technical stormwater requirements consistent with NPDES permit or E. WA Stormwater Manual.	Assume that this only involves providing information about training executed by Ecology or other entities, therefore a local training program is not implemented by the permittee. Assume that material is distributed during normal development permitting process.	None	None	Y	Obtain and provide information during normal development permitting and review process.	\$500
G. Pollution Prevention and Good Housekeeping for Municipal Operations: Develop and implement an on-going O&M program, including a staff training program, aimed at preventing or reducing pollutant runoff from municipal operations.						
G1. Begin developing a good housekeeping plan and schedule (O&M Plan) for municipal operation and maintenance activities aimed at preventing and reducing water quality impacts. Must be at least as protective as relevant chapters of the E. WA Stormwater Manual and must include provisions for record keeping. The O&M Plan must address the following types of facilities or activities that are present within the permittee's boundaries: stormwater collection and conveyance system O&M; road, highway, and parking lot O&M; vehicle fleet storage, washing, and maintenance; municipal building cleaning, washing, painting and other O&M activities; park and open space O&M activities; municipal construction projects (all types); municipal industrial sites and activities; material and equipment storage areas and maintenance areas; flood management projects; and all other facilities that can reasonably be expected to discharge contaminated runoff. The O&M Plan must include a schedule of inspections and requirements for record keeping, and identify the department (and as appropriate, specific staff) responsible for performing each activity.	Assume that it takes two years to fully develop the O&M Plan and that appropriate staff from the various departments/divisions are involved (this is a large effort and could easily take longer).	Many activities currently performed but not formally documented in a standalone O&M Plan.	None	Y	Begin developing a good housekeeping plan and schedule (O&M Plan) for municipal operation and maintenance activities aimed at preventing and reducing water quality impacts. Must be at least as protective as relevant chapters of the E. WA Stormwater Manual. Must include schedule for inspections and address methods of record keeping.	\$20,000
G3. City to continue performing existing storm system maintenance activities. Includes on-going inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection and maintenance, proper waste disposal.	Per the direction provided by the City, the costs for existing storm system maintenance activities will be ramped-up during years 2-5, with existing costs assumed by the SW Utility at increments of 25% per year. Costs for phasing-in full stormwater system maintenance and oversight by compliance staff who review and record practices and provide technical assistance will be included in years 3-5.	City currently performs routine storm system O&M, including inspection of inlets, annual cleaning of catch basins, cleaning of culverts and ditches as necessary. No formal documentation or record keeping.	SW System Maint: Avg 05-06: \$75	Y	Ramp-up costs 25% \$18,750	City to continue existing storm system maintenance activities. Costs for existing activities ramped-up in permit years 2-5 and assumed by SW Utility. \$18,750
G4. City to continue existing street sweeping program and other all season BMPs to reduce pollution into the MS4.	Per the direction provided by the City, the costs for the existing street sweeping program will be ramped-up during years 2-5, with existing costs assumed by the SW Utility at increments of 25% per year. Costs for phasing-in enhanced/changed practices, improved materials, and for stormwater compliance staff to review and record practices and provide technical assistance will be included in years 3-5.	City currently sweeps once/week in comm/business district and once/6 weeks in residential areas. Significant snow removal and ice control activities employed. Will need to review existing and additional practices required to ensure WQ is protected.	Sweeping Program: Avg 05-06: \$120K	Y	Ramp-up costs 25% \$30,000	City to continue existing street sweeping program. Costs for existing program ramped-up in permit years 2-5 and assumed by SW Utility. \$30,000
G8. Seek coverage under statewide NPDES Construction SW General Permit for projects meeting criteria for coverage. Use applicable source control and good housekeeping BMPs during all public construction projects.	Assume that NPDES Construction SW permits are being sought as needed. Assume that projects not subject to NPDES permitting still include source control and good housekeeping BMPs as applicable. However, need to create and maintain records of such. Compliance with the new construction permit itself will be a cost borne by the project proponent.	Assume currently seeking NPDES permits. Compliance with the new construction permit itself will be a cost borne by the project proponent.	N/A	Y	Need money and staff to create and maintain records of seeking and complying with construction permits for municipal projects. Technical assistance to project proponent would cost more.	\$1,000

H. Compliance With Total Maximum Daily Load Allocations: WRIA 39 - Wilson Creek, Upper Yakima River						
H1. Participate in the development of TMDLs.	Assume this is required to know and control municipal liability. Assume that this involves staff time to review material, attend meetings, prepare and submit correspondence.	Upper Yakima River Temperature TMDL and near-term studies.	None	Y	Participation in TMDL development may be desirable.	\$500
H2. Comply with applicable TMDL provisions (could involve monitoring outfalls, retrofitting treatment into existing storm drains, enhanced source control efforts, etc.).	Minimal estimate to allow minor compliance activities (no major construction projects).		None	N	None	\$0
H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on receiving waters.	Assume recording keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of annual report.	Signs posted reminding citizens to dispose of pet wastes.	Unknown	Y	Track status of TMDL implementation and keep records.	\$500
I. Monitoring and Program Evaluation Requirements						
I1. Recommend that City participate in or establish a local water-quality monitoring program to assess baseline conditions and to evaluate effectiveness of SWM Program or TMDL implementation activities. Includes monitoring outfall quality to receiving waters. Provide a description of any stormwater monitoring or studies conducted by or on behalf of the City and include in annual report.	Recommended activity for City to consider. Specific water sampling and testing not required during effective term of permit, unless required as part of applicable TMDL. Assume some participation by City with local agencies (KCCD, Kittitas Co Water Purveyor, others) conducting routine or special water quality monitoring studies.	Currently monitor Yakima River for limited water quality constituents.	None	Y	Participate in local water quality monitoring studies. Submit description of water quality monitoring studies with annual report to Ecology.	\$0
J. Reporting and Record Keeping Requirements						
J1. Update written Stormwater Management Program (SWMP) for submittal in permit year 3 with annual report.	Assume this update occurs in the 4th quarter with the updated plan submitted with annual report in the following permit year.		None	Y	Update SWMP according to Ecology format. Assume a fair effort by multiple staff, public and stakeholder involvement, review/approval by elected leaders.	\$15,000
J2. Continue ongoing process for gathering, recording, maintaining and using information to conduct planning, set priorities, track the development and implementation of the SWMP, evaluate permit compliance/noncompliance, and evaluate the effectiveness of SWMP implementation (develop measurable goals). Information to be provided in annual report includes tracking the number of inspection performed, enforcement actions taken, types of public education activities as required for each SWMP component.	Modify process as needed.		None	Y	Finish creating record keeping forms/protocols; work with directors/managers/staff to implement. Fair effort by staff at multiple levels.	\$7,000
J3. Use information from J2 to evaluate the effectiveness of the SWMP components implemented to date, including whether the SWMP is preventing adverse impacts to water quality.	Assume this is a relatively simple process that considers the activities detailed for each SWMP component and cross-check them against records (e.g., reaching target audiences, site plan review and inspection program goals, storm system maintenance inspection goals, and other measurable goals established). Also cross-check activities against established literature, studies, and accepted BMP manuals to assess impact to water quality. Assume that this analysis is presented/discussed in a narrative portion of the annual report.		None	Y	Develop evaluation approach, conduct evaluation, prepare narrative of process and results for inclusion in annual report to Ecology.	\$4,000
J4. Develop and implement a process to track the cost of development and implementation of the SWMP.	Assume this involves lead permit compliance staff: (1) estimating which departments/divisions will need to begin tracking costs, for what, and when; (2) learning about cost tracking methods and options within each affected department or division (prioritized based on when they need to start); (3) checking with each department/division to ensure implementation of cost tracking methods; and (4) obtaining cost tracking information in a timely manner so that the annual report can include it.	Have established Financial Department and accounting procedures.	N/A	Y	Funding to cover staff time needed to interface with Financial Department accounting staff and develop tracking budgets and reports.	\$1,500
J5. Prepare and submit year 1 annual report and SWMP to Ecology. Use annual report form established by Ecology. The annual report must describe the status of compliance with permit conditions, including: (1) the status of implementation of each component of the SWMP; (2) an assessment of progress towards meeting the minimum performance standards (measurable goals) established for each minimum control measure of the SWMP; (3) a description of activities being implemented to comply with each component of the SWMP (including number of inspections, site plans reviewed, illegal connection removed, enforcement actions, educational activities, etc.); (4) proposed SWMP implementation schedule and status (plus comparison with schedule in the permit, discussion of missed deadlines and why, when missed deadline activities will be implemented); and (5) summary of SWMP evaluation (including evaluation of effectiveness of SWMP and appropriateness of BMPs selected). Note annexations during the reporting period and their influence on permit coverage areas. Note if relying upon another entity for implementation of any BMPs or other permit obligations.	Reports are due no later than March 31 each year beginning in 2008. Assume that in later years, it takes a fairly senior staff person working half time from January 1 to March 31 to prepare the report - including gathering all of the records, meeting with departments/division/staff responsible for various components, tracking down/reviewing all necessary records, preparing summaries and maps, etc. Effort may be less in first couple years but will grow in later years as required SWMP activities implemented increase.		None	Y	Prepare and submit annual report.	\$20,000

K. NPDES Equipment Funds						
K1. Illicit Discharge Detection and Elimination Equipment Fund.	Assume that funds begin to be set aside in year 2 to allow the purchase of equipment needed to execute the IDDE program. Includes vehicle, field testing equipment, flow monitoring equipment, field computer, etc.	None	None	Y	Build-up equipment fund.	\$5,000
K2. Construction & Post Construction Equipment Fund.	Assume that funds begin to be set aside in year 2 to allow the purchase and replacement of equipment needed to inspect sites. Includes vehicle(s), GPS devices, cameras, etc.	None	None	Y	Build-up equipment fund.	\$8,000
K3. Good Housekeeping Equipment Fund.	Assume that funding is set aside beginning in year 2 and used to finance some good housekeeping and O&M equipment. Purchasing and R&R of most major equipment will be shared between the stormwater division and other departments/divisions sharing use or benefit of the equipment.	None	None	Y	Build-up support equipment fund, contribute to divisions responsible for bulk of good housekeeping activities/costs.	\$10,000
K4. TMDL Compliance Equipment Fund.	Assume that some funds begin to be set aside in year 2 to allow the purchase of equipment needed for TMDL compliance (assume significant overlap with equipment needed for IDDE Program, see K1).	None	None	N	None	\$0
L. NPDES Capital Project Funds						
L1. Known or planned stormwater project needs.	Annual appropriation beginning in year 2 for known and planned drainage or water quality projects and/or major equipment purchases.	No existing drainage or water quality problems identified. Planned decant facility. Planned vector truck purchase.	None	Y	Build-up fund for known or planned CIPs and contribute to division responsible for bulk of CIP costs.	\$55,000
L2. Fund to cover needs of projects discovered as SWM Program is implemented.	Annual appropriation beginning year 2 for projects that will inevitably be discovered during SWM Program implementation that must be addressed. It is not possible to know the magnitude of these project costs, however the estimate will be kept low and it will be assumed that: (1) some are financed over the long term; and (2) large projects will require modification of the annual budget in subsequent years.		None	Y	Build-up fund for discovered CIP needs.	\$20,000

2. Stormwater Program Funding - Utility Assumed						
A. Stormwater Utility Implementation						
A1. Review Assessor and land use data (annexations, new developments, etc.), update assignment of impervious surface coverage and ERUs for non-residential parcels in City based on year 1 analysis and assumed ERU, update SW Utility customer database and billing rolls, coordinate with City Utility Department staff to update and process billing rolls and send out utility bills, update public information material for Utility Department staff as needed, provide refresher training for staff on customer response as needed.	Per the direction provided by the City, an interim SW Utility rate structure shall be developed and implemented in years 1. A permanent SW Utility rate structure will be funded and developed in year 3 and will include a formal impervious surface analysis (ERU definition, impervious surface measurements on non-residential parcels). For the interim rate structure developed, assume that an annual process must be conducted to prepare updated and correct utility billing rolls, but the effort is much less than for the start-up year.	None	None	Y	Review Assessor and land use data, update assignment of non-residential coverages and ERUs, customer database, billing rolls, arrange for Utility Department to send out utility bills, public information materials, train staff on customer response.	\$7,000
A2. General Financial Department services.	Payment to Financial Department staff for accounting services rendered to the utility to manage SW Utility fee finances and books.	None	None	Y	Pay Financial Department staff for accounting services rendered to the SW Utility.	\$5,000
A3. SW Utility account management. Includes processing requests for credits and waivers, response to customer questions and complaints, enforcing payment of utility fees.	Assume that there will always be some level of on-going customer service efforts.	None	None	Y	SW Utility customer service.	\$7,000
A4. Prepare budgets for following year and adjust SW Utility fee rates as needed.	Assume rate increases must be approved by the governing body and may require a public hearing. The need for rate increases may be avoided if the original ordinance either: (1) uses a flat five year average rate, or (2) includes a set schedule for rate increases over the first five years.	None	None	Y	Prepare budget for following year and adjust SW Utility fee rates as needed. Analysis by staff, support by accounting, review by elected leaders, hearing adoption for new rates.	\$5,000
B. Stormwater Development Permit Fees						
B1. Estimate the full annual cost of service for conducting stormwater plan review, site inspection, enforcement of standards, and providing technical assistance to developers, contractors, and engineers. Consider the cost of serving different types/classes of development customers.	Per the direction provided by the City, a formal cost of service analysis will not be conducted at this time for activities related to stormwater plan review, site inspection, or enforcement. The City has an established permit structure and fee schedule (including plan review and inspection) as outlined in the City's Public Works Development Standards (Section 11 - Permitting). Assume that a formal cost of service analysis will be conducted by the City in later years as part of an overall update to the City's permitting process, and will include a re-evaluation of enhanced stormwater/drainage/development review activities and costs.	The City has an established permit structure and fee schedule (Ord. No. 4446 - PW Development Standards, Sec. 11). Annual revenue from all permit fee sources estimated at \$50K per year. Annual revenue includes fees associated with stormwater plan review and inspection.	None	Y	Complete cost of service for stormwater/drainage/development review - assumed to be done as part of future, overall cost of service study for development fees.	\$0
B2. Work with directors and/or elected leaders to determine what portion of stormwater development review costs will be funded using permit fees, and how any remaining portions will be funded.	Per the direction provided by the City, assume that stormwater development review costs will be funded using existing permit structure and fee schedule. Assume that after future cost of service analysis is conducted, elected leaders will determine if the full cost of enhanced stormwater development review activities will be funded by permit fees or whether a portion will be funded in other ways.	None	None	Y	Cost of service report presentation, alternatives, meetings with staff and elected leaders, approval to proceed - assumed to be done as part of future, overall cost of service study for development fees.	\$0
B3. Update or prepare local codes establishing permit fees, conduct any needed legal reviews, prepare informational material, hold at least one public hearing, adopt new or updated stormwater development permit fees.	Per the direction provided by the City, assume that local code establishing permit structure and fee schedule adequate.	The City has an established permit structure and fee schedule (Ord. No. 4446 - PW Development Standards, Sec. 11).	None	Y	Draft updated or new codes for development review fees, public process, hearing adoption, implementation - assume to be done as part of future, overall cost of service study for development fees.	\$0
B4. Train local front-line staff on the details of the stormwater permit fee and how to respond to customer concerns.		None	None	Y	Develop training materials, FAQs, etc. for front-line staff dealing with customers.	\$1,500
B5. Implement (or use existing mechanisms as developed in J4) methods to track stormwater development review costs.		None	None	Y	Track stormwater development review costs, mainly provided by Financial Department accounting staff, with some involvement by stormwater compliance staff.	\$1,500
C. Stormwater Program Reserve Fund						
C1. Set-aside funds in years 2-3 to build a SWM Program reserve fund equal to 25% of the estimated year 5 cost (fully implemented program cost estimate).	Assume that funds are set-aside in earlier years to build fund while rates are still low.	None	None	Y	Utility & permit fees.	\$70,000
					SUM =	\$413,350
					Equipment	\$23,000
					Capital	\$75,000
					Staff, Fees, Overhead, Services	\$245,350
					Reserve	\$70,000
					Funding from Development Fees	\$0
					Funding from Utility/Other Source	\$413,350
						\$413,350

YEAR 3

Summary of Regulatory Requirements	Notes & Assumptions	Summary of Existing Municipal Activities Aiding Compliance	Current Average Annual Expenditures	New Funding Method Needed?	Assessment of New Activities Needed for Compliance	Estimated Annual Cost to Comply
1. NPDES						
A. General NPDES Requirements						
A2. Pay Annual Permit Fee.	City of Ellensburg - \$4,000	None	None	Y	Pay fee.	\$4,000
B. Public Education and Outreach: General public, builders, businesses, engineers, developers, plan reviewers, etc.						
B1. Begin development and documentation of public education and outreach strategy. Includes conducting analysis to identify and characterize target audiences within jurisdiction.	Target audiences may include types of commercial businesses, farmers, hobby farms, industries, residential home owners, organizations that hold charity car washes, educational institutions, etc.	None	None	Y	Conduct analysis and develop a document that identifies and characterizes target audiences and defines a strategy and process for reaching them.	\$5,500
C. Public Involvement: Allow public and stakeholder involvement in program development and funding via committees, hearings, advisory panels, etc.						
C2. Continue to implement the program or policy directive adopted in C1 allowing the public to participate in the process of developing and implementing the Program, including all ordinances. Assume this involves an advisory body, open houses, and news releases.	Funding will be shown here to account for broader information and involvement efforts including: open house meetings, work anticipated from public response to open house (inspection, rectifying problems reported, equipment costs), news releases, and convening a stakeholder advisory panel/group. Assume that the cost of some involvement work is included in the cost of a particular activity (e.g., developing ordinances).	None	None	Y	News release (one), open house (one), advisory body meetings (three).	\$19,500
C3. Respond to public calls.	Identified as an additional activity that will reasonably be expected by the City. Public calls assumed to be generated from information posted in news releases, website, and other sources. Does not include costs associated with response to public calls generated by other permit elements (e.g., illicit discharge hot line; complaints about utility fees, standards, and other requirements; etc.)	None	None	Y	Respond to public calls received.	\$5,000
C4. Post updated written SWMP on local agency website and/or deliver to Ecology for posting on their website.	Assume costs for coordination and posting of updated SWMP on website. Costs associated with annual updates to SWMP covered elsewhere.	None	None	Y	Post updated SWMP on website.	\$500
D. Illicit Discharge Detection and Elimination: Develop, implement, and enforce program to detect and eliminate polluted non-stormwater discharges into the MS4.						
D1. Complete mapping of the remaining 1/3 of agency MS4, showing connections to MS4, known outfalls, and receiving waters. Include field surveys to verify locations of outfalls and identify previously unknown outfalls on priority water bodies.	Assume that City has completed 2/3 of MS4 mapping and field survey work and that remaining mapping will be carried out under direction of permit compliance staff using program funding.	Existing mapping fairly complete, but may need to be reviewed, updated, field checked. May also need additional data on physical system characteristics.	None	Y	Finalize mapping effort of system. Includes needed system surveying and inspection.	\$7,000
D3. Complete written IDDE Program Plan started in Year 2. Execute training for staff involved.	Assume that once ordinance is on the books, enforcement activities are phased-in starting in Yr 3. Assume that written guidance is needed for orderly implementation. Initial training course is needed for staff involved in the IDDE Program.	The City does not have a formal IDDE Plan or staff training program.	None	Y	Complete IDDE Plan using guidance documents from Center for Watershed Protection, Ecology, and other jurisdictions as an aid. Provide training to staff involved in IDDE program and related activities.	\$9,500
D4. Begin implementation of the IDDE Program and regulatory ordinance.	Assume some IDDE work begins this year. Based on areas likely to have illicit discharges, staff will prioritize receiving waters and outfalls for visual inspection during field assessments in following years.	Staff have walked all streams within City, but have not formally documented findings, performed follow-up actions, or carried out enforcement. Map of MS4 is nearly complete.	None	Y	Develop a list of prioritized receiving waters within City for visual inspection.	\$3,500
D7. Respond to spills and illicit discharge hotline phone calls, address reported problems, keep records.	Assume that some calls require significant staff time to address, possibly also involving enforcement procedures, interface with other agencies, and legal support. Assume some overlap with D4.		None	Y	Respond to pollution reporting hotline, trace and resolve problems and conduct enforcement as needed to eliminate any illicit discharges.	\$8,500
D8. Implement procedures, records, and tracking needed to evaluate program effectiveness versus criteria established in the IDDE Program plan.			None	Y	Develop criteria and procedures to evaluate the effectiveness of the IDDE Program, implement the process and evaluate the program at the end of the year .	\$3,000

E. Construction Site Stormwater Runoff: Develop, implement, and enforce program to reduce pollutants in runoff to the MS4 from construction sites one or more acres in size.							
E2. Begin phasing-in enforcement of the Construction Stormwater Management ordinance - implementation of adopted procedures for site plan review, including review of stormwater pollution prevention plans (SWPPPs).	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex (size, type, location, phased, etc.) and that site plan and SWPPP review is more time consuming. Costs included here are for enhanced review activities.	Storm drainage plans and calculations are reviewed as part of development plan submittal review process; however, ESC plans/SWPPPs are not currently required nor reviewed.	None	Y	Development fees	Begin reviewing construction site plans to ensure that proper ESC BMPs are selected and used. Review Construction SWPPPs. Assume significant interactions with project engineers/contractors.	\$10,000
E3. Develop training materials and program for proper training of staff reviewing construction erosion and sediment control site plans and SWPPPs. Include training on stormwater manual, hydrologic methods, sediment control BMP O&M, etc.	Assume that a formal on-going training program for site plan reviewers needs to be established. Assume that construction and post-construction training is integrated together.	Limited ESC BMP staff training. Need on-going program and training.	None	Y	Development fees	Provide in-house training or send plan review staff to external training on proper ESC BMPs and SWPPP preparation and review.	\$3,000
E4. Begin phasing-in enforcement of the Construction Stormwater Management ordinance - implementation of adopted site inspection and enforcement procedures, maintain records of inspection and enforcement actions, verify SWPPPs being followed.	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex and that site inspection and enforcement is more time consuming. Costs included here are for enhanced site inspection and enforcement activities.	Storm drainage system inspected by PW Dept; however, ESC BMPs installed during construction phase not currently inspected.	None	Y	Development fees	Begin inspecting construction sites to ensure that proper ESC BMPs are selected, used, and maintained and SWPPP is being adhered to. Conduct enforcement as needed.	\$10,000
E5. Develop training materials and program for proper training of site inspection and enforcement staff. Include training on sediment control BMP designs, reading engineering drawings, sediment control BMP O&M, identifying problems, enforcement processes, etc.	Assume that a formal on-going training program for site inspectors and enforcement needs to be established. Assume that construction and post-construction training is integrated together.	Limited ESC BMP staff training.	None	Y	Development fees	Provide in-house training or send inspection/enforcement staff to external training on proper ESC BMPs, SWPPP requirements, local enforcement procedures.	\$3,000
E6. Continue providing information to construction operators about training available on stormwater pollution prevention for construction sites consistent with NPDES permit or E. WA Stormwater Manual.	Assume that operators are informed of available training opportunities as a normal part of the agencies construction permitting or approval process. Providing flyers on state or trade group training for example.	None	None	Y		Inform construction operators about available training on stormwater pollution prevention for construction sites.	\$500
E7. Continue procedures for receipt and consideration of construction site problems reported by the public, including publicizing a hot line phone number.	Assume hot line is the same one as in D6/D7. Assume that some calls require significant staff time to address, including multiple site visits, record keeping, correspondence with property owners, resolution of problems, and possible enforcement actions.	None	None	Y		Respond to pollution reporting hotline, visit sites and resolve problems and conduct enforcement as needed to eliminate any construction pollution problems.	\$5,000
F. Post Construction Stormwater Management: Develop, implement, and enforce program to address post construction stormwater runoff to the MS4 from sites 1+ acres in size.							
F2. Begin phasing-in enforcement of the Post Construction Stormwater Management ordinance - implementation of adopted procedures for site plan review, including review of selected structural BMPs, stormwater calculations, O&M proposals, etc.	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex (size, type, location, phased, etc.) and site plan review is more time consuming. Costs included here are for enhanced review activities.	Post-const stormwater runoff treatment and control measures required. Storm drainage plans and calculations are reviewed as part of development plan submittal review process.	Unknown	Y	Development fees	Continue reviewing construction site plans, drainage reports, and calculations to ensure that proper long-term stormwater runoff controls are being used. Assume significant interactions with project engineers/contractors.	\$10,000
F3. Develop training materials and program for proper training of staff reviewing post construction stormwater site plans and BMPs. Include training on stormwater manual, hydrologic methods, treatment, detention, retention BMP designs, O&M, etc.	Assume that a formal on-going training program for site plan reviewers needs to be established. Assume that construction and post construction training is integrated together.	Limited post construction BMP staff training. Need on-going program and training.	None	Y	Development fees	Provide in-house training or send plan review staff to external training on proper post construction BMPs, design, selection, operation, maintenance, E. WA Stormwater Manual requirements, etc.	\$3,000
F4. Begin phasing-in enforcement of the Post Construction Stormwater Management ordinance - implementation of adopted site inspection and enforcement procedures, maintain records of inspection and enforcement actions. Conduct follow-up inspections to ensure adequate maintenance performed for all structural BMPs.	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex and that site inspection and enforcement is more time consuming. Costs included here are for enhanced site inspection and enforcement activities.	Storm drainage system inspected by PW Dept. Post const structural BMPs inspected during and after construction; however, only on public projects.	Unknown	Y	Development fees	Continue inspecting construction sites, including private, to ensure that proper post construction BMPs are selected, used, and maintained. Conduct enforcement as needed.	\$10,000
F5. Develop training materials and program for proper training of site inspection and enforcement staff. Include training on treatment, detention, retention BMP designs, reading engineering drawings, long-term BMP O&M, identifying problems, enforcement processes, etc.	Assume that a formal on-going training program for site inspection and enforcement needs to be established. Assume that construction and post construction training is integrated together.	Limited post construction BMP staff training. Need on-going program and training.	None	Y	Development fees	Provide in-house training or send inspection/enforcement staff to external training on proper post construction BMPs, stormwater manual requirements, local enforcement procedures, etc.	\$3,000

F6. Continue providing information to design professionals (engineering consultants) about training available on how to comply with stormwater analysis and design procedures and other technical stormwater requirements consistent with NPDES permit or E. WA Stormwater Manual.	Assume that this only involves providing information about training executed by Ecology or other entities, therefore a local training program is not implemented by the permittee. Assume that material is distributed during normal development permitting process.	None	None	Y	Obtain and provide information during normal development permitting and review process.	\$500	
G. Pollution Prevention and Good Housekeeping for Municipal Operations: Develop and Implement an ongoing O&M and staff training program to prevent or reduce pollution from municipal operations.							
G1. Complete development and begin implementation of the good housekeeping plan and schedule (O&M Plan) started in year 2.	Cost presented here assume that leadership, technical support, advice, and record keeping is provided by stormwater compliance staff who work to complete the plan, and that some costs to carry out the new procedures is borne by the dept/div responsible for a given activity (e.g., cost of changing road maintenance practices/procedures is paid by Road Maintenance Div).	Many activities currently performed but not formally documented in a standalone O&M Plan.	None	Y	Complete development of good housekeeping plan and schedule (O&M Plan) for municipal operation and maintenance activities. Begin implementation of the plan working with affected departments and divisions. Maintain records.	\$10,000	
G2. Begin developing a municipal good housekeeping staff training program (materials, schedules, who gets what training, etc.) to meet the needs of the O&M Plan completed in G1. Training must include all employees whose construction, operations, and maintenance, job functions may impact storm water quality. Training shall address the importance of protecting water quality, the requirements of the NPDES permit, proper O&M requirements, inspection procedures, ways to perform their job while protecting water quality, procedures for reporting water quality concerns and suspected illicit discharges.	Assume that it takes at least a year to develop the good housekeeping training program and that appropriate staff from the various departments/divisions are involved (this is a large effort and could easily take longer). Assume program development is lead by stormwater compliance staff and is a program cost.		None	None	Y	Develop good housekeeping training materials and program, involve various affected departments/divisions and associated staff.	\$6,000
G3. Begin implementing enhanced storm system maintenance activities in accordance with appropriate schedules. Includes inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection and maintenance, proper waste disposal.	Assume that it takes 2 years to fully phase-in enhanced activities. Assume that facilities exist for proper waste disposal (construction of a "vactor" waste dewatering/decant facility may be required). Assume that most necessary heavy equipment is available. Costs here are for phasing-in full stormwater system maintenance and oversight by compliance staff who review and record practices and provide technical assistance.	City currently performs routine storm system O&M, including inspection of inlets, annual cleaning of catch basins, cleaning of culverts and ditches as necessary. No formal documentation or record keeping.	SW System Maint: Avg 05-06: \$75	Y Ramp-up costs 50% \$37,500 Additional activities \$20,000	Estimated costs for enhanced maintenance program with stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	\$57,500	
G4. Begin implementing enhanced pollution prevention and good housekeeping practices established in the O&M plan for roads, highways, parking lots. Need to address snow removal, de-icing, snow disposal, material storage & application, and all season BMPs to reduce pollution into the MS4.	Assume that it takes 2 years to fully phase-in activities. Assume that street sweeping continues to be one of the preferred all season BMPs employed by City with additional water quality oriented weather report based sweeping in some areas on a seasonal basis. Assume that snow removal and ice control activities continue at current level of effort and that waste and snow disposal areas are available. Costs here are for improved materials and for stormwater compliance staff to review and record practices and provide technical assistance.	City currently sweeps once/week in comm/business district and once/6 weeks in residential areas. Significant snow removal and ice control activities employed. Will need to review existing and additional practices required to ensure WQ is protected.	Sweeping Program: Avg 05-06: \$120K	Y Ramp-up costs 50% \$60,000 Additional activities \$20,000	Estimated costs for enhanced practices with stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	\$80,000	
G5. Begin conducting all vehicle and equipment washing and maintenance in self-contained building or wash area and/or maintenance areas where all wash water is kept out of the MS4.	Assume that physical facilities are readily available for washing and maintenance work. Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Some costs for changed practices may have to be borne by the department/division conducting the work.	Vehicle washing currently performed outdoors on uncovered wash pad, equipped with O/W separator and final discharge to in-line swale.	None	Y	Stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	\$1,500	
G6. Begin implementing pollution prevention and good housekeeping practices established in the O&M Plan for maintenance activities at all municipally owned buildings.	Cost can vary substantially (e.g., transit areas, airport, etc.). Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Cost of changed practices is borne by the department/division conducting the work.		None	None	Y	Stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	\$2,000
G7. Begin implementing pollution prevention and good housekeeping practices established in the O&M Plan at all municipally owned parks and open spaces.	Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Cost of changed practices is borne by the department/division conducting the work.		None	None	Y	Park storm system, park/open space O&M activities, and changed practices. Stormwater compliance staff provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	\$1,500

G8. Seek coverage under statewide NPDES Construction SW General Permit for projects meeting criteria for coverage. Use applicable source control and good housekeeping BMPs during all public construction projects.	Assume that NPDES Construction SW permits are being sought as needed. Assume that projects not subject to NPDES permitting still include source control and good housekeeping BMPs as applicable. However, need to create and maintain records of such. Compliance with the new construction permit itself will be a cost borne by the project proponent.	Assume currently seeking NPDES permits. Compliance with the new construction permit itself will be a cost borne by the project proponent.	N/A	Y	Need money and staff to create and maintain records of seeking and complying with construction permits for municipal projects. Technical assistance to project proponent would cost more.	\$1,000
G10. Begin developing Stormwater Pollution Prevention Plans to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas not covered by a statewide NPDES Industrial SW General Permit.	Assume that it takes about a year to identify/screen all known facilities, evaluate practices, develop SWPPPs, and identify training needs. Assume cost estimate only involves NPDES permit compliance official leading development of the SWPPP and training materials, and conducting training, not the cost of implementing the SWPPP on site, which will be borne by the department/division operating the site.	Assume 4 sites identified and require SWPPPs.	None	Y	Develop Stormwater Pollution Prevention Plans to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas not covered by a statewide NPDES Industrial SW General Permit.	\$12,000
G11. Begin implementing provisions to address water quality considerations in the design of all new flood management projects, including minimization of site hydrology impacts where possible.	Assume that normal SEPA, HPA, Critical Areas, Shorelines, and other permitting processes adequately consider and address water quality for new flood protection projects.	Assume existing permitting/review processes are adequate, however records need to be kept for NPDES purposes.	Unknown	Y	Permit compliance staff interface with development review processes to obtain and keep records per NPDES requirements.	\$500
G14. Begin locating and mapping all stormwater treatment and flow control facilities owned or operated by the permittee.	Need clarification from Ecology about whether or not an infiltration facility would be considered a "flow control facility". Assume that locating and mapping these systems needs to begin in the year prior to inspections having to be performed. Assume overlap with system mapping required under illicit discharge program.	Existing mapping of SW collection and conveyance system fairly complete, but may need review, locate, and map muni-owned SW treatment and flow control facilities.	None	Y	Locate and map half of all stormwater treatment and flow control facilities owned or operated by the permittee.	\$4,000
G15. Begin conducting spot checks at muni-owned and operated stormwater treatment and flow control facilities after major rainfall events (greater than 10 year recurrence interval).	Assume that inspection is performed by properly trained maintenance staff using standardized field data collection forms. Stormwater compliance staff will oversee work, provide technical assistance, and ensure that records are kept.	None	None	Y	Conduct spot checks of treatment and flow control facilities after major rainfall events (greater than 10 year recurrence interval). Take notes and keep records.	\$2,000
G16. As soon as practicable, execute any repair and maintenance projects needed based on observations made during regular inspections or spot checks of muni-owned or operated stormwater treatment and flow control facilities.	Could involve anything from light maintenance to major reconstruction. Cost estimate here will generally assume that few major construction or reconstruction projects are needed (or will help be paid for by multiple departments/divisions). Cost here is for stormwater compliance staff to provide technical support and approval of needed repairs, ensure that records are kept, and provide some funding for the project (overlap with NPDES CIP Fund).	None	None	Y	Fix or repair observed problems at muni-owned and operated stormwater treatment and flow control facilities after major storm events. Keep records of repairs and costs.	\$5,000
H. Compliance With Total Maximum Daily Load Allocations: WRIA 39 - Wilson Creek, Upper Yakima River						
H1. Participate in the development of TMDLs.	Assume this is required to know and control municipal liability. Assume that this involves staff time to review material, attend meetings, prepare and submit correspondence.	Upper Yakima River Temperature TMDL and near-term studies.	None	Y	Participation in TMDL development may be desirable.	\$500
H2. Comply with applicable TMDL provisions (could involve monitoring outfalls, retrofitting treatment into existing storm drains, enhanced source control efforts, etc.).	Minimal estimate to allow minor compliance activities (no major construction projects).	None	None	N	None	\$0
H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on receiving waters.	Assume recording keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of annual report.	Signs posted reminding citizens to dispose of pet wastes.	Unknown	Y	Track status of TMDL implementation and keep records.	\$500
I. Monitoring and Program Evaluation Requirements						
I1. Recommend that City participate in or establish a local water-quality monitoring program to assess baseline conditions and to evaluate effectiveness of SWM Program or TMDL implementation activities. Includes monitoring outfall quality to receiving waters. Provide a description of any stormwater monitoring or studies conducted by or on behalf of the City and include in annual report.	Recommended activity for City to consider. Specific water sampling and testing not required during effective term of permit, unless required as part of applicable TMDL. Assume some participation by City with local agencies (KCCD, Kittitas Co Water Purveyor, others) conducting routine or special water quality monitoring studies.	Currently monitor Yakima River for limited water quality constituents.	Unknown	Y	Participate in local water quality monitoring studies. Submit description of water quality monitoring studies with annual report to Ecology.	\$2,000
I2. Begin preparing for participation and implementation of a future comprehensive long-term stormwater monitoring program. Includes identification and mapping of two outfalls or conveyances where stormwater sampling will be conducted.	Actual stormwater monitoring to occur in 2nd permit term. Assume outfalls or conveyances identified and mapped as part of activities in D.1. Includes one site to represent commercial land use and the other site to represent high-density residential.	None	None	Y	Evaluate, identify, and map suitable outfalls and/or conveyances for planned future stormwater monitoring.	\$500

I3. Begin preparing for participation and implementation of a future comprehensive long-term Stormwater Management Program (SWMP) effectiveness monitoring program. Includes identification of at least two suitable questions and the selection of sites where future monitoring will be conducted. Monitoring will include stormwater/receiving water monitoring and/or program activity evaluation monitoring. A specific monitoring plan must be developed for each question posed.	Actual Stormwater Management Program effectiveness monitoring to occur in 2nd permit term. Assume that this involves staff time to develop suitable questions to assess program effectiveness, sites where monitoring will be conducted, and development of a monitoring plan for each question posed, which includes proposed purpose, design, and methods.	None	None	Y	Develop suitable questions, select monitoring sites or targeted activities for evaluation, and develop specific monitoring plan for each question posed to evaluate effectiveness of SWM Program.	\$2,000
J. Reporting and Record Keeping Requirements						
J1. Update written Stormwater Management Program (SWMP) for submittal in permit year 4 with annual report.	Assume this update occurs in the 4th quarter with the updated plan submitted with annual report in the following permit year.	None	None	Y	Update SWMP according to Ecology format. Assume a fair effort by multiple staff, public and stakeholder involvement, review/approval by elected leaders.	\$15,000
J2. Continue ongoing process for gathering, recording, maintaining and using information to conduct planning, set priorities, track the development and implementation of the SWMP, evaluate permit compliance/noncompliance, and evaluate the effectiveness of SWMP implementation (develop measurable goals). Information to be provided in annual report includes tracking the number of inspection performed, enforcement actions taken, types of public education activities as required for each SWMP component.	Modify process as needed.	None	None	Y	Enact record keeping forms/protocols; work with directors/managers/staff to implement. Fair effort by staff at multiple levels.	\$7,000
J3. Use information from J2 to evaluate the effectiveness of the SWMP components implemented to date, including whether the SWMP is preventing adverse impacts to water quality.	Assume that this involves reviewing the evaluation/analysis conducted in permit year 2 and updating it as needed.	None	None	Y	Review/update evaluation approach, conduct evaluation, prepare narrative of process and results for inclusion in annual report to Ecology.	\$2,000
J4. Continue process to track the cost of development and implementation of the SWMP.	Modify process as needed.	Have established Financial Department and accounting procedures.	N/A	Y	Funding to cover staff time needed to interface with Financial Department accounting staff and develop tracking budgets and reports.	\$1,500
J5. Prepare and submit year 2 annual report and updated SWMP to Ecology. Update prior year annual report and address the same considerations as described in permit year 2.	Reports are due no later than March 31 each year. Assume that in later years, it takes a fairly senior staff person working half time from January 1 to March 31 to prepare the report - including gathering all of the records, meeting with departments/division/staff responsible for various components, tracking down/reviewing all necessary records, preparing summaries and maps, etc. Effort may be less in first couple years but will grow in later years as required SWMP activities implemented increase.	None	None	Y	Prepare and submit annual report.	\$20,000
K. NPDES Equipment Funds						
K1. Illicit Discharge Detection and Elimination Equipment Fund.	Assume that funds begin to be set aside in year 2 to allow the purchase of equipment needed to execute the IDDE program. Includes vehicle, field testing equipment, flow monitoring equipment, field computer, etc.	None	None	Y	Build-up equipment fund.	\$5,000
K2. Construction & Post Construction Equipment Fund.	Assume that funds begin to be set aside in year 2 to allow the purchase and replacement of equipment needed to inspect sites. Includes vehicle(s), GPS devices, cameras, etc.	None	None	Y	Build-up equipment fund.	\$8,000
K3. Good Housekeeping Equipment Fund.	Assume that funding is set aside beginning in year 2 and used to finance some good housekeeping and O&M equipment. Purchasing and R&R of most major equipment will be shared between the stormwater division and other departments/divisions sharing use or benefit of the equipment.	None	None	Y	Build-up support equipment fund, contribute to divisions responsible for bulk of good housekeeping activities/costs.	\$10,000
K4. TMDL Compliance Equipment Fund.	Assume that some funds begin to be set aside in year 2 to allow the purchase of equipment needed for TMDL compliance (assume significant overlap with equipment needed for IDDE Program, see K1).	None	None	N	None	\$0
L. NPDES Capital Project Funds						
L1. Known or planned stormwater project needs.	Annual appropriation beginning in year 2 for known and planned drainage or water quality projects and/or major equipment purchases.	No existing drainage or water quality problems identified. Planned decant facility. Planned vector truck purchase.	None	Y	Build-up fund for known or planned CIPs and contribute to division responsible for bulk of CIP costs.	\$55,000
L2. Fund to cover needs of projects discovered as SWM Program is implemented.	Annual appropriation beginning year 2 for projects that will inevitably be discovered during SWM Program implementation that must be addressed. It is not possible to know the magnitude of these project costs, however the estimate will be kept low and it will be assumed that: (1) some are financed over the long term; and (2) large projects will require modification of the annual budget in subsequent years.		None	Y	Build-up fund for discovered CIP needs.	\$20,000

2. Stormwater Program Funding - Utility Assumed						
A. Stormwater Utility Implementation						
A1. Review Assessor and land use data (annexations, new developments, etc.), perform GIS analysis (ERU definition, impervious surface measurements on non-residential parcels), finalize and update existing SW Utility customer database and billing rolls, coordinate with City Utility Department staff to update and process billing rolls and send out utility bills (on monthly utility billing statements), update public information material for Utility Department staff, provide refresher training for staff on customer response.	Per the direction provided by the City, a permanent SW Utility rate structure will be funded and developed in year 3 and will include a formal impervious surface analysis (ERU definition, impervious surface measurements on non-residential parcels). Assume that an annual process must be conducted to prepare updated and correct utility billing rolls. Assume that initial work will be completed in permit year 3.	None	None	Y	Review Assessor and land use data, perform GIS analysis, update customer database, billing rolls, arrange for Utility Department to send out utility bills, public information materials, train staff on customer response.	\$15,000
A2. General Financial Department services.	Payment to Financial Department staff for accounting services rendered to the utility to manage SW Utility fee finances and books.	None	None	Y	Pay Financial Department staff for accounting services rendered to the SW Utility.	\$5,000
A3. SW Utility account management. Includes processing requests for credits and waivers, response to customer questions and complaints, enforcing payment of utility fees.	Assume that there will always be some level of on-going customer service efforts.	None	None	Y	SW Utility customer service.	\$7,000
A4. Prepare budgets for following year and adjust SW Utility fee rates as needed.	Assume rate increases must be approved by the governing body and may require a public hearing. The need for rate increases may be avoided if the original ordinance either: (1) uses a flat five year average rate, or (2) includes a set schedule for rate increases over the first five years.	None	None	Y	Prepare budget for following year and adjust SW Utility fee rates as needed. Analysis by staff, support by accounting, review by elected leaders, hearing adoption for new rates.	\$5,000
B. Stormwater Development Permit Fees						
B4. Re-train local front-line staff on the details of the stormwater permit fee and how to respond to customer concerns.	Assume minor training updates as needed.	None	None	Y Development fees	Develop training materials, FAQs, etc. for front-line staff dealing with customers.	\$1,500
B5. Continue methods to track stormwater development review costs.		None	None	Y Development fees	Track stormwater development review costs, mainly provided by Financial Department accounting staff, with some involvement by stormwater compliance staff.	\$1,500
B6. Continue to implement development permit fee process and collect revenue.		The City has an established permit structure and fee schedule.	None	Y Development fees	Continue to collect development permit fees.	\$0
B7. General Financial Department accounting services.	Assume no additional costs to manage stormwater development permit fees since included as part of overall management of development permit fee finances and books by Financial Department accounting staff.	None	None	Y Development fees	Pay accounting staff for services supporting stormwater development permit fees - stormwater permit fees included as part of overall permit structure.	\$0
C. Stormwater Program Reserve Fund						
C1. Set-aside funds in years 2-3 to build a SWM Program reserve fund equal to 25% of the estimated year 5 cost (fully implemented program cost estimate).	Assume that funds are set-aside in earlier years to build fund while rates are still low.	None	None	Y Utility & permit fees	Build reserve fund to ensure financial stability and financing capacity.	\$70,000
					SUM =	\$561,000
					Equipment	\$23,000
					Capital	\$75,000
					Staff, Fees, Overhead, Services	\$393,000
					Reserve	\$70,000
					Funding from Development Fees	\$55,000
					Funding from Utility/Other Source	\$506,000
						\$561,000

YEAR 4

Summary of Regulatory Requirements	Notes & Assumptions	Summary of Existing Municipal Activities Aiding Compliance	Current Average Annual Expenditures	New Funding Method Needed?	Assessment of New Activities Needed for Compliance	Estimated Annual Cost to Comply
1. NPDES						
A. General NPDES Requirements						
A2. Pay Annual Permit Fee.	City of Ellensburg - \$4,500	None	None	Y	Pay fee.	\$4,500
B. Public Education and Outreach: General public, builders, businesses, engineers, developers, plan reviewers, etc.						
B2. Develop a formal written public education and outreach strategy designed to reach the target audiences identified in B1.	Assume that this is fairly straightforward document to prepare and that strategy requires elected leader review and approval.	None	None	Y	Prepare a formal written education and outreach strategy, present to elected leaders for review and approval.	\$4,000
B3. Implement the public education and outreach strategy developed in B2.	Assume this includes: stormwater brochures (general), work anticipated from public response to brochure mailing (inspection, rectifying problems reported, equipment costs), storm drain stenciling with volunteers, minor classroom education coordinated with schools, and development of stormwater website (page within City's existing site).	None	None	Y	Begin public education and outreach activities.	\$31,500
C. Public Involvement: Allow public and stakeholder involvement in program development and funding via committees, hearings, advisory panels, etc.						
C2. Continue to implement the program or policy directive adopted in C1 allowing the public to participate in the process of developing and implementing the Program, including all ordinances. Assume this involves an advisory body, open houses, and news releases.	Funding will be shown here to account for broader information and involvement efforts including: open house meetings, work anticipated from public response to open house (inspection, rectifying problems reported, equipment costs), news releases, and convening a stakeholder advisory panel/group. Assume that the cost of some involvement work is included in the cost of a particular activity (e.g., developing ordinances).	None	None	Y	News release (one), open house (one), advisory body meetings (three).	\$19,500
C3. Respond to public calls.	Identified as an additional activity that will reasonably be expected by the City. Public calls assumed to be generated from information posted in news releases, website, and other sources. Does not include costs associated with response to public calls generated by other permit elements (e.g., illicit discharge hot line; complaints about utility fees, standards, and other requirements; etc.).	None	None	Y	Respond to public calls received.	\$5,000
C4. Post updated written SWMP on local agency website and/or deliver to Ecology for posting on their website.	Assume costs for coordination and posting of updated SWMP on website. Costs associated with annual updates to SWMP covered elsewhere.	None	None	Y	Post updated SWMP on website.	\$500
D. Illicit Discharge Detection and Elimination: Develop, implement, and enforce program to detect and eliminate polluted non-stormwater discharges into the MS4.						
D1. Update completed map of agency MS4, including new and removed connections, updates to system characteristic data and information, location of previously unknown outfalls and connections, etc.	Assume that City has completed MS4 mapping and field survey work by end of Year 3. Assume minimal work needed for annual updates to map by permit compliance staff.	None	None	Y	Annually update MS4 mapping.	\$1,000
D3. Repeat or update IDDE staff training as needed.	Assume that IDDE training is repeated or updated annually as needed based on staffing changes and updated methods.	None	None	Y	Evaluate need for training update. Update and repeat training as needed.	\$2,500
D4. Continue and fully implement the IDDE Program and regulatory ordinance.	IDDE work begins in earnest this year with a fully implemented IDDE Program by mid-year. Staff will conduct field assessments on three high-priority water bodies within the City. Field assessments include visual inspection of outfalls during dry weather and documentation of observations and findings. Assume that some screened outfalls appear suspicious and require follow-up work including the collection of samples, source tracing and removal activities, and possibly enforcement actions.	Source tracing and removal are currently conducted on an as needed basis.	Unknown	Y	Conduct field assessments on three high-priority water bodies within the City and conduct necessary follow-up activities to ensure termination of illicit discharges identified.	\$120,000
D5. Inform public employees, businesses, and general public about hazards posed by illicit discharges and improper waste disposal. Develop and distribute information to target audiences identified in B1 and B2.	Some overlap with B3 - implementation of public education and outreach strategy. Likely need to begin this activity in earlier years. Cost reflects overlap with B3.	None	None	Y	Inform public employees, businesses, and general public about hazards posed by illicit discharges and improper waste disposal. Provide information on proper disposal, etc.	\$1,500

D7. Respond to spills and illicit discharge hotline phone calls, address reported problems, keep records.	Assume that some calls require significant staff time to address, possibly also involving enforcement procedures, interface with other agencies, and legal support. Assume some overlap with D4.	None	None	Y	Respond to pollution reporting hotline, trace and resolve problems and conduct enforcement as needed to eliminate any illicit discharges.	\$8,500
D8. Implement procedures, records, and tracking needed to evaluate program effectiveness versus criteria established in the IDDE Program plan.		None	None	Y	Review, update, and use criteria and procedures to evaluate the effectiveness of the IDDE Program, implement the process and evaluate the program at the end of the year .	\$3,000
E. Construction Site Stormwater Runoff: Develop, implement, and enforce program to reduce pollutants in runoff to the MS4 from construction sites one or more acres in size.						
E2. Continue and ensure full enforcement of the Construction Stormwater Management ordinance - implementation of adopted procedures for site plan review, including review of stormwater pollution prevention plans (SWPPPs).	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex (size, type, location, phased, etc.) and that site plan and SWPPP review is more time consuming. Costs included here are for enhanced review activities.	Storm drainage plans and calculations are reviewed as part of development plan submittal review process; however, ESC plans/SWPPPs are not currently required nor reviewed.	None	Y Development fees	Review construction site plans to ensure that proper ESC BMPs are selected and used. Review Construction SWPPPs. Assume significant interactions with project engineers/contractors.	\$10,000
E3. Execute proper training for staff reviewing construction erosion and sediment control site plans and SWPPPs: Include training on stormwater manual, hydrologic methods, sediment control BMP O&M, etc.	Assume that a formal on-going training program for site plan reviewers is needed. Assume that construction and post-construction training is integrated together. Assume that level of effort drops because most training materials and procedures have already been established.	Limited ESC BMP staff training. Need on-going program and training.	None	Y Development fees	Provide in-house training or send plan review staff to external training on proper ESC BMPs and SWPPP preparation and review.	\$2,000
E4. Continue and ensure full enforcement of the Construction Stormwater Management ordinance - implementation of adopted site inspection and enforcement procedures, maintain records of inspection and enforcement actions, verify SWPPPs being followed.	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex and that site inspection and enforcement is more time consuming. Costs included here are for enhanced site inspection and enforcement activities.	Storm drainage system inspected by PW Dept; however, ESC BMPs installed during construction phase not currently inspected.	None	Y Development fees	Inspect construction sites to ensure that proper ESC BMPs are selected, used, and maintained and SWPPP is being adhered to. Conduct enforcement as needed.	\$10,000
E5. Execute proper training for site inspection and enforcement staff. Include training on sediment control BMP designs, reading engineering drawings, sediment control BMP O&M, identifying problems, enforcement processes, etc.	Assume that a formal on-going training program for site inspectors and enforcement is needed. Assume that construction and post-construction training is integrated together. Assume that level of effort drops because most training materials and procedures have already been established.	Limited ESC BMP staff training.	None	Y Development fees	Provide in-house training or send inspection/enforcement staff to external training on proper ESC BMPs, SWPPP requirements, local enforcement procedures.	\$2,000
E6. Continue providing information to construction operators about training available on stormwater pollution prevention for construction sites consistent with NPDES permit or E. WA Stormwater Manual.	Assume that operators are informed of available training opportunities as a normal part of the agencies construction permitting or approval process. Providing flyers on state or trade group training for example.		None	Y	Inform construction operators about available training on stormwater pollution prevention for construction sites.	\$500
E7. Continue procedures for receipt and consideration of construction site problems reported by the public, including publicizing a hot line phone number.	Assume hot line is the same one as in D6/D7. Assume that some calls require significant staff time to address, including multiple site visits, record keeping, correspondence with property owners, resolution of problems, and possible enforcement actions.		None	Y	Respond to pollution reporting hotline, visit sites and resolve problems and conduct enforcement as needed to eliminate any construction pollution problems.	\$5,000
F. Post Construction Stormwater Management: Develop, implement, and enforce program to address post construction stormwater runoff to the MS4 from sites 1+ acres in size.						
F2. Continue and ensure full enforcement of the Post Construction Stormwater Management ordinance - implementation of adopted procedures for site plan review, including review of selected structural BMPs, stormwater calculations, O&M proposals, etc.	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex (size, type, location, phased, etc.) and site plan review is more time consuming. Costs included here are for enhanced review activities.	Post-const stormwater runoff treatment and control measures required. Storm drainage plans and calculations are reviewed as part of development plan submittal review process.	Unknown	Y Development fees	Continue reviewing construction site plans, drainage reports, and calculations to ensure that proper long-term stormwater runoff controls are being used. Assume significant interactions with project engineers/contractors.	\$10,000
F3. Execute proper training for staff reviewing post construction stormwater site plans and BMPs. Include training on stormwater manual, hydrologic methods, treatment, detention, retention BMP designs, O&M, etc.	Assume that a formal on-going training program for site plan reviewers needs to be established. Assume that construction and post construction training is integrated together. Assume that level of effort drops because most training materials and procedures have already been established.	Limited post construction BMP staff training. Need on-going program and training.	None	Y Development fees	Provide in-house training or send plan review staff to external training on proper post construction BMPs, design, selection, operation, maintenance, E. WA Stormwater Manual requirements, etc.	\$2,000

F4. Continue and ensure full enforcement of the Post Construction Stormwater Management ordinance - implementation of adopted site inspection and enforcement procedures, maintain records of inspection and enforcement actions. Conduct follow-up inspections to ensure adequate maintenance performed for all structural BMPs.	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex and that site inspection and enforcement is more time consuming. Costs included here are for enhanced site inspection and enforcement activities.	Storm drainage system inspected by PW Dept. Post const structural BMPs inspected during and after construction; however, only on public projects.	Unknown	Y Development fees	Continue inspecting construction sites, including private, to ensure that proper post construction BMPs are selected, used, and maintained. Conduct enforcement as needed.	\$10,000
F5. Execute proper training for site inspection and enforcement staff. Include training on treatment, detention, retention BMP designs, reading engineering drawings, long-term BMP O&M, identifying problems, enforcement processes, etc.	Assume that a formal on-going training program for site inspection and enforcement is needed. Assume that construction and post construction training is integrated together. Assume that level of effort drops because most training materials and procedures have already been established.	Limited post construction BMP staff training. Need on-going program and training.	None	Y Development fees	Provide in-house training or send inspection/enforcement staff to external training on proper post construction BMPs, stormwater manual requirements, local enforcement procedures, etc.	\$2,000
F6. Continue providing information to design professionals (engineering consultants) about training available on how to comply with stormwater analysis and design procedures and other technical stormwater requirements consistent with NPDES permit or E. WA Stormwater Manual.	Assume that this only involves providing information about training executed by Ecology or other entities, therefore a local training program is not implemented by the permittee. Assume that material is distributed during normal development permitting process.	None	None	Y	Obtain and provide information during normal development permitting and review process.	\$500
G. Pollution Prevention and Good Housekeeping for Municipal Operations: Develop and Implement an ongoing O & M and staff training program to prevent or reduce pollution from municipal operations.						
G2. Finish developing and execute a municipal good housekeeping training program for the various staff groups.	Assume that it takes 2 years to develop the O&M Plan and that appropriate staff from the various departments/divisions are involved. Assume training is provided to approximately 5 groups, including streets, shop, engineering, inspection/enforcement, etc - this is a large effort including formal day of training in-house and and full day in field. Assume training is lead by stormwater compliance staff and is a program cost. Costs to send staff to training is borne by department/division staff come from.	None	None	Y	Conduct good housekeeping training program for various affected departments/divisions and associated staff.	\$15,000
G3. Continue phasing-in and implementing enhanced storm system maintenance activities in accordance with appropriate schedules. Includes inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection and maintenance, proper waste disposal.	Assume that it takes 2 years to fully phase-in enhanced activities. Assume that facilities exist for proper waste disposal (construction of a "vector" waste dewatering/decant facility may be required). Assume that most necessary heavy equipment is available. Costs here are for phasing-in full stormwater system maintenance and oversight by compliance staff who review and record practices and provide technical assistance.	City currently performs routine storm system O&M, including inspection of inlets, annual cleaning of catch basins, cleaning of culverts and ditches as necessary. No formal documentation or record keeping.	SW System Maint: Avg 05-06: \$75	Y Ramp-up costs 75% \$56,250 Additional activities \$20,000	Estimated costs for enhanced practices with stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	\$76,250
G4. Continue phasing-in and implementing enhanced pollution prevention and good housekeeping practices established in the O&M plan for roads, highways, parking lots. Need to address snow removal, de-icing, snow disposal, material storage & application, and all season BMPs to reduce pollution into the MS4.	Assume that it takes 2 years to fully phase-in activities. Assume that street sweeping continues to be one of the preferred all season BMPs employed by City with additional water quality oriented weather report based sweeping in some areas on a seasonal basis. Assume that snow removal and ice control activities continue at current level of effort and that waste and snow disposal areas are available. Costs here are for improved materials and for stormwater compliance staff to review and record practices and provide technical assistance.	City currently sweeps once/week in comm/business district and once/6 weeks in residential areas. Significant snow removal and ice control activities employed. Will need to review existing and additional practices required to ensure WQ is protected.	Sweeping Program: Avg 05-06: \$120K	Y Ramp-up costs 75% \$90,000 Additional activities \$20,000	Estimated costs for enhanced practices with stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	\$110,000
G5. Continue conducting all vehicle and equipment washing and maintenance in self-contained building or wash area and/or maintenance areas where all wash water is kept out of the MS4.	Assume that physical facilities are readily available for washing and maintenance work. Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Some costs for changed practices may have to be borne by the department/division conducting the work.	Vehicle washing currently performed outdoors on uncovered wash pad, equipped with O/W separator and final discharge to in-line swale.	None	Y	Stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	\$1,500
G6. Continue phasing-in and implementing pollution prevention and good housekeeping practices established in the O&M Plan for maintenance activities at all municipally owned buildings.	Cost can vary substantially (e.g., transit areas, airport, etc.). Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Cost of changed practices is borne by the department/division conducting the work.	None	None	Y	Stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	\$2,000

G7. Continue phasing-in and implementing pollution prevention and good housekeeping practices established in the O&M Plan at all municipally owned parks and open spaces.	Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Cost of changed practices is borne by the department/division conducting the work.	None	None	Y	Park storm system, park/open space O&M activities, and changed practices. Stormwater compliance staff provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	\$1,500
G8. Seek coverage under statewide NPDES Construction SW General Permit for projects meeting criteria for coverage. Use applicable source control and good housekeeping BMPs during all public construction projects.	Assume that NPDES Construction SW permits are being sought as needed. Assume that projects not subject to NPDES permitting still include source control and good housekeeping BMPs as applicable. However, need to create and maintain records of such. Compliance with the new construction permit itself will be a cost borne by the project proponent.	Assume currently seeking NPDES permits. Compliance with the new construction permit itself will be a cost borne by the project proponent.	N/A	Y	Need money and staff to create and maintain records of seeking and complying with construction permits for municipal projects. Technical assistance to project proponent would cost more.	\$1,000
G10. Finish developing and begin implementing Stormwater Pollution Prevention Plans to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas not covered by a statewide NPDES Industrial SW General Permit. Develop training materials and execute training as needed.	Assume cost estimate only involves NPDES permit compliance official leading development of the SWPPP and training materials, and conducting training, not the cost of implementing the SWPPP on site, which will be borne by the department/division operating the site. Assume that level of effort drops in years 4-5 because training materials, training program, and procedures have already been established.	Assume 4 sites identified and require SWPPPs.	None	Y	Complete Stormwater Pollution Prevention Plans to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas, conduct training, implement SWPPPs.	\$10,000
G11. Continue implementing provisions to address water quality considerations in the design of all new flood management projects, including minimization of site hydrology impacts where possible.	Assume that normal SEPA, HPA, Critical Areas, Shorelines, and other permitting processes adequately consider and address water quality for new flood protection projects.	Assume existing permitting/review processes are adequate, however records need to be kept for NPDES purposes.	Unknown	Y	Permit compliance staff interface with development review processes to obtain and keep records per NPDES requirements.	\$1,000
G12. Review existing flood management projects, prioritize them based on water quality concerns, and select at least five to review and evaluate whether or not changes or additions should be made to improve water quality.	General language, could result in projects of significant costs depending on how interpreted. Not clear what intention is: is this a review of existing stormwater detention facilities or a review of levee systems? Assume cost is for review process, not improvement projects. Evaluation process and definition of desired improvements occurs in year 5.	None	None	Y	Develop criteria and protocol for review, conduct review of existing flood management projects for water quality concerns, select five to evaluate if changes or additions should be made to improve water quality.	\$1,000
G13. Begin using source control and good housekeeping BMPs during other municipal activities and at other municipal sites that would reasonably be expected to discharge contaminated runoff.	Assume that it takes about a year to identify all other municipal facilities, evaluate practices, identify appropriate BMPs to be implemented to protect water quality, and provide necessary training. Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Cost of changed practices is borne by the department/division conducting the work. Assume that there are several facilities meeting criteria.	Senior Center, City pool, animal shelter, substations, pump stations, City domestic well sites.	None	Y	Stormwater compliance staff provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	\$4,000
G14. Finish locating all treatment and flow control facilities owned or operated by the permittee. Inspect each facility, making notes of conditions, maintenance needs, or other related concerns. Track all new systems coming into public ownership as development occurs.	Assume overlap with system mapping required under illicit discharge program. Assume that inspection is performed by properly trained maintenance staff using standardized field data collection forms.	Existing mapping fairly complete, but may need review, locate, and map muni-owned SW treatment and flow control facilities. Some inspection records may exist.	None	Y	Locate and map remaining half of all stormwater treatment and flow control facilities owned or operated by the permittee. Inspect facilities and maintain records.	\$4,000
G15. Conduct spot checks at muni-owned and operated stormwater treatment and flow control facilities after major rainfall events (greater than 10 year recurrence interval).	Assume that inspection is performed by properly trained maintenance staff using standardized field data collection forms. Stormwater compliance staff will oversee work, provide technical assistance, and ensure that records are kept.	None	None	Y	Conduct spot checks of treatment and flow control facilities after major rainfall events (greater than 10 year recurrence interval). Take notes and keep records.	\$2,000
G16. As soon as practicable, execute any repair and maintenance projects needed based on observations made during regular inspections or spot checks of muni-owned or operated stormwater treatment and flow control facilities.	Could involve anything from light maintenance to major reconstruction. Cost estimate here will generally assume that no major construction or reconstruction projects are needed (or will be covered by the stormwater CIP Fund). Cost here is for stormwater compliance staff to provide technical support and approval of needed repairs and ensure that records are kept.	None	None	Y	Fix or repair observed problems at muni-owned and operated stormwater treatment and flow control facilities after major storm events. Keep records of repairs and costs.	\$5,000
H. Compliance With Total Maximum Daily Load Allocations: WRIA 39 - Wilson Creek, Upper Yakima River						
H1. Participate in the development of TMDLs.	Assume this is required to know and control municipal liability. Assume that this involves staff time to review material, attend meetings, prepare and submit correspondence.	Upper Yakima River Temperature TMDL and near-term studies.	None	Y	Participation in TMDL development may be desirable.	\$500
H2. Comply with applicable TMDL provisions (could involve monitoring outfalls, retrofitting treatment into existing storm drains, enhanced source control efforts, etc.).	Minimal estimate to allow minor compliance activities (no major construction projects).	None	None	N	None	\$0

H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on receiving waters.	Assume recording keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of annual report.	Signs posted reminding citizens to dispose of pet wastes.	Unknown	Y	Track status of TMDL implementation and keep records.	\$500
I. Monitoring and Program Evaluation Requirements						
I1. Recommend that City participate in or establish a local water-quality monitoring program to assess baseline conditions and to evaluate effectiveness of SWM Program or TMDL implementation activities. Includes monitoring outfall quality to receiving waters. Provide a description of any stormwater monitoring or studies conducted by or on behalf of the City and include in annual report.	Recommended activity for City to consider. Specific water sampling and testing not required during effective term of permit, unless required as part of applicable TMDL. Assume some participation by City with local agencies (KCCD, Kittitas Co Water Purveyor, others) conducting routine or special water quality monitoring studies.	Currently monitor Yakima River for limited water quality constituents.	Unknown	Y	Participate in local water quality monitoring studies. Submit description of water quality monitoring studies with annual report to Ecology.	\$2,000
I3. Continue preparing for participation and implementation of a future comprehensive long-term Stormwater Management Program (SWMP) effectiveness monitoring program. Have developed at least two suitable questions, selected sites where future monitoring will be conducted, and developed a specific monitoring plan for each question posed. Include a summary of the proposed questions for the SWM Program effectiveness monitoring and describe status of developing the monitoring plan in 3rd annual report.	Actual Stormwater Management Program effectiveness monitoring to occur in 2nd permit term. Assume that this involves staff time to fully develop suitable questions to assess program effectiveness, sites where monitoring will be conducted, and development of a monitoring plan for each question posed, which includes proposed purpose, design, and methods. Include status in 3rd Annual Report (by March 31, 2010).		None	Y	Develop suitable questions, select monitoring sites or targeted activities for evaluation, and develop specific monitoring plan for each question posed to evaluate effectiveness of SWM Program.	\$2,000
J. Reporting and Record Keeping Requirements						
J1. Update written Stormwater Management Program (SWMP) for submittal in permit year 5 with annual report.	Assume this update occurs in the 4th quarter with the updated plan submitted with annual report in the following permit year.		None	Y	Update SWMP according to Ecology format. Assume a fair effort by multiple staff, public and stakeholder involvement, review/approval by elected leaders.	\$15,000
J2. Continue ongoing process for gathering, recording, maintaining and using information to conduct planning, set priorities, track the development and implementation of the SWMP, evaluate permit compliance/noncompliance, and evaluate the effectiveness of SWMP implementation (develop measurable goals). Information to be provided in annual report includes tracking the number of inspection performed, enforcement actions taken, types of public education activities as required for each SWMP component.	Modify process as needed.		None	Y	Enact record keeping forms/protocols; work with directors/managers/staff to implement. Fair effort by staff at multiple levels.	\$7,000
J3. Use information from J2 to evaluate the effectiveness of the SWMP components implemented to date, including whether the SWMP is preventing adverse impacts to water quality.	Assume that this involves reviewing the evaluation/analysis conducted in permit year 2 and updating it as needed.		None	Y	Review/update evaluation approach, conduct evaluation, prepare narrative of process and results for inclusion in annual report to Ecology.	\$2,000
J4. Continue process to track the cost of development and implementation of the SWMP.	Modify process as needed.	Have established Financial Department and accounting procedures.	N/A	Y	Funding to cover staff time needed to interface with Financial Department accounting staff and develop tracking budgets and reports.	\$1,500
J5. Prepare and submit year 3 annual report and updated SWMP to Ecology. Update prior year annual report and address the same considerations as described in permit year 3.	Reports are due no later than March 31 each year. Assume that in later years, it takes a fairly senior staff person working half time from January 1 to March 31 to prepare the report - including gathering all of the records, meeting with departments/division/staff responsible for various components, tracking down/reviewing all necessary records, preparing summaries and maps, etc. Effort may be less in first couple years but will grow in later years as required SWMP activities implemented increase.		None	Y	Prepare and submit annual report.	\$20,000
K. NPDES Equipment Funds						
K1. Illicit Discharge Detection and Elimination Equipment Fund.	Assume that funds begin to be set aside in year 2 to allow the purchase of equipment needed to execute the IDDE program. Includes vehicle, field testing equipment, flow monitoring equipment, field computer, etc.		None	Y	Build-up equipment fund.	\$5,000
K2. Construction & Post Construction Equipment Fund.	Assume that funds begin to be set aside in year 2 to allow the purchase and replacement of equipment needed to inspect sites. Includes vehicle(s), GPS devices, cameras, etc.		None	Y	Build-up equipment fund.	\$8,000
K3. Good Housekeeping Equipment Fund.	Assume that funding is set aside beginning in year 2 and used to finance some good housekeeping and O&M equipment. Purchasing and R&R of most major equipment will be shared between the stormwater division and other departments/divisions sharing use or benefit of the equipment.		None	Y	Build-up support equipment fund, contribute to divisions responsible for bulk of good housekeeping activities/costs.	\$10,000
K4. TMDL Compliance Equipment Fund.	Assume that some funds begin to be set aside in year 2 to allow the purchase of equipment needed for TMDL compliance (assume significant overlap with equipment needed for IDDE Program, see K1).		None	N	None	\$0

L. NPDES Capital Project Funds							
L1. Known or planned stormwater project needs.	Annual appropriation beginning in year 2 for known and planned drainage or water quality projects and/or major equipment purchases.	No existing drainage or water quality problems identified. Planned decant facility. Planned vector truck purchase.	None	Y	Build-up fund for known or planned CIPs and contribute to division responsible for bulk of CIP costs.	\$55,000	
L2. Fund to cover needs of projects discovered as SWM Program is implemented.	Annual appropriation beginning year 2 for projects that will inevitably be discovered during SWM Program implementation that must be addressed. It is not possible to know the magnitude of these project costs, however the estimate will be kept low and it will be assumed that: (1) some are financed over the long term; and (2) large projects will require modification of the annual budget in subsequent years.		None	Y	Build-up fund for discovered CIP needs.	\$20,000	
2. Stormwater Program Funding - Utility Assumed							
A. Stormwater Utility Implementation							
A1. Review Assessor and land use data (annexations, new developments), perform updated GIS analysis, update SW Utility customer database and billing rolls, coordinate with City Utility Department staff to update and process billing rolls and send out utility bills, update public information material for Utility Department staff as needed, provide refresher training for staff on customer response as needed.	Per the direction provided by the City, a permanent SW Utility rate structure will be funded and developed in year 3 and will include a formal impervious surface analysis (ERU definition, impervious surface measurements on non-residential parcels). Assume that an annual process must be conducted to prepare updated and correct utility billing rolls, but the effort is much less than for the start-up year.		None	Y	Review Assessor and land use data, update GIS analysis, customer database, billing rolls, arrange for Utility Department to send out utility bills, public information materials, train staff on customer response.	\$10,000	
A2. General Financial Department services.	Payment to Financial Department staff for accounting services rendered to the utility to manage SW Utility fee finances and books.		None	Y	Pay Financial Department staff for accounting services rendered to the SW Utility.	\$5,000	
A3. SW Utility account management. Includes processing requests for credits and waivers, response to customer questions and complaints, enforcing payment of utility fees.	Assume that there will always be some level of on-going customer service efforts.		None	Y	SW Utility customer service.	\$7,000	
A4. Prepare budgets for following year and adjust SW Utility fee rates as needed.	Assume rate increases must be approved by the governing body and may require a public hearing. The need for rate increases may be avoided if the original ordinance either: (1) uses a flat five year average rate, or (2) includes a set schedule for rate increases over the first five years.		None	Y	Prepare budget for following year and adjust SW Utility fee rates as needed. Analysis by staff, support by accounting, review by elected leaders, hearing adoption for new rates.	\$5,000	
B. Stormwater Development Permit Fees							
B4. Re-train local front-line staff on the details of the new stormwater permit fee and how to respond to customer concerns.	Assume minor training updates as needed.		None	Y	Develop training materials, FAQs, etc. for front-line staff dealing with customers.	\$1,500	
B5. Continue methods to track stormwater development review costs.			None	Y	Track stormwater development review costs, mainly provided by Financial Department accounting staff, with some involvement by stormwater compliance staff.	\$1,500	
B6. Continue to implement development permit fee process and collect revenue.		The City has an established permit structure and fee schedule.	None	Y	Continue to collect development permit fees.	\$0	
B7. General Financial Department accounting services.	Assume no additional costs to manage stormwater development permit fees since included as part of overall management of development permit fee finances and books by Financial Department accounting staff.		None	Y	Pay accounting staff for services supporting stormwater development permit fees - stormwater permit fees included as part of overall permit structure.	\$0	
SUM =						\$668,250	
						Equipment	\$23,000
						Capital	\$75,000
						Staff, Fees, Overhead, Services	\$570,250
						Reserve	\$0
						Funding from Development Fees	\$51,000
						Funding from Utility/Other Source	\$617,250
							\$668,250

YEAR 5

Summary of Regulatory Requirements	Notes & Assumptions	Summary of Existing Municipal Activities Aiding Compliance	Current Average Annual Expenditures	New Funding Method Needed?	Assessment of New Activities Needed for Compliance	Estimated Annual Cost to Comply
1. NPDES						
A. General NPDES Requirements						
A2. Pay Annual Permit Fee.	City of Ellensburg - \$5,000	None	None	Y	Pay fee.	\$5,000
B. Public Education and Outreach: General public, builders, businesses, engineers, developers, plan reviewers, etc.						
B2. Continue to develop/refine the formal written public education and outreach strategy designed to reach the target audiences identified in B1.	Assume some time necessary to review and update to public education and outreach strategy.	None	None	Y	Update public education and outreach strategy as needed. Continue public education and outreach activities.	\$1,000
B3. Continue to implement the public education and outreach strategy developed in B2.	Assume this includes: stormwater brochures (targeted), work anticipated from public response to brochure mailing (inspection, rectifying problems reported, equipment costs), storm drain stenciling with volunteers, and minor classroom education coordinated with schools. Cost also include semi-annual update of stormwater website.	None	None	Y	Continue public education and outreach activities.	\$21,500
C. Public Involvement: Allow public and stakeholder involvement in program development and funding via committees, hearings, advisory panels, etc.						
C2. Continue to implement the program or policy directive adopted in C1 allowing the public to participate in the process of developing and implementing the Program, including all ordinances. Assume this involves an advisory body, open houses, and news releases.	Funding will be shown here to account for broader information and involvement efforts including: open house meetings, work anticipated from public response to open house (inspection, rectifying problems reported, equipment costs), news releases, and convening a stakeholder advisory panel/group. Assume that the cost of some involvement work is included in the cost of a particular activity (e.g., developing ordinances).	None	None	Y	News release (one), open house (one), advisory body meetings (three).	\$19,500
C3. Respond to public calls.	Identified as an additional activity that will reasonably be expected by the City. Public calls assumed to be generated from information posted in news releases, website, and other sources. Does not include costs associated with response to public calls generated by other permit elements (e.g., illicit discharge hot line; complaints about utility fees, standards, and other requirements; etc.).	None	None	Y	Respond to public calls received.	\$5,000
C4. Post updated written SWMP on local agency website and/or deliver to Ecology for posting on their website.	Assume costs for coordination and posting of updated SWMP on website. Costs associated with annual updates to SWMP covered elsewhere.	None	None	Y	Post updated SWMP on website.	\$500
D. Illicit Discharge Detection and Elimination: Develop, implement, and enforce program to detect and eliminate polluted non-stormwater discharges into the MS4.						
D1. Update completed map of agency MS4, including new and removed connections, updates to system characteristic data and information, location of previously unknown outfalls and connections, etc.	Assume that City has completed MS4 mapping and field survey work by end of Year 3. Assume minimal work needed for annual updates to map by permit compliance staff.	None	None	Y	Annually update MS4 mapping.	\$1,000
D3. Repeat or update IDDE staff training as needed.	Assume that IDDE training is repeated or updated annually as needed based on staffing changes and updated methods.	None	None	Y	Evaluate need for training update. Update and repeat training as needed.	\$2,500
D4. Continue implementation of the IDDE Program and regulatory ordinance.	Staff will conduct field assessments on one additional high-priority water body within the City. Field assessments include visual inspection of outfalls during dry weather and documentation of observations and findings. Assume that some screened outfalls appear suspicious and require follow-up work including the collection of samples, source tracing and removal activities, and possibly enforcement actions.	Source tracing and removal are currently conducted on an as needed basis.	Unknown	Y	Conduct field assessment on one additional high-priority water body within the City and conduct necessary follow-up activities to ensure termination of illicit discharges identified.	\$40,000
D7. Respond to spills and illicit discharge hotline phone calls, address reported problems, keep records.	Assume that some calls require significant staff time to address, possibly also involving enforcement procedures, interface with other agencies, and legal support. Assume some overlap with D4.	None	None	Y	Respond to pollution reporting hotline, trace and resolve problems and conduct enforcement as needed to eliminate any illicit discharges.	\$8,500
D8. Implement procedures, records, and tracking needed to evaluate program effectiveness versus criteria established in the IDDE Program plan.		None	None	Y	Review, update, and use criteria and procedures to evaluate the effectiveness of the IDDE Program, implement the process and evaluate the program at the end of the year.	\$3,000

E. Construction Site Stormwater Runoff: Develop, implement, and enforce program to reduce pollutants in runoff to the MS4 from construction sites one or more acres in size.							
E2. Continue enforcement of the Construction Stormwater Management ordinance - implementation of adopted procedures for site plan review, including review of stormwater pollution prevention plans (SWPPPs).	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex (size, type, location, phased, etc.) and that site plan and SWPPP review is more time consuming. Costs included here are for enhanced review activities.	Storm drainage plans and calculations are reviewed as part of development plan submittal review process; however, ESC plans/SWPPPs are not currently required nor reviewed.	None	Y	Development fees	Review construction site plans to ensure that proper ESC BMPs are selected and used. Review Construction SWPPPs. Assume significant interactions with project engineers/contractors.	\$10,000
E3. Execute proper training for staff reviewing construction erosion and sediment control site plans and SWPPPs: Include training on stormwater manual, hydrologic methods, sediment control BMP O&M, etc.	Assume that a formal on-going training program for site plan reviewers is needed. Assume that construction and post-construction training is integrated together. Assume that level of effort drops because most training materials and procedures have already been established.	Limited ESC BMP staff training. Need on-going program and training.	None	Y	Development fees	Provide in-house training or send plan review staff to external training on proper ESC BMPs and SWPPP preparation and review.	\$2,000
E4. Continue enforcement of the Construction Stormwater Management ordinance - implementation of adopted site inspection and enforcement procedures, maintain records of inspection and enforcement actions, verify SWPPP being followed.	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex and that site inspection and enforcement is more time consuming. Costs included here are for enhanced site inspection and enforcement activities.	Storm drainage system inspected by PW Dept; however, ESC BMPs installed during construction phase not currently inspected.	None	Y	Development fees	Inspect construction sites to ensure that proper ESC BMPs are selected, used, and maintained and SWPPP is being adhered to. Conduct enforcement as needed.	\$10,000
E5. Execute proper training for site inspection and enforcement staff. Include training on sediment control BMP designs, reading engineering drawings, sediment control BMP O&M, identifying problems, enforcement processes, etc.	Assume that a formal on-going training program for site inspectors and enforcement is needed. Assume that construction and post-construction training is integrated together. Assume that level of effort drops because most training materials and procedures have already been established.	Limited ESC BMP staff training.	None	Y	Development fees	Provide in-house training or send inspection/enforcement staff to external training on proper ESC BMPs, SWPPP requirements, local enforcement procedures.	\$2,000
E6. Continue providing information to construction operators about training available on stormwater pollution prevention for construction sites consistent with NPDES permit or E. WA Stormwater Manual.	Assume that operators are informed of available training opportunities as a normal part of the agencies construction permitting or approval process. Providing flyers on state or trade group training for example.	None	None	Y		Inform construction operators about available training on stormwater pollution prevention for construction sites.	\$500
E7. Continue procedures for receipt and consideration of construction site problems reported by the public, including publicizing a hot line phone number.	Assume hot line is the same one as in D6/D7. Assume that some calls require significant staff time to address, including multiple site visits, record keeping, correspondence with property owners, resolution of problems, and possible enforcement actions.	None	None	Y		Respond to pollution reporting hotline, visit sites and resolve problems and conduct enforcement as needed to eliminate any construction pollution problems.	\$5,000
F. Post Construction Stormwater Management: Develop, implement, and enforce program to address post construction stormwater runoff to the MS4 from sites 1+ acres in size.							
F2. Continue enforcement of the Post Construction Stormwater Management ordinance - implementation of adopted procedures for site plan review, including review of selected structural BMPs, stormwater calculations, O&M proposals, etc.	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex (size, type, location, phased, etc.) and site plan review is more time consuming. Costs included here are for enhanced review activities.	Post-const stormwater runoff treatment and control measures required. Storm drainage plans and calculations are reviewed as part of development plan submittal review process.	Unknown	Y	Development fees	Continue reviewing construction site plans, drainage reports, and calculations to ensure that proper long-term stormwater runoff controls are being used. Assume significant interactions with project engineers/contractors.	\$10,000
F3. Execute proper training for staff reviewing post construction stormwater site plans and BMPs. Include training on stormwater manual, hydrologic methods, treatment, detention, retention BMP designs, O&M, etc.	Assume that a formal on-going training program for site plan reviewers needs to be established. Assume that construction and post construction training is integrated together. Assume that level of effort drops because most training materials and procedures have already been established.	Limited post construction BMP staff training. Need on-going program and training.	None	Y	Development fees	Provide in-house training or send plan review staff to external training on proper post construction BMPs, design, selection, operation, maintenance, E. WA Stormwater Manual requirements, etc.	\$2,000
F4. Continue enforcement of the Post Construction Stormwater Management ordinance - implementation of adopted site inspection and enforcement procedures, maintain records of inspection and enforcement actions. Conduct follow-up inspections to ensure adequate maintenance for all structural BMPs.	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex and that site inspection and enforcement is more time consuming. Cost included here are for enhanced site inspection and enforcement activities.	Storm drainage system inspected by PW Dept. Post const structural BMPs inspected during and after construction; however, only on public projects.	Unknown	Y	Development fees	Continue inspecting construction sites, including private, to ensure that proper post construction BMPs are selected, used, and maintained. Conduct enforcement as needed.	\$10,000
F5. Execute proper training for site inspection and enforcement staff. Include training on treatment, detention, retention BMP designs, reading engineering drawings, long-term BMP O&M, identifying problems, enforcement processes, etc.	Assume that a formal on-going training program for site inspection and enforcement is needed. Assume that construction and post construction training is integrated together. Assume that level of effort drops because most training materials and procedures have already been established.	Limited post construction BMP staff training. Need on-going program and training.	None	Y	Development fees	Provide in-house training or send inspection/enforcement staff to external training on proper post construction BMPs, stormwater manual requirements, local enforcement procedures, etc.	\$2,000

F6. Continue providing information to design professionals (engineering consultants) about training available on how to comply with stormwater analysis and design procedures and other technical stormwater requirements consistent with NPDES permit or E. WA Stormwater Manual.	Assume that this only involves providing information about training executed by Ecology or other entities, therefore a local training program is not implemented by the permittee. Assume that material is distributed during normal development permitting process.	None	None	Y	Obtain and provide information during normal development permitting and review process.	\$500
G. Pollution Prevention and Good Housekeeping for Municipal Operations: Develop and Implement an ongoing O& M and staff training program to prevent or reduce pollution from municipal operations.						
G2. Update good housekeeping training of staff groups as needed.	Assume that it takes 2 years to develop the O&M Plan and that appropriate staff from the various departments/divisions are involved. Assume training is provided to approximately 5 groups - this is a large effort. Assume training is lead by stormwater compliance staff and is a program cost. Costs to send staff to training is borne by department/division staff come from.	None	None	Y	Conduct good housekeeping training program for various affected departments/divisions and associated staff.	\$8,000
G3. Fully implement enhanced storm system maintenance activities in accordance with appropriate schedules. Includes inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection and maintenance, proper waste disposal.	Assume that it takes 2 years to fully phase-in enhanced activities. Assume that facilities exist for proper waste disposal (construction of a "vactor" waste dewatering/decant facility may be required). Assume that most necessary heavy equipment is available. Costs here are for phasing-in full stormwater system maintenance and oversight by compliance staff who review and record practices and provide technical assistance.	City currently performs routine storm system O&M, including inspection of inlets, annual cleaning of catch basins, cleaning of culverts and ditches as necessary. No formal documentation or record keeping.	SW System Maint: Avg 05-06: \$75	Y Ramp-up cost 100% \$75,000 Additional activities \$20,000	Estimated costs for enhanced practices with stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	\$95,000
G4. Fully implement enhanced pollution prevention and good housekeeping practices established in the O&M plan for roads, highways, parking lots. Need to address snow removal, de-icing, snow disposal, material storage & application, and all season BMPs to reduce pollution into the MS4.	Assume that it takes 2 years to fully phase-in activities. Assume that street sweeping continues to be one of the preferred all season BMPs employed by City with additional water quality oriented weather report based sweeping in some areas on a seasonal basis. Assume that snow removal and ice control activities continue at current level of effort and that waste and snow disposal areas are available. Costs here are for improved materials and for stormwater compliance staff to review and record practices and provide technical assistance.	City currently sweeps once/week in comm/business district and once/6 weeks in residential areas. Significant snow removal and ice control activities employed. Will need to review existing and additional practices required to ensure WQ is protected.	Sweeping Program: Avg 05-06: \$120K	Y Ramp-up cost 100% \$120,000 Additional activities \$20,000	Estimated costs for enhanced practices with stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	\$140,000
G5. Fully implement all vehicle and equipment washing and maintenance in self-contained building or wash area and/or maintenance areas where all wash water is kept out of the MS4.	Assume that physical facilities are readily available for washing and maintenance work. Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Some costs for changed practices may have to be borne by the department/division conducting the work.	Vehicle washing currently performed outdoors on uncovered wash pad, equipped with O/W separator and final discharge to in-line swale.	None	Y	Stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	\$1,500
G6. Fully implement pollution prevention and good housekeeping practices established in the O&M Plan for maintenance activities at all municipally owned buildings.	Cost can vary substantially (e.g., transit areas, airport, etc.). Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Cost of changed practices is borne by the department/division conducting the work.	None	None	Y	Stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	\$2,000
G7. Fully implement pollution prevention and good housekeeping practices established in the O&M Plan at all municipally owned parks and open spaces.	Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Cost of changed practices is borne by the department/division conducting the work.	None	None	Y	Park storm system, park/open space O&M activities, and changed practices. Stormwater compliance staff provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	\$1,500
G8. Seek coverage under statewide NPDES Construction SW General Permit for projects meeting criteria for coverage. Use applicable source control and good housekeeping BMPs during all public construction projects.	Assume that NPDES Construction SW permits are being sought as needed. Assume that projects not subject to NPDES permitting still include source control and good housekeeping BMPs as applicable. However, need to create and maintain records of such. Compliance with the new construction permit itself will be a cost borne by the project proponent.	Assume currently seeking NPDES permits. Compliance with the new construction permit itself will be a cost borne by the project proponent.	N/A	Y	Need money and staff to create and maintain records of seeking and complying with construction permits for municipal projects. Technical assistance to project proponent would cost more.	\$1,000
G10. Fully implement Stormwater Pollution Prevention Plans to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas not covered by a statewide NPDES Industrial SW General Permit. Update training materials and execute training as needed.	Assume cost estimate only involves NPDES permit compliance official leading development of the SWPPP and training materials, and conducting training, not the cost of implementing the SWPPP on site, which will be borne by the department/division operating the site.	Assume 4 sites identified and require SWPPPs.	None	Y	Implement Stormwater Pollution Prevention Plans to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas, conduct training, implement SWPPPs.	\$7,000

G11. Fully implement provisions to address water quality considerations in the design of all new flood management projects, including minimization of site hydrology impacts where possible.	Assume that normal SEPA, HPA, Critical Areas, Shorelines, and other permitting processes adequately consider and address water quality for new flood protection projects.	Assume existing permitting/review processes are adequate, however records need to be kept for NPDES purposes.	Unknown	Y	Permit compliance staff interface with development review processes to obtain and keep records per NPDES requirements.	\$1,000
G12. Evaluate five existing flood management projects and determine whether or not changes or additions should be made to improve water quality.	Improvements to be identified, but any projects required will occur in 2nd permit term.	None	None	Y	Evaluate City flood management projects and identify any improvements or projects that could enhance water quality.	\$500
G13. Fully implement source control and good housekeeping BMPs during other municipal activities and at other municipal sites that would reasonably be expected to discharge contaminated runoff.	Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Cost of changed practices is borne by the department/division conducting the work. Assume that there are several facilities meeting criteria.	Senior Center, City pool, animal shelter, substations, pump stations, City domestic well sites.	None	Y	Stormwater compliance staff provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	\$4,000
G14. Inspect each treatment and flow control facility owned or operated by the permittee making notes of conditions and need for maintenance, or other concerns. Keep track of new systems coming into public ownership as development occurs.	Assume that inspection is performed by properly trained maintenance staff using standardized field data collection forms. Stormwater compliance staff will oversee work, provide training and data forms, provide technical assistance, and ensure that records are kept. Costs to rectify problems will be covered by other stormwater budget categories.	None	None	Y	Inspect all treatment and flow control facilities owned or operated by the permittee. Identify repair or maintenance needs, resolve concerns.	\$4,000
G15. Conduct spot checks at muni-owned and operated stormwater treatment and flow control facilities after major rainfall events (greater than 10 year recurrence interval).	Assume that inspection is performed by properly trained maintenance staff using standardized field data collection forms. Stormwater compliance staff will oversee work, provide technical assistance, and ensure that records are kept.	None	None	Y	Conduct spot checks of treatment and flow control facilities after major rainfall events (greater than 10 year recurrence interval). Take notes and keep records.	\$2,000
G16. As soon as practicable, execute any repair and maintenance projects needed based on observations made during regular inspections or spot checks of muni-owned or operated stormwater treatment and flow control facilities.	Could involve anything from light maintenance to major reconstruction. Cost estimate here will generally assume that no major construction or reconstruction projects are needed (or will be covered by the stormwater CIP Fund). Cost here is for stormwater compliance staff to provide technical support and approval of needed repairs and ensure that records are kept.	None	None	Y	Fix or repair observed problems at muni-owned and operated stormwater treatment and flow control facilities after major storm events. Keep records of repairs and costs.	\$5,000
H. Compliance With Total Maximum Daily Load Allocations: WRIA 39 - Wilson Creek, Upper Yakima River						
H1. Participate in the development of TMDLs.	Assume this is required to know and control municipal liability. Assume that this involves staff time to review material, attend meetings, prepare and submit correspondence.	Upper Yakima River Temperature TMDL and near-term studies.	None	Y	Participation in TMDL development may be desirable.	\$500
H2. Comply with applicable TMDL provisions (could involve monitoring outfalls, retrofitting treatment into existing storm drains, enhanced source control efforts, etc.).	Minimal estimate to allow minor compliance activities (no major construction projects).	None	None	N	None	\$0
H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on receiving waters.	Assume recording keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of annual report.	Signs posted reminding citizens to dispose of pet wastes.	Unknown	Y	Track status of TMDL implementation and keep records.	\$500
I. Monitoring and Program Evaluation Requirements						
I1. Recommend that City participate in or establish a local water-quality monitoring program to assess baseline conditions and to evaluate effectiveness of SWM Program or TMDL implementation activities. Includes monitoring outfall quality to receiving waters. Provide a description of any stormwater monitoring or studies conducted by or on behalf of the City and include in annual report.	Recommended activity for City to consider. Specific water sampling and testing not required during effective term of permit, unless required as part of applicable TMDL. Assume some participation by City with local agencies (KCCD, Kittitas Co Water Purveyor, others) conducting routine or special water quality monitoring studies.	Currently monitor Yakima River for limited water quality constituents.	Unknown	Y	Participate in local water quality monitoring studies. Submit description of water quality monitoring studies with annual report to Ecology.	\$2,000
J. Reporting and Record Keeping Requirements						
J1. Update written Stormwater Management Program (SWMP) for submittal in permit year 1 (2nd permit cycle) with annual report.	Assume this update occurs in the 4th quarter with the updated plan submitted with annual report in the following permit year.	None	None	Y	Update SWMP according to Ecology format. Assume a fair effort by multiple staff, public and stakeholder involvement, review/approval by elected leaders.	\$15,000
J2. Continue ongoing process for gathering, recording, maintaining and using information to conduct planning, set priorities, track the development and implementation of the SWMP, evaluate permit compliance/noncompliance, and evaluate the effectiveness of SWMP implementation (develop measurable goals). Information to be provided in annual report includes tracking the number of inspection performed, enforcement actions taken, types of public education activities as required for each SWMP component.	Modify process as needed.	None	None	Y	Enact record keeping forms/protocols; work with directors/managers/staff to implement. Fair effort by staff at multiple levels.	\$7,000

J3. Use information from J2 to evaluate the effectiveness of the SWMP components implemented to date, including whether the SWMP is preventing adverse impacts to water quality.	Assume that this involves reviewing the evaluation/analysis conducted in permit year 2 and updating it as needed.	None	None	Y	Review/update evaluation approach, conduct evaluation, prepare narrative of process and results for inclusion in annual report to Ecology.	\$2,000
J4. Continue process to track the cost of development and implementation of the SWMP.	Modify process as needed.	Have established Financial Department and accounting procedures.	N/A	Y	Funding to cover staff time needed to interface with Financial Department accounting staff and develop tracking budgets and reports.	\$1,500
J5. Prepare and submit year 4 annual report and updated SWMP to Ecology. Update prior year annual report and address the same considerations as described in permit year 4.	Reports are due no later than March 31 each year. Assume that in later years, it takes a fairly senior staff person working half time from January 1 to March 31 to prepare the report - including gathering all of the records, meeting with departments/division/staff responsible for various components, tracking down/reviewing all necessary records, preparing summaries and maps, etc. Effort may be less in first couple years but will grow in later years as required SWMP activities implemented increase.	None	None	Y	Prepare and submit annual report.	\$20,000
K. NPDES Equipment Funds						
K1. Illicit Discharge Detection and Elimination Equipment Fund.	Assume that funds begin to be set aside in year 2 to allow the purchase of equipment needed to execute the IDDE program. Includes vehicle, field testing equipment, flow monitoring equipment, field computer, etc.	None	None	Y	Build-up equipment fund.	\$5,000
K2. Construction & Post Construction Equipment Fund.	Assume that funds begin to be set aside in year 2 to allow the purchase and replacement of equipment needed to inspect sites. Includes vehicle(s), GPS devices, cameras, etc.	None	None	Y	Build-up equipment fund.	\$8,000
K3. Good Housekeeping Equipment Fund.	Assume that funding is set aside beginning in year 2 and used to finance some good housekeeping and O&M equipment. Purchasing and R&R of most major equipment will be shared between the stormwater division and other departments/divisions sharing use or benefit of the equipment.	None	None	Y	Build-up support equipment fund, contribute to divisions responsible for bulk of good housekeeping activities/costs.	\$10,000
K4. TMDL Compliance Equipment Fund.	Assume that some funds begin to be set aside in year 2 to allow the purchase of equipment needed for TMDL compliance (assume significant overlap with equipment needed for IDDE Program, see K1).	None	None	N	None	\$0
L. NPDES Capital Project Funds						
L1. Known or planned stormwater project needs.	Annual appropriation beginning in year 2 for known and planned drainage or water quality projects and/or major equipment purchases.	No existing drainage or water quality problems identified. Planned decant facility. Planned vector truck purchase.	None	Y	Build-up fund for known or planned CIPs and contribute to division responsible for bulk of CIP costs.	\$55,000
L2. Fund to cover needs of projects discovered as SWM Program is implemented.	Annual appropriation beginning year 2 for projects that will inevitably be discovered during SWM Program implementation that must be addressed. It is not possible to know the magnitude of these project costs, however the estimate will be kept low and it will be assumed that: (1) some are financed over the long term; and (2) large projects will require modification of the annual budget in subsequent years.	None	None	Y	Build-up fund for discovered CIP needs.	\$20,000

2. Stormwater Program Funding - Utility Assumed						
A. Stormwater Utility Implementation						
A1. Review Assessor and land use data (annexations, new developments), perform updated GIS analysis, update SW Utility customer database and billing rolls, coordinate with City Utility Department staff to update and process billing rolls and send out utility bills (on monthly utility billing statements), update public information material for Utility Department staff as needed, provide refresher training for staff on customer response as needed.	Assume that an annual process must be conducted to prepare updated and correct utility billing rolls, but the effort is much less than for the start-up year.	None	None	Y	Review Assessor and land use data, update GIS analysis, customer database, billing rolls, arrange for Utility Department to send out utility bills, public information materials, train staff on customer response.	\$10,000
A2. General Financial Department services.	Payment to Financial Department staff for accounting services rendered to the utility to manage SW Utility fee finances and books.	None	None	Y	Pay Financial Department staff for accounting services rendered to the SW Utility.	\$5,000
A3. SW Utility account management. Includes processing requests for credits and waivers, response to customer questions and complaints, enforcing payment of utility fees.	Assume that there will always be some level of on-going customer service efforts.	None	None	Y	SW Utility customer service.	\$7,000
A4. Prepare budgets for following year and adjust SW Utility fee rates as needed.	Assume rate increases must be approved by the governing body and may require a public hearing. The need for rate increases may be avoided if the original ordinance either: (1) uses a flat five year average rate, or (2) includes a set schedule for rate increases over the first five years.	None	None	Y	Prepare budget for following year and adjust SW Utility fee rates as needed. Analysis by staff, support by accounting, review by elected leaders, hearing adoption for new rates.	\$5,000
B. Stormwater Development Permit Fees						
B4. Re-train local front-line staff on the details of the new stormwater permit fee and how to respond to customer concerns.	Assume minor training updates as needed.	None	None	Y Development fees	Develop training materials, FAQs, etc. for front-line staff dealing with customers.	\$1,500
B5. Continue methods to track stormwater development review costs.		None	None	Y Development fees	Track stormwater development review costs, mainly provided by Financial Department accounting staff, with some involvement by stormwater compliance staff.	\$1,500
B6. Continue to implement development permit fee process and collect revenue.		The City has an established permit structure and fee schedule.	None	Y Development fees	Continue to collect development permit fees.	\$0
B7. General Financial Department accounting services.	Assume no additional costs to manage stormwater development permit fees since included as part of overall management of development permit fee finances and books by Financial Department accounting staff.	None	None	Y Development fees	Pay accounting staff for services supporting stormwater development permit fees - stormwater permit fees included as part of overall permit structure.	\$0
B8. Perform a new cost of service study and update stormwater development permit fees as needed.	Assume that the City conducts a future cost of service study for development fees as part of an overall update process. Assume that permit fee increases must be approved by the governing body and may require a public hearing.	None	None	Y Development fees	Perform new cost of service, work with staff and elected leaders, public hearing, update fees - assumed to be done as part of future, overall cost of service study and update process.	\$0
					SUM =	\$610,500
					Equipment	\$23,000
					Capital	\$75,000
					Staff, Fees, Overhead, Services	\$512,500
					Reserve	\$0
					Funding from Development Fees	\$51,000
					Funding from Utility/Other Source	\$559,500
						\$610,500

Summary

Program Area	Year 1 Cost	Year 2 Cost	Year 3 Cost	Year 4 Cost	Year 5 Cost	5 Year Total
1. NPDES						
A. General NPDES Requirements	\$3,500	\$3,600	\$4,000	\$4,500	\$5,000	\$20,600
B. Public Education and Outreach	\$0	\$0	\$5,500	\$35,500	\$22,500	\$63,500
C. Public Involvement	\$3,500	\$25,000	\$25,000	\$25,000	\$25,000	\$103,500
D. Illicit Discharge Detection & Elimin	\$15,000	\$35,500	\$31,500	\$136,500	\$55,000	\$273,500
E. Construction Site Stormwater Runoff	\$15,500	\$20,500	\$31,500	\$29,500	\$29,500	\$126,500
F. Post Construction Stormwater Mng	\$15,500	\$15,500	\$26,500	\$24,500	\$24,500	\$106,500
G. Pollution Prevent/Good Housekeeping	\$6,000	\$69,750	\$183,000	\$234,250	\$272,500	\$765,500
H. Compliance With Clean-up Plans	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$5,000
I. Monitoring and Program Evaluation	\$0	\$0	\$4,500	\$4,000	\$2,000	\$10,500
J. Reporting and Record Keeping	\$33,000	\$47,500	\$45,500	\$45,500	\$45,500	\$217,000
K. NPDES Equipment Funds	\$0	\$23,000	\$23,000	\$23,000	\$23,000	\$92,000
L. NPDES Capital Project Funds	\$0	\$75,000	\$75,000	\$75,000	\$75,000	\$300,000
2. STORMWATER PROGRAM FUNDING						
A. Implement Stormwater Utility	\$15,000	\$24,000	\$32,000	\$27,000	\$27,000	\$125,000
B. Stormwater Development Permit Fees	\$0	\$3,000	\$3,000	\$3,000	\$3,000	\$12,000
C. Stormwater Program Reserve Fund	\$0	\$70,000	\$70,000	\$0	\$0	\$140,000
Annual Total	\$108,000	\$413,350	\$561,000	\$668,250	\$610,500	\$2,361,100
Equipment	\$0	\$23,000	\$23,000	\$23,000	\$23,000	\$92,000
Capital	\$0	\$75,000	\$75,000	\$75,000	\$75,000	\$300,000
Staff, Fees, Overhead, Services	\$108,000	\$245,350	\$393,000	\$570,250	\$512,500	\$1,829,100
Reserve	\$0	\$70,000	\$70,000	\$0	\$0	\$140,000
Funding from Development Fees	\$0	\$0	\$55,000	\$51,000	\$51,000	\$157,000
Funding from Utility/Other Source	\$108,000	\$413,350	\$506,000	\$617,250	\$559,500	\$2,204,100

Appendix C—City Annual Stormwater
Program Implementation Checklist

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List √
NPDES			
A. General NPDES Requirements			
YEAR 1			
A1. Prepare Notice of Intent (NOI).	Assume that City has prepared and submitted NOI.	NOI prepared and submitted.	
A2. Pay Annual Permit Fee.	City of Ellensburg - \$3,500	Pay fee.	
YEAR 2			
A2. Pay Annual Permit Fee.	City of Ellensburg - \$3,600	Pay fee.	
YEAR 3			
A2. Pay Annual Permit Fee.	City of Ellensburg - \$4,000	Pay fee.	
YEAR 4			
A2. Pay Annual Permit Fee.	City of Ellensburg - \$4,500	Pay fee.	
YEAR 5			
A2. Pay Annual Permit Fee.	City of Ellensburg - \$5,000	Pay fee.	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List √
NPDES			
B. Public Education and Outreach: General public, builders, businesses, engineers, developers, plan reviewers, etc.			
YEAR 1			
	Note that minimum requirements do not begin until yr 3, which may not satisfy desired local approach, particularly when things like ordinances are being developed. Even then, the focus is on water quality protection, not how and why programs are being developed and how the public may be affected.		
YEAR 2			
	See Year 1 Notes & Assumptions.		
YEAR 3			
B1. Begin development and documentation of public education and outreach strategy. Includes conducting analysis to identify and characterize target audiences within jurisdiction.	Target audiences may include types of commercial businesses, farmers, hobby farms, industries, residential home owners, organizations that hold charity car washes, educational institutions, etc.	Conduct analysis and develop a document that identifies and characterizes target audiences and defines a strategy and process for reaching them.	
YEAR 4			
B2. Develop a formal written public education and outreach strategy designed to reach the target audiences identified in B1.	Assume that this is fairly straightforward document to prepare and that strategy requires elected leader review and approval.	Prepare a formal written education and outreach strategy, present to elected leaders for review and approval.	
B3. Implement the public education and outreach strategy developed in B2.	Assume this includes: stormwater brochures (general), work anticipated from public response to brochure mailing (inspection, rectifying problems reported, equipment costs), storm drain stenciling with volunteers, minor classroom education coordinated with schools, and development of stormwater website (page within City's existing site).	Begin public education and outreach activities.	
YEAR 5			
B2. Continue to develop/refine the formal written public education and outreach strategy designed to reach the target audiences identified in B1.	Assume some time necessary to review and update to public education and outreach strategy.	Update public education and outreach strategy as needed. Continue public education and outreach activities.	
B3. Continue to implement the public education and outreach strategy developed in B2.	Assume this includes: stormwater brochures (targeted), work anticipated from public response to brochure mailing (inspection, rectifying problems reported, equipment costs), storm drain stenciling with volunteers, and minor classroom education coordinated with schools. Cost also include semi-annual update of stormwater website.	Continue public education and outreach activities.	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List √
NPDES			
C. Public Involvement: Allow public and stakeholder involvement in program development and funding via committees, hearings, advisory panels, etc.			
YEAR 1			
C1. Adopt a program or policy directive to allow the public to participate in the process of developing and implementing the Stormwater Management Program (SWMP), including all ordinances. Must include consideration of public comments.	Note that it may be desirable for actual public/stakeholder involvement to begin in year 1 depending on preferences of local leaders. A formal policy must be developed and adopted by elected leaders by end of permit year 1	Develop and adopt official public involvement policy for stormwater. Assume involves staff time, discussions with leaders, approval at formal agenda.	
YEAR 2			
C2. Implement the program or policy directive adopted in C1 allowing the public to participate in the process of developing and implementing the SWMP, including all ordinances. Assume this involves an advisory body, open house, and news release.	Funding will be shown here to account for broader information and involvement efforts including: open house meetings, work anticipated from public response to open house (inspection, rectifying problems reported, equipment costs), news releases, and convening a stakeholder advisory panel/group. Assume that the cost of some involvement work is included in the cost of a particular activity (e.g., developing ordinances).	News release (one), open house (one), advisory body meetings (three).	
C3. Respond to public calls.	Identified as an additional activity that will reasonably be expected by the City. Public calls assumed to be generated from information posted in news releases, website, and other sources. Does not include costs associated with response to public calls generated by other permit elements (e.g., illicit discharge hot line; complaints about utility fees, standards, and other requirements; etc.).	Respond to public calls received.	
C4. Post updated written SWMP on local agency website and/or deliver to Ecology for posting on their website.	Assume costs for coordination and posting of updated SWMP on website. Costs associated with annual updates to SWMP covered elsewhere.	Post updated SWMP on website.	
YEAR 3			
C2. Continue to implement the program or policy directive adopted in C1 allowing the public to participate in the process of developing and implementing the Program, including all ordinances. Assume this involves an advisory body, open houses, and news releases.	Funding will be shown here to account for broader information and involvement efforts including: open house meetings, work anticipated from public response to open house (inspection, rectifying problems reported, equipment costs), news releases, and convening a stakeholder advisory panel/group. Assume that the cost of some involvement work is included in the cost of a particular activity (e.g., developing ordinances).	News release (one), open house (one), advisory body meetings (three).	
C3. Respond to public calls.	Identified as an additional activity that will reasonably be expected by the City. Public calls assumed to be generated from information posted in news releases, website, and other sources. Does not include costs associated with response to public calls generated by other permit elements (e.g., illicit discharge hot line; complaints about utility fees, standards, and other requirements; etc.).	Respond to public calls received.	
C4. Post updated written SWMP on local agency website and/or deliver to Ecology for posting on their website.	Assume costs for coordination and posting of updated SWMP on website. Costs associated with annual updates to SWMP covered elsewhere.	Post updated SWMP on website.	
YEAR 4			
C2. Continue to implement the program or policy directive adopted in C1 allowing the public to participate in the process of developing and implementing the Program, including all ordinances. Assume this involves an advisory body, open houses, and news releases.	Funding will be shown here to account for broader information and involvement efforts including: open house meetings, work anticipated from public response to open house (inspection, rectifying problems reported, equipment costs), news releases, and convening a stakeholder advisory panel/group. Assume that the cost of some involvement work is included in the cost of a particular activity (e.g., developing ordinances).	News release (one), open house (one), advisory body meetings (three).	
C3. Respond to public calls.	Identified as an additional activity that will reasonably be expected by the City. Public calls assumed to be generated from information posted in news releases, website, and other sources. Does not include costs associated with response to public calls generated by other permit elements (e.g., illicit discharge hot line; complaints about utility fees, standards, and other requirements; etc.).	Respond to public calls received.	
C4. Post updated written SWMP on local agency website and/or deliver to Ecology for posting on their website.	Assume costs for coordination and posting of updated SWMP on website. Costs associated with annual updates to SWMP covered elsewhere.	Post updated SWMP on website.	
YEAR 5			
C2. Continue to implement the program or policy directive adopted in C1 allowing the public to participate in the process of developing and implementing the Program, including all ordinances. Assume this involves an advisory body, open houses, and news releases.	Funding will be shown here to account for broader information and involvement efforts including: open house meetings, work anticipated from public response to open house (inspection, rectifying problems reported, equipment costs), news releases, and convening a stakeholder advisory panel/group. Assume that the cost of some involvement work is included in the cost of a particular activity (e.g., developing ordinances).	News release (one), open house (one), advisory body meetings (three).	
C3. Respond to public calls.	Identified as an additional activity that will reasonably be expected by the City. Public calls assumed to be generated from information posted in news releases, website, and other sources. Does not include costs associated with response to public calls generated by other permit elements (e.g., illicit discharge hot line; complaints about utility fees, standards, and other requirements; etc.).	Respond to public calls received.	
C4. Post updated written SWMP on local agency website and/or deliver to Ecology for posting on their website.	Assume costs for coordination and posting of updated SWMP on website. Costs associated with annual updates to SWMP covered elsewhere.	Post updated SWMP on website.	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List √
NPDES			
D. Illicit Discharge Detection and Elimination: Develop, implement, and enforce program to detect and eliminate polluted non-stormwater discharges into the MS4.			
YEAR 1			
D2. Begin developing an ordinance that prohibits illicit discharges and authorizes enforcement actions. (Involve the public as required).	Assume that it takes up to two years to fully develop an ordinance, involve the public/stakeholders, complete legal review, coordinate internally, hold hearings, adopt ordinance, and place in local code. Assume staff time, possible consultant assistance, legal consultant review.	Begin IDDE Ordinance involving public and stakeholders, legal support.	
YEAR 2			
D2. Complete and adopt an ordinance that prohibits illicit discharges and authorizes enforcement actions. (Involve the public as required).	Assume that it takes up to two years to fully develop an ordinance, involve the public/stakeholders, complete legal review, coordinate internally, hold hearings, adopt ordinance, and place in local code. Assume staff time, possible consultant assistance, legal consultant review.	Complete IDDE Ordinance involving public and stakeholders, legal review, hearing comments and responses, revisions, formal adoption, placement in code.	
D3. Begin developing written IDDE Program Plan that addresses ordinance enforcement, staff training needs, priority areas & businesses, field assessments, complaint handling, discharge characterization methods, hazard assessment, spill response and containment, tracing methods, sampling/analyzing techniques, removal methods, interface with other agencies, program evaluation methods.	Assume that once ordinance is on the books, enforcement activities are phased-in starting in Yr 3. Assume that written guidance is needed for orderly implementation. Assume preparation involves multiple divisions and takes a significant amount of staff time for most of a year. Funding estimate is only for lead compliance staff.	Develop IDDE Plan using guidance documents from Center for Watershed Protection, Ecology, and other jurisdictions as an aid. Ordinance Enforcement and Spill Response plans included with IDDE Plan. Involve multiple staff as needed.	
D6. Publicize a hotline or other local phone number for public reporting of spills and illicit discharges.	Assume that hotline or other local phone number is publicly listed and publicized by end of year. Assume calls are received from public in the following year and require follow-up activities (inspection; source tracing, identification, removal; enforcement activities; and response to public). Assume costs for follow-up activities covered in D7. Records of all calls and follow-up activities must be maintained.	Publish hotline for pollution reporting in subsequent years.	
YEAR 3			
D1. Complete mapping of the remaining 1/3 of agency MS4, showing connections to MS4, known outfalls, and receiving waters. Include field surveys to verify locations of outfalls and identify previously unknown outfalls on priority water bodies.	Assume that City has completed 2/3 of MS4 mapping and field survey work and that remaining mapping will be carried out under direction of permit compliance staff using program funding.	Finalize mapping effort of system. Includes needed system surveying and inspection.	
D3. Complete written IDDE Program Plan started in Year 2. Execute training for staff involved.	Assume that once ordinance is on the books, enforcement activities are phased-in starting in Yr 3. Assume that written guidance is needed for orderly implementation. Initial training course is needed for staff involved in the IDDE Program.	Complete IDDE Plan using guidance documents from Center for Watershed Protection, Ecology, and other jurisdictions as an aid. Provide training to staff involved in IDDE program and related activities.	
D4. Begin implementation of the IDDE Program and regulatory ordinance.	Assume some IDDE work begins this year. Based on areas likely to have illicit discharges, staff will prioritize receiving waters and outfalls for visual inspection during field assessments in following years.	Develop a list of prioritized receiving waters within City for visual inspection.	
D7. Respond to spills and illicit discharge hotline phone calls, address reported problems, keep records.	Assume that some calls require significant staff time to address, possibly also involving enforcement procedures, interface with other agencies, and legal support. Assume some overlap with D4.	Respond to pollution reporting hotline, trace and resolve problems and conduct enforcement as needed to eliminate any illicit discharges.	
D8. Implement procedures, records, and tracking needed to evaluate program effectiveness versus criteria established in the IDDE Program plan.		Develop criteria and procedures to evaluate the effectiveness of the IDDE Program, implement the process and evaluate the program at the end of the year .	
YEAR 4			
D1. Update completed map of agency MS4, including new and removed connections, updates to system characteristic data and information, location of previously unknown outfalls and connections, etc.	Assume that City has completed MS4 mapping and field survey work by end of Year 3. Assume minimal work needed for annual updates to map by permit compliance staff.	Annually update MS4 mapping.	
D3. Repeat or update IDDE staff training as needed.	Assume that IDDE training is repeated or updated annually as needed based on staffing changes and updated methods.	Evaluate need for training update. Update and repeat training as needed.	
D4. Continue and fully implement the IDDE Program and regulatory ordinance.	IDDE work begins in earnest this year with a fully implemented IDDE Program by mid-year. Staff will conduct field assessments on three high-priority water bodies within the City. Field assessments include visual inspection of outfalls during dry weather and documentation of observations and findings. Assume that some screened outfalls appear suspicious and require follow-up work including the collection of samples, source tracing and removal activities, and possibly enforcement actions.	Conduct field assessments on three high-priority water bodies within the City and conduct necessary follow-up activities to ensure termination of illicit discharges identified.	
D5. Inform public employees, businesses, and general public about hazards posed by illicit discharges and improper waste disposal. Develop and distribute information to target audiences identified in B1 and B2.	Some overlap with B3 - implementation of public education and outreach strategy. Likely need to begin this activity in earlier years. Cost reflects overlap with B3.	Inform public employees, businesses, and general public about hazards posed by illicit discharges and improper waste disposal. Provide information on proper disposal, etc.	
D7. Respond to spills and illicit discharge hotline phone calls, address reported problems, keep records.	Assume that some calls require significant staff time to address, possibly also involving enforcement procedures, interface with other agencies, and legal support. Assume some overlap with D4.	Respond to pollution reporting hotline, trace and resolve problems and conduct enforcement as needed to eliminate any illicit discharges.	
D8. Implement procedures, records, and tracking needed to evaluate program effectiveness versus criteria established in the IDDE Program plan.		Review, update, and use criteria and procedures to evaluate the effectiveness of the IDDE Program, implement the process and evaluate the program at the end of the year .	
YEAR 5			
D1. Update completed map of agency MS4, including new and removed connections, updates to system characteristic data and information, location of previously unknown outfalls and connections, etc.	Assume that City has completed MS4 mapping and field survey work by end of Year 3. Assume minimal work needed for annual updates to map by permit compliance staff.	Annually update MS4 mapping.	
D3. Repeat or update IDDE staff training as needed.	Assume that IDDE training is repeated or updated annually as needed based on staffing changes and updated methods.	Evaluate need for training update. Update and repeat training as needed.	
D4. Continue implementation of the IDDE Program and regulatory ordinance.	Staff will conduct field assessments on one additional high-priority water body within the City. Field assessments include visual inspection of outfalls during dry weather and documentation of observations and findings. Assume that some screened outfalls appear suspicious and require follow-up work including the collection of samples, source tracing and removal activities, and possibly enforcement actions.	Conduct field assessment on one additional high-priority water body within the City and conduct necessary follow-up activities to ensure termination of illicit discharges identified.	
D7. Respond to spills and illicit discharge hotline phone calls, address reported problems, keep records.	Assume that some calls require significant staff time to address, possibly also involving enforcement procedures, interface with other agencies, and legal support. Assume some overlap with D4.	Respond to pollution reporting hotline, trace and resolve problems and conduct enforcement as needed to eliminate any illicit discharges.	
D8. Implement procedures, records, and tracking needed to evaluate program effectiveness versus criteria established in the IDDE Program plan.		Review, update, and use criteria and procedures to evaluate the effectiveness of the IDDE Program, implement the process and evaluate the program at the end of the year .	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List √
NPDES			
E. Construction Site Stormwater Runoff: Develop, implement, and enforce program to reduce pollutants in runoff to the MS4 from construction sites one or more acres in size.			
YEAR 1			
E1. Begin developing an ordinance for Construction Stormwater Management that requires erosion and sediment controls and regulates sites at least 1+ acre in size (involve the public as required). Must allow access by Permittee staff to inspect site for compliance. Must include construction stormwater pollution prevention activities consistent with the statewide NPDES Construction SW General Permit, including use of approved BMPs, chemical monitoring, certified professionals, and so on. May allow Erosivity Waiver to be used, at the discretion of the local agency.	Per the direction provided by the City, ordinance development work will start earlier than what is stated/required in permit. Assume that it takes up to two years to fully develop an ordinance, develop an ordinance enforcement strategy, involve the public/stakeholders, complete legal review, coordinate internally, hold hearings, adopt the ordinance, and place in local code. Assume staff time, possible consultant assistance, legal consultant review.	Begin developing Construction Stormwater Management ordinance involving the public, stakeholders, and legal support. Includes development of ordinance enforcement strategy.	
E6. Provide information to construction operators about training available on stormwater pollution prevention for construction sites consistent with NPDES permit or E. WA Stormwater Manual.	Assume that operators are informed of available training opportunities as a normal part of the agencies construction permitting or approval process. Providing flyers on state or trade group training for example.	Inform construction operators about available training on stormwater pollution prevention for construction sites.	
YEAR 2			
E1. Complete and adopt an ordinance for Construction Stormwater Management (involve the public as required).	Per the direction provided by the City, ordinance development work will start earlier than what is stated/required in permit. Assume that it takes up to two years to fully develop an ordinance, develop an ordinance enforcement strategy, involve the public/stakeholders, complete legal review, coordinate internally, hold hearings, adopt the ordinance, and place in local code. Assume staff time, possible consultant assistance, legal consultant review. Assume that ordinance will require a local construction stormwater permit or approval to be obtained.	Complete Construction Stormwater Management ordinance involving the public, stakeholders, legal review, hearing comments and responses, revisions, formal adoption, and placement in code.	
E6. Continue providing information to construction operators about training available on stormwater pollution prevention for construction sites consistent with NPDES permit or E. WA Stormwater Manual.	Assume that operators are informed of available training opportunities as a normal part of the agencies construction permitting or approval process. Providing flyers on state or trade group training for example.	Inform construction operators about available training on stormwater pollution prevention for construction sites.	
E7. Adopt procedures for receipt and consideration of construction site problems reported by the public, including publicizing a hot line phone number.	Assume hot line is the same one as in D6/D7. Assume that some calls require significant staff time to address, including multiple site visits, record keeping, correspondence with property owners, resolution of problems, and possible enforcement actions.	Respond to pollution reporting hotline, visit sites and resolve problems and conduct enforcement as needed to eliminate any construction pollution problems.	
YEAR 3			
E2. Begin phasing-in enforcement of the Construction Stormwater Management ordinance - implementation of adopted procedures for site plan review, including review of stormwater pollution prevention plans (SWPPPs).	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex (size, type, location, phased, etc.) and that site plan and SWPPP review is more time consuming. Costs included here are for enhanced review activities.	Begin reviewing construction site plans to ensure that proper ESC BMPs are selected and used. Review Construction SWPPPs. Assume significant interactions with project engineers/contractors.	
E3. Develop training materials and program for proper training of staff reviewing construction erosion and sediment control site plans and SWPPPs. Include training on stormwater manual, hydrologic methods, sediment control BMP O&M, etc.	Assume that a formal on-going training program for site plan reviewers needs to be established. Assume that construction and post-construction training is integrated together.	Provide in-house training or send plan review staff to external training on proper ESC BMPs and SWPPP preparation and review.	
E4. Begin phasing-in enforcement of the Construction Stormwater Management ordinance - implementation of adopted site inspection and enforcement procedures, maintain records of inspection and enforcement actions, verify SWPPPs being followed.	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex and that site inspection and enforcement is more time consuming. Costs included here are for enhanced site inspection and enforcement activities.	Begin inspecting construction sites to ensure that proper ESC BMPs are selected, used, and maintained and SWPPP is being adhered to. Conduct enforcement as needed.	
E5. Develop training materials and program for proper training of site inspection and enforcement staff. Include training on sediment control BMP designs, reading engineering drawings, sediment control BMP O&M, identifying problems, enforcement processes, etc.	Assume that a formal on-going training program for site inspectors and enforcement needs to be established. Assume that construction and post-construction training is integrated together.	Provide in-house training or send inspection/enforcement staff to external training on proper ESC BMPs, SWPPP requirements, local enforcement procedures.	
E6. Continue providing information to construction operators about training available on stormwater pollution prevention for construction sites consistent with NPDES permit or E. WA Stormwater Manual.	Assume that operators are informed of available training opportunities as a normal part of the agencies construction permitting or approval process. Providing flyers on state or trade group training for example.	Inform construction operators about available training on stormwater pollution prevention for construction sites.	
E7. Continue procedures for receipt and consideration of construction site problems reported by the public, including publicizing a hot line phone number.	Assume hot line is the same one as in D6/D7. Assume that some calls require significant staff time to address, including multiple site visits, record keeping, correspondence with property owners, resolution of problems, and possible enforcement actions.	Respond to pollution reporting hotline, visit sites and resolve problems and conduct enforcement as needed to eliminate any construction pollution problems.	
YEAR 4			
E2. Continue and ensure full enforcement of the Construction Stormwater Management ordinance - implementation of adopted procedures for site plan review, including review of stormwater pollution prevention plans (SWPPPs).	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex (size, type, location, phased, etc.) and that site plan and SWPPP review is more time consuming. Costs included here are for enhanced review activities.	Review construction site plans to ensure that proper ESC BMPs are selected and used. Review Construction SWPPPs. Assume significant interactions with project engineers/contractors.	
E3. Execute proper training for staff reviewing construction erosion and sediment control site plans and SWPPPs: Include training on stormwater manual, hydrologic methods, sediment control BMP O&M, etc.	Assume that a formal on-going training program for site plan reviewers is needed. Assume that construction and post-construction training is integrated together. Assume that level of effort drops because most training materials and procedures have already been established.	Provide in-house training or send plan review staff to external training on proper ESC BMPs and SWPPP preparation and review.	
E4. Continue and ensure full enforcement of the Construction Stormwater Management ordinance - implementation of adopted site inspection and enforcement procedures, maintain records of inspection and enforcement actions, verify SWPPPs being followed.	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex and that site inspection and enforcement is more time consuming. Costs included here are for enhanced site inspection and enforcement activities.	Inspect construction sites to ensure that proper ESC BMPs are selected, used, and maintained and SWPPP is being adhered to. Conduct enforcement as needed.	
E5. Execute proper training for site inspection and enforcement staff. Include training on sediment control BMP designs, reading engineering drawings, sediment control BMP O&M, identifying problems, enforcement processes, etc.	Assume that a formal on-going training program for site inspectors and enforcement is needed. Assume that construction and post-construction training is integrated together. Assume that level of effort drops because most training materials and procedures have already been established.	Provide in-house training or send inspection/enforcement staff to external training on proper ESC BMPs, SWPPP requirements, local enforcement procedures.	
E6. Continue providing information to construction operators about training available on stormwater pollution prevention for construction sites consistent with NPDES permit or E. WA Stormwater Manual.	Assume that operators are informed of available training opportunities as a normal part of the agencies construction permitting or approval process. Providing flyers on state or trade group training for example.	Inform construction operators about available training on stormwater pollution prevention for construction sites.	
E7. Continue procedures for receipt and consideration of construction site problems reported by the public, including publicizing a hot line phone number.	Assume hot line is the same one as in D6/D7. Assume that some calls require significant staff time to address, including multiple site visits, record keeping, correspondence with property owners, resolution of problems, and possible enforcement actions.	Respond to pollution reporting hotline, visit sites and resolve problems and conduct enforcement as needed to eliminate any construction pollution problems.	
YEAR 5			
E2. Continue enforcement of the Construction Stormwater Management ordinance - implementation of adopted procedures for site plan review, including review of stormwater pollution prevention plans (SWPPPs).	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex (size, type, location, phased, etc.) and that site plan and SWPPP review is more time consuming. Costs included here are for enhanced review activities.	Review construction site plans to ensure that proper ESC BMPs are selected and used. Review Construction SWPPPs. Assume significant interactions with project engineers/contractors.	
E3. Execute proper training for staff reviewing construction erosion and sediment control site plans and SWPPPs: Include training on stormwater manual, hydrologic methods, sediment control BMP O&M, etc.	Assume that a formal on-going training program for site plan reviewers is needed. Assume that construction and post-construction training is integrated together. Assume that level of effort drops because most training materials and procedures have already been established.	Provide in-house training or send plan review staff to external training on proper ESC BMPs and SWPPP preparation and review.	
E4. Continue enforcement of the Construction Stormwater Management ordinance - implementation of adopted site inspection and enforcement procedures, maintain records of inspection and enforcement actions, verify SWPPP being followed.	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex and that site inspection and enforcement is more time consuming. Costs included here are for enhanced site inspection and enforcement activities.	Inspect construction sites to ensure that proper ESC BMPs are selected, used, and maintained and SWPPP is being adhered to. Conduct enforcement as needed.	

E5. Execute proper training for site inspection and enforcement staff. Include training on sediment control BMP designs, reading engineering drawings, sediment control BMP O&M, identifying problems, enforcement processes, etc.	Assume that a formal on-going training program for site inspectors and enforcement is needed. Assume that construction and post-construction training is integrated together. Assume that level of effort drops because most training materials and procedures have already been established.	Provide in-house training or send inspection/enforcement staff to external training on proper ESC BMPs, SWPPP requirements, local enforcement procedures.	
E6. Continue providing information to construction operators about training available on stormwater pollution prevention for construction sites consistent with NPDES permit or E. WA Stormwater Manual.	Assume that operators are informed of available training opportunities as a normal part of the agencies construction permitting or approval process. Providing flyers on state or trade group training for example.	Inform construction operators about available training on stormwater pollution prevention for construction sites.	
E7. Continue procedures for receipt and consideration of construction site problems reported by the public, including publicizing a hot line phone number.	Assume hot line is the same one as in D6/D7. Assume that some calls require significant staff time to address, including multiple site visits, record keeping, correspondence with property owners, resolution of problems, and possible enforcement actions.	Respond to pollution reporting hotline, visit sites and resolve problems and conduct enforcement as needed to eliminate any construction pollution problems.	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List ✓
NPDES			
F. Post Construction Stormwater Management: Develop, implement, and enforce program to address post construction stormwater runoff to the MS4 from sites 1+ acres in size.			
YEAR 1			
F1. Begin developing an ordinance for Post Construction Stormwater Management that requires stormwater controls and regulates sites at least 1+ acre in size (involve the public as required). Must allow access by Permittee staff to inspect site during and after construction to ensure compliance with BMP selection, design, installation, and O&M standards, consistent with E. WA Stormwater Manual. Encourage preservation of natural drainages and reductions in impervious surfaces. Must require source control BMPs. Include mechanism requiring owners to ensure long-term proper O&M of BMPs.	Per the direction provided by the City, ordinance development work will start earlier than what is stated/required in permit. Assume that it takes up to two years to fully develop an ordinance, develop an ordinance enforcement strategy, involve the public/stakeholders, complete legal review, coordinate internally, hold hearings, adopt the ordinance, and place in local code. Assume staff time, possible consultant assistance, legal consultant review.	Begin developing/updating Post Construction Stormwater Management ordinance involving the public, stakeholders, and legal support. Includes development of ordinance enforcement strategy.	
F6. Provide information to design professionals (engineering consultants) about training available on how to comply with stormwater analysis and design procedures and other technical stormwater requirements consistent with NPDES permit or E. WA Stormwater Manual.	Assume that this only involves providing information about training executed by Ecology or other entities, therefore a local training program is not implemented by the permittee. Assume that material is distributed during normal development permitting process.	Obtain and provide information during normal development permitting and review process.	
YEAR 2			
F1. Complete and adopt an ordinance for Post Construction Stormwater Management (involve the public as required).	Per the direction provided by the City, ordinance development work will start earlier than what is stated/required in permit. Assume that it takes up to two years to fully develop an ordinance, develop and ordinance enforcement strategy, involve the public/stakeholders, complete legal review, coordinate internally, hold hearing(s), adopt the ordinance, and place in local codes. Assume staff time, possible consultant assistance, legal consultant review. Assume that ordinance will require a local post-construction stormwater permit or approval to be obtained.	Complete Post Construction Stormwater Management ordinance involving the public, stakeholders, legal review, hearing comments and responses, revisions, formal adoption, and placement in code.	
F6. Continue providing information to design professionals (engineering consultants) about training available on how to comply with stormwater analysis and design procedures and other technical stormwater requirements consistent with NPDES permit or E. WA Stormwater Manual.	Assume that this only involves providing information about training executed by Ecology or other entities, therefore a local training program is not implemented by the permittee. Assume that material is distributed during normal development permitting process.	Obtain and provide information during normal development permitting and review process.	
YEAR 3			
F2. Begin phasing-in enforcement of the Post Construction Stormwater Management ordinance - implementation of adopted procedures for site plan review, including review of selected structural BMPs, stormwater calculations, O&M proposals, etc.	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex (size, type, location, phased, etc.) and site plan review is more time consuming. Costs included here are for enhanced review activities.	Continue reviewing construction site plans, drainage reports, and calculations to ensure that proper long-term stormwater runoff controls are being used. Assume significant interactions with project engineers/contractors.	
F3. Develop training materials and program for proper training of staff reviewing post construction stormwater site plans and BMPs. Include training on stormwater manual, hydrologic methods, treatment, detention, retention BMP designs, O&M, etc.	Assume that a formal on-going training program for site plan reviewers needs to be established. Assume that construction and post construction training is integrated together.	Provide in-house training or send plan review staff to external training on proper post construction BMPs, design, selection, operation, maintenance, E. WA Stormwater Manual requirements, etc.	
F4. Begin phasing-in enforcement of the Post Construction Stormwater Management ordinance - implementation of adopted site inspection and enforcement procedures, maintain records of inspection and enforcement actions. Conduct follow-up inspections to ensure adequate maintenance performed for all structural BMPs.	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex and that site inspection and enforcement is more time consuming. Costs included here are for enhanced site inspection and enforcement activities.	Continue inspecting construction sites, including private, to ensure that proper post construction BMPs are selected, used, and maintained. Conduct enforcement as needed.	
F5. Develop training materials and program for proper training of site inspection and enforcement staff. Include training on treatment, detention, retention BMP designs, reading engineering drawings, long-term BMP O&M, identifying problems, enforcement processes, etc.	Assume that a formal on-going training program for site inspection and enforcement needs to be established. Assume that construction and post construction training is integrated together.	Provide in-house training or send inspection/enforcement staff to external training on proper post construction BMPs, stormwater manual requirements, local enforcement procedures, etc.	
F6. Continue providing information to design professionals (engineering consultants) about training available on how to comply with stormwater analysis and design procedures and other technical stormwater requirements consistent with NPDES permit or E. WA Stormwater Manual.	Assume that this only involves providing information about training executed by Ecology or other entities, therefore a local training program is not implemented by the permittee. Assume that material is distributed during normal development permitting process.	Obtain and provide information during normal development permitting and review process.	
YEAR 4			
F2. Continue and ensure full enforcement of the Post Construction Stormwater Management ordinance - implementation of adopted procedures for site plan review, including review of selected structural BMPs, stormwater calculations, O&M proposals, etc.	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex (size, type, location, phased, etc.) and site plan review is more time consuming. Costs included here are for enhanced review activities.	Continue reviewing construction site plans, drainage reports, and calculations to ensure that proper long-term stormwater runoff controls are being used. Assume significant interactions with project engineers/contractors.	
F3. Execute proper training for staff reviewing post construction stormwater site plans and BMPs. Include training on stormwater manual, hydrologic methods, treatment, detention, retention BMP designs, O&M, etc.	Assume that a formal on-going training program for site plan reviewers needs to be established. Assume that construction and post construction training is integrated together. Assume that level of effort drops because most training materials and procedures have already been established.	Provide in-house training or send plan review staff to external training on proper post construction BMPs, design, selection, operation, maintenance, E. WA Stormwater Manual requirements, etc.	
F4. Continue and ensure full enforcement of the Post Construction Stormwater Management ordinance - implementation of adopted site inspection and enforcement procedures, maintain records of inspection and enforcement actions. Conduct follow-up inspections to ensure adequate maintenance performed for all structural BMPs.	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex and that site inspection and enforcement is more time consuming. Costs included here are for enhanced site inspection and enforcement activities.	Continue inspecting construction sites, including private, to ensure that proper post construction BMPs are selected, used, and maintained. Conduct enforcement as needed.	
F5. Execute proper training for site inspection and enforcement staff. Include training on treatment, detention, retention BMP designs, reading engineering drawings, long-term BMP O&M, identifying problems, enforcement processes, etc.	Assume that a formal on-going training program for site inspection and enforcement is needed. Assume that construction and post construction training is integrated together. Assume that level of effort drops because most training materials and procedures have already been established.	Provide in-house training or send inspection/enforcement staff to external training on proper post construction BMPs, stormwater manual requirements, local enforcement procedures, etc.	
F6. Continue providing information to design professionals (engineering consultants) about training available on how to comply with stormwater analysis and design procedures and other technical stormwater requirements consistent with NPDES permit or E. WA Stormwater Manual.	Assume that this only involves providing information about training executed by Ecology or other entities, therefore a local training program is not implemented by the permittee. Assume that material is distributed during normal development permitting process.	Obtain and provide information during normal development permitting and review process.	
YEAR 5			
F2. Continue enforcement of the Post Construction Stormwater Management ordinance - implementation of adopted procedures for site plan review, including review of selected structural BMPs, stormwater calculations, O&M proposals, etc.	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex (size, type, location, phased, etc.) and site plan review is more time consuming. Costs included here are for enhanced review activities.	Continue reviewing construction site plans, drainage reports, and calculations to ensure that proper long-term stormwater runoff controls are being used. Assume significant interactions with project engineers/contractors.	
F3. Execute proper training for staff reviewing post construction stormwater site plans and BMPs. Include training on stormwater manual, hydrologic methods, treatment, detention, retention BMP designs, O&M, etc.	Assume that a formal on-going training program for site plan reviewers needs to be established. Assume that construction and post construction training is integrated together. Assume that level of effort drops because most training materials and procedures have already been established.	Provide in-house training or send plan review staff to external training on proper post construction BMPs, design, selection, operation, maintenance, E. WA Stormwater Manual requirements, etc.	
F4. Continue enforcement of the Post Construction Stormwater Management ordinance - implementation of adopted site inspection and enforcement procedures, maintain records of inspection and enforcement actions. Conduct follow-up inspections to ensure adequate maintenance for all structural BMPs.	Assume that once ordinance is on the books, enforcement is phased-in starting year 3. Assume that some projects are complex and that site inspection and enforcement is more time consuming. Cost included here are for enhanced site inspection and enforcement activities.	Continue inspecting construction sites, including private, to ensure that proper post construction BMPs are selected, used, and maintained. Conduct enforcement as needed.	
F5. Execute proper training for site inspection and enforcement staff. Include training on treatment, detention, retention BMP designs, reading engineering drawings, long-term BMP O&M, identifying problems, enforcement processes, etc.	Assume that a formal on-going training program for site inspection and enforcement is needed. Assume that construction and post construction training is integrated together. Assume that level of effort drops because most training materials and procedures have already been established.	Provide in-house training or send inspection/enforcement staff to external training on proper post construction BMPs, stormwater manual requirements, local enforcement procedures, etc.	
F6. Continue providing information to design professionals (engineering consultants) about training available on how to comply with stormwater analysis and design procedures and other technical stormwater requirements consistent with NPDES permit or E. WA Stormwater Manual.	Assume that this only involves providing information about training executed by Ecology or other entities, therefore a local training program is not implemented by the permittee. Assume that material is distributed during normal development permitting process.	Obtain and provide information during normal development permitting and review process.	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List ✓
NPDES			
G. Pollution Prevention and Good Housekeeping for Municipal Operations: Develop and Implement an ongoing O& M and staff training program to prevent or reduce pollution from municipal operations.			
YEAR 1			
G3. City to continue performing existing storm system maintenance activities. Includes on-going inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection and maintenance, proper waste disposal.	Per the direction provided by the City, the costs for existing storm system maintenance activities will be ramped-up during years 2-5, with existing costs assumed by the SW Utility at increments of 25% per year. Costs for phasing-in full stormwater system maintenance and oversight by compliance staff who review and record practices and provide technical assistance will be included in years 3-5.	City to continue existing storm system maintenance activities. Costs for existing activities ramped-up in permit years 2-5 and assumed by SW Utility.	
G4. City to continue existing street sweeping program and other all season BMPs to reduce pollution into the MS4.	Per the direction provided by the City, the costs for the existing street sweeping program will be ramped-up during years 2-5, with existing costs assumed by the SW Utility at increments of 25% per year. Costs for phasing-in enhanced/changed practices, improved materials, and for stormwater compliance staff to review and record practices and provide technical assistance will be included in years 3-5.	City to continue existing street sweeping program. Costs for existing program ramped-up in permit years 2-5 and assumed by SW Utility.	
G8. As of the effective date of the permit, have reviewed existing and near-term municipal construction projects and sought coverage under statewide NPDES Construction SW General Permit for any projects meeting criteria for coverage. Use applicable source control and good housekeeping BMPs during all public construction projects after the effective date of the permit.	Assume that NPDES Construction SW permits are being sought as needed. Assume that projects not subject to NPDES permitting still include source control and good housekeeping BMPs as applicable. However, need to create and maintain records of such. Cost of seeking and compliance with permit will be borne by Department/Division executing project.	Need money and staff to create and maintain records of seeking and complying with construction permits for municipal projects. Technical assistance to project proponent would cost more.	
G9. As of the effective date of the permit, have reviewed all municipal "industrial" facilities/sites and sought coverage under statewide NPDES Industrial SW General Permit for municipal sites meeting criteria for coverage.	Assume that this still needs to be accomplished and is conducted in year 1. Cost will be for NPDES MS4 Permit compliance staff to review facilities and recommend that the facilities seek coverage. Records of the process must be developed. Cost of seeking and compliance with permits will be borne by Department/Division being covered.	Need money and staff to review facilities, assess need for permit, create and maintain records of seeking and complying with industrial stormwater permits for municipal facilities/sites.	
YEAR 2			
G1. Begin developing a good housekeeping plan and schedule (O&M Plan) for municipal operation and maintenance activities aimed at preventing and reducing water quality impacts. Must be at least as protective as relevant chapters of the E. WA Stormwater Manual and must include provisions for record keeping. The O&M Plan must address the following types of facilities or activities that are present within the permittee's boundaries: stormwater collection and conveyance system O&M; road, highway, and parking lot O&M; vehicle fleet storage, washing, and maintenance; municipal building cleaning, washing, painting and other O&M activities; park and open space O&M activities; municipal construction projects (all types); municipal industrial sites and activities; material and equipment storage areas and maintenance areas; flood management projects; and all other facilities that can reasonably be expected to discharge contaminated runoff. The O&M Plan must include a schedule of inspections and requirements for record keeping, and identify the department (and as appropriate, specific staff) responsible for performing each activity.	Assume that it takes two years to fully develop the O&M Plan and that appropriate staff from the various departments/divisions are involved (this is a large effort and could easily take longer).	Begin developing a good housekeeping plan and schedule (O&M Plan) for municipal operation and maintenance activities aimed at preventing and reducing water quality impacts. Must be at least as protective as relevant chapters of the E. WA Stormwater Manual. Must include schedule for inspections and address methods of record keeping.	
G3. City to continue performing existing storm system maintenance activities. Includes on-going inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection and maintenance, proper waste disposal.	Per the direction provided by the City, the costs for existing storm system maintenance activities will be ramped-up during years 2-5, with existing costs assumed by the SW Utility at increments of 25% per year. Costs for phasing-in full stormwater system maintenance and oversight by compliance staff who review and record practices and provide technical assistance will be included in years 3-5.	City to continue existing storm system maintenance activities. Costs for existing activities ramped-up in permit years 2-5 and assumed by SW Utility.	
G4. City to continue existing street sweeping program and other all season BMPs to reduce pollution into the MS4.	Per the direction provided by the City, the costs for the existing street sweeping program will be ramped-up during years 2-5, with existing costs assumed by the SW Utility at increments of 25% per year. Costs for phasing-in enhanced/changed practices, improved materials, and for stormwater compliance staff to review and record practices and provide technical assistance will be included in years 3-5.	City to continue existing street sweeping program. Costs for existing program ramped-up in permit years 2-5 and assumed by SW Utility.	
G8. Seek coverage under statewide NPDES Construction SW General Permit for projects meeting criteria for coverage. Use applicable source control and good housekeeping BMPs during all public construction projects.	Assume that NPDES Construction SW permits are being sought as needed. Assume that projects not subject to NPDES permitting still include source control and good housekeeping BMPs as applicable. However, need to create and maintain records of such. Compliance with the new construction permit itself will be a cost borne by the project proponent.	Need money and staff to create and maintain records of seeking and complying with construction permits for municipal projects. Technical assistance to project proponent would cost more.	
YEAR 3			
G1. Complete development and begin implementation of the good housekeeping plan and schedule (O&M Plan) started in year 2.	Cost presented here assume that leadership, technical support, advice, and record keeping is provided by stormwater compliance staff who work to complete the plan, and that some costs to carry out the new procedures is borne by the dept/div responsible for a given activity (e.g., cost of changing road maintenance practices/procedures is paid by Road Maintenance Div).	Complete development of good housekeeping plan and schedule (O&M Plan) for municipal operation and maintenance activities. Begin implementation of the plan working with affected departments and divisions. Maintain records.	
G2. Begin developing a municipal good housekeeping staff training program (materials, schedules, who gets what training, etc.) to meet the needs of the O&M Plan completed in G1. Training must include all employees whose construction, operations, and maintenance, job functions may impact storm water quality. Training shall address the importance of protecting water quality, the requirements of the NPDES permit, proper O&M requirements, inspection procedures, ways to perform their job while protecting water quality, procedures for reporting water quality concerns and suspected illicit discharges.	Assume that it takes at least a year to develop the good housekeeping training program and that appropriate staff from the various departments/divisions are involved (this is a large effort and could easily take longer). Assume program development is lead by stormwater compliance staff and is a program cost.	Develop good housekeeping training materials and program, involve various affected departments/divisions and associated staff.	
G3. Begin implementing enhanced storm system maintenance activities in accordance with appropriate schedules. Includes inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection and maintenance, proper waste disposal.	Assume that it takes 2 years to fully phase-in enhanced activities. Assume that facilities exist for proper waste disposal (construction of a "vactor" waste dewatering/decant facility may be required). Assume that most necessary heavy equipment is available. Costs here are for phasing-in full stormwater system maintenance and oversight by compliance staff who review and record practices and provide technical assistance.	Estimated costs for enhanced maintenance program with stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	
G4. Begin implementing enhanced pollution prevention and good housekeeping practices established in the O&M plan for roads, highways, parking lots. Need to address snow removal de-icing, snow disposal, material storage & application, and all season BMPs to reduce pollution into the MS4.	Assume that it takes 2 years to fully phase-in activities. Assume that street sweeping continues to be one of the preferred all season BMPs employed by City with additional water quality oriented weather report based sweeping in some areas on a seasonal basis. Assume that snow removal and ice control activities continue at current level of effort and that waste and snow disposal areas are available. Costs here are for improved materials and for stormwater compliance staff to review and record practices and provide technical assistance.	Estimated costs for enhanced practices with stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	
G5. Begin conducting all vehicle and equipment washing and maintenance in self-contained building or wash area and/or maintenance areas where all wash water is kept out of the MS4.	Assume that physical facilities are readily available for washing and maintenance work. Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Some costs for changed practices may have to be borne by the department/division conducting the work.	Stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	
G6. Begin implementing pollution prevention and good housekeeping practices established in the O&M Plan for maintenance activities at all municipally owned buildings.	Cost can vary substantially (e.g., transit areas, airport, etc.). Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Cost of changed practices is borne by the department/division conducting the work.	Stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	

G7. Begin implementing pollution prevention and good housekeeping practices established in the O&M Plan at all municipally owned parks and open spaces.	Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Cost of changed practices is borne by the department/division conducting the work.	Park storm system, park/open space O&M activities, and changed practices. Stormwater compliance staff provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	
G8. Seek coverage under statewide NPDES Construction SW General Permit for projects meeting criteria for coverage. Use applicable source control and good housekeeping BMPs during all public construction projects.	Assume that NPDES Construction SW permits are being sought as needed. Assume that projects not subject to NPDES permitting still include source control and good housekeeping BMPs as applicable. However, need to create and maintain records of such. Compliance with the new construction permit itself will be a cost borne by the project proponent.	Need money and staff to create and maintain records of seeking and complying with construction permits for municipal projects. Technical assistance to project proponent would cost more.	
G10. Begin developing Stormwater Pollution Prevention Plans to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas not covered by a statewide NPDES Industrial SW General Permit.	Assume that it takes about a year to identify/screen all known facilities, evaluate practices, develop SWPPPs, and identify training needs. Assume cost estimate only involves NPDES permit compliance official leading development of the SWPPP and training materials, and conducting training, not the cost of implementing the SWPPP on site, which will be borne by the department/division operating the site.	Develop Stormwater Pollution Prevention Plans to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas not covered by a statewide NPDES Industrial SW General Permit.	
G11. Begin implementing provisions to address water quality considerations in the design of all new flood management projects, including minimization of site hydrology impacts where possible.	Assume that normal SEPA, HPA, Critical Areas, Shorelines, and other permitting processes adequately consider and address water quality for new flood protection projects.	Permit compliance staff interface with development review processes to obtain and keep records per NPDES requirements.	
G14. Begin locating and mapping all stormwater treatment and flow control facilities owned or operated by the permittee.	Need clarification from Ecology about whether or not an infiltration facility would be considered a "flow control facility". Assume that locating and mapping these systems needs to begin in the year prior to inspections having to be performed. Assume overlap with system mapping required under illicit discharge program.	Locate and map half of all stormwater treatment and flow control facilities owned or operated by the permittee.	
G15. Begin conducting spot checks at muni-owned and operated stormwater treatment and flow control facilities after major rainfall events (greater than 10 year recurrence interval).	Assume that inspection is performed by properly trained maintenance staff using standardized field data collection forms. Stormwater compliance staff will oversee work, provide technical assistance, and ensure that records are kept.	Conduct spot checks of treatment and flow control facilities after major rainfall events (greater than 10 year recurrence interval). Take notes and keep records.	
G16. As soon as practicable, execute any repair and maintenance projects needed based on observations made during regular inspections or spot checks of muni-owned or operated stormwater treatment and flow control facilities.	Could involve anything from light maintenance to major reconstruction. Cost estimate here will generally assume that few major construction or reconstruction projects are needed (or will help be paid for by multiple departments/divisions). Cost here is for stormwater compliance staff to provide technical support and approval of needed repairs, ensure that records are kept, and provide some funding for the project (overlap with NPDES CIP Fund).	Fix or repair observed problems at muni-owned and operated stormwater treatment and flow control facilities after major storm events. Keep records of repairs and costs.	
YEAR 4			
G2. Finish developing and execute a municipal good housekeeping training program for the various staff groups.	Assume that it takes 2 years to develop the O&M Plan and that appropriate staff from the various departments/divisions are involved. Assume training is provided to approximately 5 groups, including streets, shop, engineering, inspection/enforcement, etc - this is a large effort including formal day of training in-house and full day in field. Assume training is lead by stormwater compliance staff and is a program cost. Costs to send staff to training is borne by department/division staff come from.	Conduct good housekeeping training program for various affected departments/divisions and associated staff.	
G3. Continue phasing-in and implementing enhanced storm system maintenance activities in accordance with appropriate schedules. Includes inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection and maintenance, proper waste disposal.	Assume that it takes 2 years to fully phase-in enhanced activities. Assume that facilities exist for proper waste disposal (construction of a "vactor" waste dewatering/decant facility may be required). Assume that most necessary heavy equipment is available. Costs here are for phasing-in full stormwater system maintenance and oversight by compliance staff who review and record practices and provide technical assistance.	Estimated costs for enhanced practices with stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	
G4. Continue phasing-in and implementing enhanced pollution prevention and good housekeeping practices established in the O&M plan for roads, highways, parking lots. Need to address snow removal, de-icing, snow disposal, material storage & application, and all season BMPs to reduce pollution into the MS4.	Assume that it takes 2 years to fully phase-in activities. Assume that street sweeping continues to be one of the preferred all season BMPs employed by City with additional water quality oriented weather report based sweeping in some areas on a seasonal basis. Assume that snow removal and ice control activities continue at current level of effort and that waste and snow disposal areas are available. Costs here are for improved materials and for stormwater compliance staff to review and record practices and provide technical assistance.	Estimated costs for enhanced practices with stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	
G5. Continue conducting all vehicle and equipment washing and maintenance in self-contained building or wash area and/or maintenance areas where all wash water is kept out of the MS4.	Assume that physical facilities are readily available for washing and maintenance work. Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Some costs for changed practices may have to be borne by the department/division conducting the work.	Stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	
G6. Continue phasing-in and implementing pollution prevention and good housekeeping practices established in the O&M Plan for maintenance activities at all municipally owned buildings.	Cost can vary substantially (e.g., transit areas, airport, etc.). Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Cost of changed practices is borne by the department/division conducting the work.	Stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	
G7. Continue phasing-in and implementing pollution prevention and good housekeeping practices established in the O&M Plan at all municipally owned parks and open spaces.	Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Cost of changed practices is borne by the department/division conducting the work.	Park storm system, park/open space O&M activities, and changed practices. Stormwater compliance staff provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	
G8. Seek coverage under statewide NPDES Construction SW General Permit for projects meeting criteria for coverage. Use applicable source control and good housekeeping BMPs during all public construction projects.	Assume that NPDES Construction SW permits are being sought as needed. Assume that projects not subject to NPDES permitting still include source control and good housekeeping BMPs as applicable. However, need to create and maintain records of such. Compliance with the new construction permit itself will be a cost borne by the project proponent.	Need money and staff to create and maintain records of seeking and complying with construction permits for municipal projects. Technical assistance to project proponent would cost more.	
G10. Finish developing and begin implementing Stormwater Pollution Prevention Plans to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas not covered by a statewide NPDES Industrial SW General Permit. Develop training materials and execute training as needed.	Assume cost estimate only involves NPDES permit compliance official leading development of the SWPPP and training materials, and conducting training, not the cost of implementing the SWPPP on site, which will be borne by the department/division operating the site. Assume that level of effort drops in years 4-5 because training materials, training program, and procedures have already been established.	Complete Stormwater Pollution Prevention Plans to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas, conduct training, implement SWPPPs.	
G11. Continue implementing provisions to address water quality considerations in the design of all new flood management projects, including minimization of site hydrology impacts where possible.	Assume that normal SEPA, HPA, Critical Areas, Shorelines, and other permitting processes adequately consider and address water quality for new flood protection projects.	Permit compliance staff interface with development review processes to obtain and keep records per NPDES requirements.	
G12. Review existing flood management projects, prioritize them based on water quality concerns, and select at least five to review and evaluate whether or not changes or additions should be made to improve water quality.	General language, could result in projects of significant costs depending on how interpreted. Not clear what intention is: is this a review of existing stormwater detention facilities or a review of levee systems? Assume cost is for review process, not improvement projects. Evaluation process and definition of desired improvements occurs in year 5.	Develop criteria and protocol for review, conduct review of existing flood management projects for water quality concerns, select five to evaluate if changes or additions should be made to improve water quality.	
G13. Begin using source control and good housekeeping BMPs during other municipal activities and at other municipal sites that would reasonably be expected to discharge contaminated runoff.	Assume that it takes about a year to identify all other municipal facilities, evaluate practices, identify appropriate BMPs to be implemented to protect water quality, and provide necessary training. Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Cost of changed practices is borne by the department/division conducting the work. Assume that there are several facilities meeting criteria.	Stormwater compliance staff provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	

G14. Finish locating all treatment and flow control facilities owned or operated by the permittee. Inspect each facility, making notes of conditions, maintenance needs, or other related concerns. Track all new systems coming into public ownership as development occurs.	Assume overlap with system mapping required under illicit discharge program. Assume that inspection is performed by properly trained maintenance staff using standardized field data collection forms.	Locate and map remaining half of all stormwater treatment and flow control facilities owned or operated by the permittee. Inspect facilities and maintain records.	
G15. Conduct spot checks at muni-owned and operated stormwater treatment and flow control facilities after major rainfall events (greater than 10 year recurrence interval).	Assume that inspection is performed by properly trained maintenance staff using standardized field data collection forms. Stormwater compliance staff will oversee work, provide technical assistance, and ensure that records are kept.	Conduct spot checks of treatment and flow control facilities after major rainfall events (greater than 10 year recurrence interval). Take notes and keep records.	
G16. As soon as practicable, execute any repair and maintenance projects needed based on observations made during regular inspections or spot checks of muni-owned or operated stormwater treatment and flow control facilities.	Could involve anything from light maintenance to major reconstruction. Cost estimate here will generally assume that no major construction or reconstruction projects are needed (or will be covered by the stormwater CIP Fund). Cost here is for stormwater compliance staff to provide technical support and approval of needed repairs and ensure that records are kept.	Fix or repair observed problems at muni-owned and operated stormwater treatment and flow control facilities after major storm events. Keep records of repairs and costs.	
YEAR 5			
G2. Update good housekeeping training of staff groups as needed.	Assume that it takes 2 years to develop the O&M Plan and that appropriate staff from the various departments/divisions are involved. Assume training is provided to approximately 5 groups - this is a large effort. Assume training is lead by stormwater compliance staff and is a program cost. Costs to send staff to training is borne by department/division staff come from.	Conduct good housekeeping training program for various affected departments/divisions and associated staff.	
G3. Fully implement enhanced storm system maintenance activities in accordance with appropriate schedules. Includes inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection and maintenance, proper waste disposal.	Assume that it takes 2 years to fully phase-in enhanced activities. Assume that facilities exist for proper waste disposal (construction of a "vactor" waste dewatering/decant facility may be required). Assume that most necessary heavy equipment is available. Costs here are for phasing-in full stormwater system maintenance and oversight by compliance staff who review and record practices and provide technical assistance.	Estimated costs for enhanced practices with stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	
G4. Fully implement enhanced pollution prevention and good housekeeping practices established in the O&M plan for roads, highways, parking lots. Need to address snow removal, de-icing, snow disposal, material storage & application, and all season BMPs to reduce pollution into the MS4.	Assume that it takes 2 years to fully phase-in activities. Assume that street sweeping continues to be one of the preferred all season BMPs employed by City with additional water quality oriented weather report based sweeping in some areas on a seasonal basis. Assume that snow removal and ice control activities continue at current level of effort and that waste and snow disposal areas are available. Costs here are for improved materials and for stormwater compliance staff to review and record practices and provide technical assistance.	Estimated costs for enhanced practices with stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	
G5. Fully implement all vehicle and equipment washing and maintenance in self-contained building or wash area and/or maintenance areas where all wash water is kept out of the MS4.	Assume that physical facilities are readily available for washing and maintenance work. Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Some costs for changed practices may have to be borne by the department/division conducting the work.	Stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	
G6. Fully implement pollution prevention and good housekeeping practices established in the O&M Plan for maintenance activities at all municipally owned buildings.	Cost can vary substantially (e.g., transit areas, airport, etc.). Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Cost of changed practices is borne by the department/division conducting the work.	Stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	
G7. Fully implement pollution prevention and good housekeeping practices established in the O&M Plan at all municipally owned parks and open spaces.	Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Cost of changed practices is borne by the department/division conducting the work.	Park storm system, park/open space O&M activities, and changed practices. Stormwater compliance staff provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	
G8. Seek coverage under statewide NPDES Construction SW General Permit for projects meeting criteria for coverage. Use applicable source control and good housekeeping BMPs during all public construction projects.	Assume that NPDES Construction SW permits are being sought as needed. Assume that projects not subject to NPDES permitting still include source control and good housekeeping BMPs as applicable. However, need to create and maintain records of such. Compliance with the new construction permit itself will be a cost borne by the project proponent.	Need money and staff to create and maintain records of seeking and complying with construction permits for municipal projects. Technical assistance to project proponent would cost more.	
G10. Fully implement Stormwater Pollution Prevention Plans to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas not covered by a statewide NPDES Industrial SW General Permit. Update training materials and execute training as needed.	Assume cost estimate only involves NPDES permit compliance official leading development of the SWPPP and training materials, and conducting training, not the cost of implementing the SWPPP on site, which will be borne by the department/division operating the site.	Implement Stormwater Pollution Prevention Plans to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas, conduct training, implement SWPPPs.	
G11. Fully implement provisions to address water quality considerations in the design of all new flood management projects, including minimization of site hydrology impacts where possible.	Assume that normal SEPA, HPA, Critical Areas, Shorelines, and other permitting processes adequately consider and address water quality for new flood protection projects.	Permit compliance staff interface with development review processes to obtain and keep records per NPDES requirements.	
G12. Evaluate five existing flood management projects and determine whether or not changes or additions should be made to improve water quality.	Improvements to be identified, but any projects required will occur in 2nd permit term.	Evaluate City flood management projects and identify any improvements or projects that could enhance water quality.	
G13. Fully implement source control and good housekeeping BMPs during other municipal activities and at other municipal sites that would reasonably be expected to discharge contaminated runoff.	Costs here are for stormwater compliance staff to review and record practices and provide technical assistance. Cost of changed practices is borne by the department/division conducting the work. Assume that there are several facilities meeting criteria.	Stormwater compliance staff provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible department/division.	
G14. Inspect each treatment and flow control facility owned or operated by the permittee making notes of conditions and need for maintenance, or other concerns. Keep track of new systems coming into public ownership as development occurs.	Assume that inspection is performed by properly trained maintenance staff using standardized field data collection forms. Stormwater compliance staff will oversee work, provide training and data forms, provide technical assistance, and ensure that records are kept. Costs to rectify problems will be covered by other stormwater budget categories.	Inspect all treatment and flow control facilities owned or operated by the permittee. Identify repair or maintenance needs, resolve concerns.	
G15. Conduct spot checks at muni-owned and operated stormwater treatment and flow control facilities after major rainfall events (greater than 10 year recurrence interval).	Assume that inspection is performed by properly trained maintenance staff using standardized field data collection forms. Stormwater compliance staff will oversee work, provide technical assistance, and ensure that records are kept.	Conduct spot checks of treatment and flow control facilities after major rainfall events (greater than 10 year recurrence interval). Take notes and keep records.	
G16. As soon as practicable, execute any repair and maintenance projects needed based on observations made during regular inspections or spot checks of muni-owned or operated stormwater treatment and flow control facilities.	Could involve anything from light maintenance to major reconstruction. Cost estimate here will generally assume that no major construction or reconstruction projects are needed (or will be covered by the stormwater CIP Fund). Cost here is for stormwater compliance staff to provide technical support and approval of needed repairs and ensure that records are kept.	Fix or repair observed problems at muni-owned and operated stormwater treatment and flow control facilities after major storm events. Keep records of repairs and costs.	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List √
NPDES			
H. Compliance With Total Maximum Daily Load Allocations: WRIA 39 - Wilson Creek, Upper Yakima River	Existing TMDLs (WRIA 39) approved by EPA do not include specific stormwater control elements over and above the implementation of standard NPDES BMPs; however, it may be in the City's best interest to budget for some effort just in case.		
YEAR 1			
H1. Participate in the development of TMDLs.	Assume this is required to know and control municipal liability. Assume that this involves staff time to review material, attend meetings, prepare and submit correspondence.	Participation in TMDL development may be desirable.	
H2. Comply with applicable TMDL provisions (could involve monitoring outfalls, retrofitting treatment into existing storm drains, enhanced source control efforts, etc.).	Minimal estimate to allow minor compliance activities (no major construction projects).	None	
H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on receiving waters.	Assume recording keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of annual report.	Track status of TMDL implementation and keep records.	
YEAR 2			
H1. Participate in the development of TMDLs.	Assume this is required to know and control municipal liability. Assume that this involves staff time to review material, attend meetings, prepare and submit correspondence.	Participation in TMDL development may be desirable.	
H2. Comply with applicable TMDL provisions (could involve monitoring outfalls, retrofitting treatment into existing storm drains, enhanced source control efforts, etc.).	Minimal estimate to allow minor compliance activities (no major construction projects).	None	
H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on receiving waters.	Assume recording keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of annual report.	Track status of TMDL implementation and keep records.	
YEAR 3			
H1. Participate in the development of TMDLs.	Assume this is required to know and control municipal liability. Assume that this involves staff time to review material, attend meetings, prepare and submit correspondence.	Participation in TMDL development may be desirable.	
H2. Comply with applicable TMDL provisions (could involve monitoring outfalls, retrofitting treatment into existing storm drains, enhanced source control efforts, etc.).	Minimal estimate to allow minor compliance activities (no major construction projects).	None	
H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on receiving waters.	Assume recording keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of annual report.	Track status of TMDL implementation and keep records.	
YEAR 4			
H1. Participate in the development of TMDLs.	Assume this is required to know and control municipal liability. Assume that this involves staff time to review material, attend meetings, prepare and submit correspondence.	Participation in TMDL development may be desirable.	
H2. Comply with applicable TMDL provisions (could involve monitoring outfalls, retrofitting treatment into existing storm drains, enhanced source control efforts, etc.).	Minimal estimate to allow minor compliance activities (no major construction projects).	None	
H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on receiving waters.	Assume recording keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of annual report.	Track status of TMDL implementation and keep records.	
YEAR 5			
H1. Participate in the development of TMDLs.	Assume this is required to know and control municipal liability. Assume that this involves staff time to review material, attend meetings, prepare and submit correspondence.	Participation in TMDL development may be desirable.	
H2. Comply with applicable TMDL provisions (could involve monitoring outfalls, retrofitting treatment into existing storm drains, enhanced source control efforts, etc.).	Minimal estimate to allow minor compliance activities (no major construction projects).	None	
H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on receiving waters.	Assume recording keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of annual report.	Track status of TMDL implementation and keep records.	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List √
NPDES			
I. Monitoring and Program Evaluation Requirements			
YEAR 1			
I1. Recommend that City participate in or establish a local water-quality monitoring program to assess baseline conditions and to evaluate effectiveness of SWM Program or TMDL implementation activities. Includes monitoring outfall quality to receiving waters. Provide a description of any stormwater monitoring or studies conducted by or on behalf of the City and include in annual report.	Recommended activity for City to consider. Specific water sampling and testing not required during effective term of permit, unless required as part of applicable TMDL. Assume some participation by City with local agencies (KCCD, Kittitas Co Water Purveyor, others) conducting routine or special water quality monitoring studies.	Participate in local water quality monitoring studies. Submit description of water quality monitoring studies with annual report to Ecology.	
YEAR 2			
I1. Recommend that City participate in or establish a local water-quality monitoring program to assess baseline conditions and to evaluate effectiveness of SWM Program or TMDL implementation activities. Includes monitoring outfall quality to receiving waters. Provide a description of any stormwater monitoring or studies conducted by or on behalf of the City and include in annual report.	Recommended activity for City to consider. Specific water sampling and testing not required during effective term of permit, unless required as part of applicable TMDL. Assume some participation by City with local agencies (KCCD, Kittitas Co Water Purveyor, others) conducting routine or special water quality monitoring studies.	Participate in local water quality monitoring studies. Submit description of water quality monitoring studies with annual report to Ecology.	
YEAR 3			
I1. Recommend that City participate in or establish a local water-quality monitoring program to assess baseline conditions and to evaluate effectiveness of SWM Program or TMDL implementation activities. Includes monitoring outfall quality to receiving waters. Provide a description of any stormwater monitoring or studies conducted by or on behalf of the City and include in annual report.	Recommended activity for City to consider. Specific water sampling and testing not required during effective term of permit, unless required as part of applicable TMDL. Assume some participation by City with local agencies (KCCD, Kittitas Co Water Purveyor, others) conducting routine or special water quality monitoring studies.	Participate in local water quality monitoring studies. Submit description of water quality monitoring studies with annual report to Ecology.	
I2. Begin preparing for participation and implementation of a future comprehensive long-term stormwater monitoring program. Includes identification and mapping of two outfalls or conveyances where stormwater sampling will be conducted.	Actual stormwater monitoring to occur in 2nd permit term. Assume outfalls or conveyances identified and mapped as part of activities in D.1. Includes one site to represent commercial land use and the other site to represent high-density residential.	Evaluate, identify, and map suitable outfalls and/or conveyances for planned future stormwater monitoring.	
I3. Begin preparing for participation and implementation of a future comprehensive long-term Stormwater Management Program (SWMP) effectiveness monitoring program. Includes identification of at least two suitable questions and the selection of sites where future monitoring will be conducted. Monitoring will include stormwater/receiving water monitoring and/or program activity evaluation monitoring. A specific monitoring plan must be developed for each question posed.	Actual Stormwater Management Program effectiveness monitoring to occur in 2nd permit term. Assume that this involves staff time to develop suitable questions to assess program effectiveness, sites where monitoring will be conducted, and development of a monitoring plan for each question posed, which includes proposed purpose, design, and methods.	Develop suitable questions, select monitoring sites or targeted activities for evaluation, and develop specific monitoring plan for each question posed to evaluate effectiveness of SWM Program.	
YEAR 4			
I1. Recommend that City participate in or establish a local water-quality monitoring program to assess baseline conditions and to evaluate effectiveness of SWM Program or TMDL implementation activities. Includes monitoring outfall quality to receiving waters. Provide a description of any stormwater monitoring or studies conducted by or on behalf of the City and include in annual report.	Recommended activity for City to consider. Specific water sampling and testing not required during effective term of permit, unless required as part of applicable TMDL. Assume some participation by City with local agencies (KCCD, Kittitas Co Water Purveyor, others) conducting routine or special water quality monitoring studies.	Participate in local water quality monitoring studies. Submit description of water quality monitoring studies with annual report to Ecology.	
I3. Continue preparing for participation and implementation of a future comprehensive long-term Stormwater Management Program (SWMP) effectiveness monitoring program. Have developed at least two suitable questions, selected sites where future monitoring will be conducted, and developed a specific monitoring plan for each question posed. Include a summary of the proposed questions for the SWM Program effectiveness monitoring and describe status of developing the monitoring plan in 3rd annual report.	Actual Stormwater Management Program effectiveness monitoring to occur in 2nd permit term. Assume that this involves staff time to fully develop suitable questions to assess program effectiveness, sites where monitoring will be conducted, and development of a monitoring plan for each question posed, which includes proposed purpose, design, and methods. Include status in 3rd Annual Report (by March 31, 2010).	Develop suitable questions, select monitoring sites or targeted activities for evaluation, and develop specific monitoring plan for each question posed to evaluate effectiveness of SWM Program.	
YEAR 5			
I1. Recommend that City participate in or establish a local water-quality monitoring program to assess baseline conditions and to evaluate effectiveness of SWM Program or TMDL implementation activities. Includes monitoring outfall quality to receiving waters. Provide a description of any stormwater monitoring or studies conducted by or on behalf of the City and include in annual report.	Recommended activity for City to consider. Specific water sampling and testing not required during effective term of permit, unless required as part of applicable TMDL. Assume some participation by City with local agencies (KCCD, Kittitas Co Water Purveyor, others) conducting routine or special water quality monitoring studies.	Participate in local water quality monitoring studies. Submit description of water quality monitoring studies with annual report to Ecology.	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List √
NPDES			
J. Reporting and Record Keeping Requirements			
YEAR 1			
J1. Develop written Stormwater Management Program (SWMP) for submittal in permit year 2 with annual report, follow program component format established by Ecology.	Must submit a copy of SWMP to Ecology with the Annual Report beginning no later than March 31, 2008. Assume that development of the SWMP begins during permit year 1.	Prepare SWMP according to Ecology format. Assume a significant effort by multiple staff, public and stakeholder involvement per C1, review/approval by elected leaders.	
J2. Develop and implement an ongoing process for gathering, recording, maintaining and using information to conduct planning, set priorities, track the development and implementation of the SWMP, evaluate permit compliance/noncompliance, and evaluate the effectiveness of SWMP implementation (develop measurable goals). Information to be provided in annual report includes tracking the number of inspection performed, enforcement actions taken, types of public education activities as required for each SWMP component.	Assume that this involves lead permit compliance staff: (1) itemizing the types of recordkeeping needed for each category of permit requirement; (2) meeting with various department/divisions to learn about current record keeping activities; (3) assessing the need for new processes or changes or enhancements to existing processes; (4) creating or modifying record keeping forms as needed; (5) and working with various directors/managers/staff to ensure implementation of the new processes.	Itemize the types of recordkeeping needed for permit; meet with various department/divisions; assess need for new or changed processes; create record keeping forms/protocols; work with directors/managers/staff to implement. Significant effort by staff at multiple levels.	
YEAR 2			
J1. Update written Stormwater Management Program (SWMP) for submittal in permit year 3 with annual report.	Assume this update occurs in the 4th quarter with the updated plan submitted with annual report in the following permit year.	Update SWMP according to Ecology format. Assume a fair effort by multiple staff, public and stakeholder involvement, review/approval by elected leaders.	
J2. Continue ongoing process for gathering, recording, maintaining and using information to conduct planning, set priorities, track the development and implementation of the SWMP, evaluate permit compliance/noncompliance, and evaluate the effectiveness of SWMP implementation (develop measurable goals). Information to be provided in annual report includes tracking the number of inspection performed, enforcement actions taken, types of public education activities as required for each SWMP component.	Modify process as needed.	Finish creating record keeping forms/protocols; work with directors/managers/staff to implement. Fair effort by staff at multiple levels.	
J3. Use information from J2 to evaluate the effectiveness of the SWMP components implemented to date, including whether the SWMP is preventing adverse impacts to water quality.	Assume this is a relatively simple process that considers the activities detailed for each SWMP component and cross-check them against records (e.g., reaching target audiences, site plan review and inspection program goals, storm system maintenance inspection goals, and other measurable goals established). Also cross-check activities against established literature, studies, and accepted BMP manuals to assess impact to water quality. Assume that this analysis is presented/discussed in a narrative portion of the annual report.	Develop evaluation approach, conduct evaluation, prepare narrative of process and results for inclusion in annual report to Ecology.	
J4. Develop and implement a process to track the cost of development and implementation of the SWMP.	Assume this involves lead permit compliance staff: (1) estimating which departments/divisions will need to begin tracking costs, for what, and when; (2) learning about cost tracking methods and options within each affected department or division (prioritized based on when they need to start); (3) checking with each department/division to ensure implementation of cost tracking methods; and (4) obtaining cost tracking information in a timely manner so that the annual report can include it.	Funding to cover staff time needed to interface with Financial Department accounting staff and develop tracking budgets and reports.	
J5. Prepare and submit year 1 annual report and SWMP to Ecology. Use annual report form established by Ecology. The annual report must describe the status of compliance with permit conditions, including: (1) the status of implementation of each component of the SWMP; (2) an assessment of progress towards meeting the minimum performance standards (measurable goals) established for each minimum control measure of the SWMP; (3) a description of activities being implemented to comply with each component of the SWMP (including number of inspections, site plans reviewed, illegal connection removed, enforcement actions, educational activities, etc.); (4) proposed SWMP implementation schedule and status (plus comparison with schedule in the permit, discussion of missed deadlines and why, when missed deadline activities will be implemented); and (5) summary of SWMP evaluation (including evaluation of effectiveness of SWMP and appropriateness of BMPs selected). Note annexations during the reporting period and their influence on permit coverage areas. Note if relying upon another entity for implementation of any BMPs or other permit obligations.	Reports are due no later than March 31 each year beginning in 2008. Assume that in later years, it takes a fairly senior staff person working half time from January 1 to March 31 to prepare the report - including gathering all of the records, meeting with departments/division/staff responsible for various components, tracking down/reviewing all necessary records, preparing summaries and maps, etc. Effort may be less in first couple years but will grow in later years as required SWMP activities implemented increase.	Prepare and submit annual report.	
YEAR 3			
J1. Update written Stormwater Management Program (SWMP) for submittal in permit year 4 with annual report.	Assume this update occurs in the 4th quarter with the updated plan submitted with annual report in the following permit year.	Update SWMP according to Ecology format. Assume a fair effort by multiple staff, public and stakeholder involvement, review/approval by elected leaders.	
J2. Continue ongoing process for gathering, recording, maintaining and using information to conduct planning, set priorities, track the development and implementation of the SWMP, evaluate permit compliance/noncompliance, and evaluate the effectiveness of SWMP implementation (develop measurable goals). Information to be provided in annual report includes tracking the number of inspection performed, enforcement actions taken, types of public education activities as required for each SWMP component.	Modify process as needed.	Enact record keeping forms/protocols; work with directors/managers/staff to implement. Fair effort by staff at multiple levels.	
J3. Use information from J2 to evaluate the effectiveness of the SWMP components implemented to date, including whether the SWMP is preventing adverse impacts to water quality.	Assume that this involves reviewing the evaluation/analysis conducted in permit year 2 and updating it as needed.	Review/update evaluation approach, conduct evaluation, prepare narrative of process and results for inclusion in annual report to Ecology.	
J4. Continue process to track the cost of development and implementation of the SWMP.	Modify process as needed.	Funding to cover staff time needed to interface with Financial Department accounting staff and develop tracking budgets and reports.	
J5. Prepare and submit year 2 annual report and updated SWMP to Ecology. Update prior year annual report and address the same considerations as described in permit year 2.	Reports are due no later than March 31 each year. Assume that in later years, it takes a fairly senior staff person working half time from January 1 to March 31 to prepare the report - including gathering all of the records, meeting with departments/division/staff responsible for various components, tracking down/reviewing all necessary records, preparing summaries and maps, etc. Effort may be less in first couple years but will grow in later years as required SWMP activities implemented increase.	Prepare and submit annual report.	
YEAR 4			
J1. Update written Stormwater Management Program (SWMP) for submittal in permit year 5 with annual report.	Assume this update occurs in the 4th quarter with the updated plan submitted with annual report in the following permit year.	Update SWMP according to Ecology format. Assume a fair effort by multiple staff, public and stakeholder involvement, review/approval by elected leaders.	
J2. Continue ongoing process for gathering, recording, maintaining and using information to conduct planning, set priorities, track the development and implementation of the SWMP, evaluate permit compliance/noncompliance, and evaluate the effectiveness of SWMP implementation (develop measurable goals). Information to be provided in annual report includes tracking the number of inspection performed, enforcement actions taken, types of public education activities as required for each SWMP component.	Modify process as needed.	Enact record keeping forms/protocols; work with directors/managers/staff to implement. Fair effort by staff at multiple levels.	
J3. Use information from J2 to evaluate the effectiveness of the SWMP components implemented to date, including whether the SWMP is preventing adverse impacts to water quality.	Assume that this involves reviewing the evaluation/analysis conducted in permit year 2 and updating it as needed.	Review/update evaluation approach, conduct evaluation, prepare narrative of process and results for inclusion in annual report to Ecology.	
J4. Continue process to track the cost of development and implementation of the SWMP.	Modify process as needed.	Funding to cover staff time needed to interface with Financial Department accounting staff and develop tracking budgets and reports.	

J5. Prepare and submit year 3 annual report and updated SWMP to Ecology. Update prior year annual report and address the same considerations as described in permit year 3.	Reports are due no later than March 31 each year. Assume that in later years, it takes a fairly senior staff person working half time from January 1 to March 31 to prepare the report - including gathering all of the records, meeting with departments/division/staff responsible for various components, tracking down/reviewing all necessary records, preparing summaries and maps, etc. Effort may be less in first couple years but will grow in later years as required SWMP activities implemented increase.	Prepare and submit annual report.	
YEAR 5			
J1. Update written Stormwater Management Program (SWMP) for submittal in permit year 1 (2nd permit cycle) with annual report.	Assume this update occurs in the 4th quarter with the updated plan submitted with annual report in the following permit year.	Update SWMP according to Ecology format. Assume a fair effort by multiple staff, public and stakeholder involvement, review/approval by elected leaders.	
J2. Continue ongoing process for gathering, recording, maintaining and using information to conduct planning, set priorities, track the development and implementation of the SWMP, evaluate permit compliance/noncompliance, and evaluate the effectiveness of SWMP implementation (develop measurable goals). Information to be provided in annual report includes tracking the number of inspection performed, enforcement actions taken, types of public education activities as required for each SWMP component.	Modify process as needed.	Enact record keeping forms/protocols; work with directors/managers/staff to implement. Fair effort by staff at multiple levels.	
J3. Use information from J2 to evaluate the effectiveness of the SWMP components implemented to date, including whether the SWMP is preventing adverse impacts to water quality.	Assume that this involves reviewing the evaluation/analysis conducted in permit year 2 and updating it as needed.	Review/update evaluation approach, conduct evaluation, prepare narrative of process and results for inclusion in annual report to Ecology.	
J4. Continue process to track the cost of development and implementation of the SWMP.	Modify process as needed.	Funding to cover staff time needed to interface with Financial Department accounting staff and develop tracking budgets and reports.	
J5. Prepare and submit year 4 annual report and updated SWMP to Ecology. Update prior year annual report and address the same considerations as described in permit year 4.	Reports are due no later than March 31 each year. Assume that in later years, it takes a fairly senior staff person working half time from January 1 to March 31 to prepare the report - including gathering all of the records, meeting with departments/division/staff responsible for various components, tracking down/reviewing all necessary records, preparing summaries and maps, etc. Effort may be less in first couple years but will grow in later years as required SWMP activities implemented increase.	Prepare and submit annual report.	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List √
NPDES			
K. NPDES Equipment Funds			
YEAR 1			
YEAR 2			
K1. Illicit Discharge Detection and Elimination Equipment Fund.	Assume that funds begin to be set aside in year 2 to allow the purchase of equipment needed to execute the IDDE program. Includes vehicle, field testing equipment, flow monitoring equipment, field computer, etc.	Build-up equipment fund.	
K2. Construction & Post Construction Equipment Fund.	Assume that funds begin to be set aside in year 2 to allow the purchase and replacement of equipment needed to inspect sites. Includes vehicle(s), GPS devices, cameras, etc.	Build-up equipment fund.	
K3. Good Housekeeping Equipment Fund.	Assume that funding is set aside beginning in year 2 and used to finance some good housekeeping and O&M equipment. Purchasing and R&R of most major equipment will be shared between the stormwater division and other departments/divisions sharing use or benefit of the equipment.	Build-up support equipment fund, contribute to divisions responsible for bulk of good housekeeping activities/costs.	
K4. TMDL Compliance Equipment Fund.	Assume that some funds begin to be set aside in year 2 to allow the purchase of equipment needed for TMDL compliance (assume significant overlap with equipment needed for IDDE Program, see K1).	None	
YEAR 3			
K1. Illicit Discharge Detection and Elimination Equipment Fund.	Assume that funds begin to be set aside in year 2 to allow the purchase of equipment needed to execute the IDDE program. Includes vehicle, field testing equipment, flow monitoring equipment, field computer, etc.	Build-up equipment fund.	
K2. Construction & Post Construction Equipment Fund.	Assume that funds begin to be set aside in year 2 to allow the purchase and replacement of equipment needed to inspect sites. Includes vehicle(s), GPS devices, cameras, etc.	Build-up equipment fund.	
K3. Good Housekeeping Equipment Fund.	Assume that funding is set aside beginning in year 2 and used to finance some good housekeeping and O&M equipment. Purchasing and R&R of most major equipment will be shared between the stormwater division and other departments/divisions sharing use or benefit of the equipment.	Build-up support equipment fund, contribute to divisions responsible for bulk of good housekeeping activities/costs.	
K4. TMDL Compliance Equipment Fund.	Assume that some funds begin to be set aside in year 2 to allow the purchase of equipment needed for TMDL compliance (assume significant overlap with equipment needed for IDDE Program, see K1).	None	
YEAR 4			
K1. Illicit Discharge Detection and Elimination Equipment Fund.	Assume that funds begin to be set aside in year 2 to allow the purchase of equipment needed to execute the IDDE program. Includes vehicle, field testing equipment, flow monitoring equipment, field computer, etc.	Build-up equipment fund.	
K2. Construction & Post Construction Equipment Fund.	Assume that funds begin to be set aside in year 2 to allow the purchase and replacement of equipment needed to inspect sites. Includes vehicle(s), GPS devices, cameras, etc.	Build-up equipment fund.	
K3. Good Housekeeping Equipment Fund.	Assume that funding is set aside beginning in year 2 and used to finance some good housekeeping and O&M equipment. Purchasing and R&R of most major equipment will be shared between the stormwater division and other departments/divisions sharing use or benefit of the equipment.	Build-up support equipment fund, contribute to divisions responsible for bulk of good housekeeping activities/costs.	
K4. TMDL Compliance Equipment Fund.	Assume that some funds begin to be set aside in year 2 to allow the purchase of equipment needed for TMDL compliance (assume significant overlap with equipment needed for IDDE Program, see K1).	None	
YEAR 5			
K1. Illicit Discharge Detection and Elimination Equipment Fund.	Assume that funds begin to be set aside in year 2 to allow the purchase of equipment needed to execute the IDDE program. Includes vehicle, field testing equipment, flow monitoring equipment, field computer, etc.	Build-up equipment fund.	
K2. Construction & Post Construction Equipment Fund.	Assume that funds begin to be set aside in year 2 to allow the purchase and replacement of equipment needed to inspect sites. Includes vehicle(s), GPS devices, cameras, etc.	Build-up equipment fund.	
K3. Good Housekeeping Equipment Fund.	Assume that funding is set aside beginning in year 2 and used to finance some good housekeeping and O&M equipment. Purchasing and R&R of most major equipment will be shared between the stormwater division and other departments/divisions sharing use or benefit of the equipment.	Build-up support equipment fund, contribute to divisions responsible for bulk of good housekeeping activities/costs.	
K4. TMDL Compliance Equipment Fund.	Assume that some funds begin to be set aside in year 2 to allow the purchase of equipment needed for TMDL compliance (assume significant overlap with equipment needed for IDDE Program, see K1).	None	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List √
NPDES			
L. NPDES Capital Project Funds			
YEAR 1			
YEAR 2			
L1. Known or planned stormwater project needs.	Annual appropriation beginning in year 2 for known and planned drainage or water quality projects and/or major equipment purchases.	Build-up fund for known or planned CIPs and contribute to division responsible for bulk of CIP costs.	
L2. Fund to cover needs of projects discovered as SWM Program is implemented.	Annual appropriation beginning year 2 for projects that will inevitably be discovered during SWM Program implementation that must be addressed. It is not possible to know the magnitude of these project costs, however the estimate will be kept low and it will be assumed that: (1) some are financed over the long term; and (2) large projects will require modification of the annual budget in subsequent years.	Build-up fund for discovered CIP needs.	
YEAR 3			
L1. Known or planned stormwater project needs.	Annual appropriation beginning in year 2 for known and planned drainage or water quality projects and/or major equipment purchases.	Build-up fund for known or planned CIPs and contribute to division responsible for bulk of CIP costs.	
L2. Fund to cover needs of projects discovered as SWM Program is implemented.	Annual appropriation beginning year 2 for projects that will inevitably be discovered during SWM Program implementation that must be addressed. It is not possible to know the magnitude of these project costs, however the estimate will be kept low and it will be assumed that: (1) some are financed over the long term; and (2) large projects will require modification of the annual budget in subsequent years.	Build-up fund for discovered CIP needs.	
YEAR 4			
L1. Known or planned stormwater project needs.	Annual appropriation beginning in year 2 for known and planned drainage or water quality projects and/or major equipment purchases.	Build-up fund for known or planned CIPs and contribute to division responsible for bulk of CIP costs.	
L2. Fund to cover needs of projects discovered as SWM Program is implemented.	Annual appropriation beginning year 2 for projects that will inevitably be discovered during SWM Program implementation that must be addressed. It is not possible to know the magnitude of these project costs, however the estimate will be kept low and it will be assumed that: (1) some are financed over the long term; and (2) large projects will require modification of the annual budget in subsequent years.	Build-up fund for discovered CIP needs.	
YEAR 5			
L1. Known or planned stormwater project needs.	Annual appropriation beginning in year 2 for known and planned drainage or water quality projects and/or major equipment purchases.	Build-up fund for known or planned CIPs and contribute to division responsible for bulk of CIP costs.	
L2. Fund to cover needs of projects discovered as SWM Program is implemented.	Annual appropriation beginning year 2 for projects that will inevitably be discovered during SWM Program implementation that must be addressed. It is not possible to know the magnitude of these project costs, however the estimate will be kept low and it will be assumed that: (1) some are financed over the long term; and (2) large projects will require modification of the annual budget in subsequent years.	Build-up fund for discovered CIP needs.	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List √
Stormwater Program Funding - Utility Assumed			
A. Stormwater Utility Implementation			
YEAR 1			
A1. Review Assessor and land use data (annexations, new developments, etc.), perform analysis (use impervious surface measurements conducted in neighboring jurisdictions to determine average percent impervious surface coverage for non-residential land uses), assign impervious surface coverage and ERUs for non-residential parcels in City based on assumed ERU, finalize SW Utility customer database and billing rolls, coordinate with City Utility Department staff to process billing rolls and send out utility bills (on monthly utility billing statements), develop public information material for Utility Department staff, train appropriate staff on customer response.	Per the direction provided by the City, an interim SW Utility rate structure shall be developed and implemented in years 1. A permanent SW Utility rate structure will be funded and developed in year 3 and will include a formal impervious surface analysis (ERU definition, impervious surface measurements on non-residential parcels). For the interim rate structure developed, assume that an annual process must be conducted to prepare updated and correct utility billing rolls. Assume that initial work will be completed in permit year 1. Assume some activities and costs overlap with City and consultant work and products.	Review Assessor and land use data, perform simplified impervious surface coverage analysis, assign non-residential coverages and ERUs, develop customer database, billing rolls, arrange for Utility Department to send out utility bills, public information materials, train staff on customer response.	
A2. General Financial Department services.	Payment to Financial Department staff for accounting services rendered to the utility to manage SW Utility fee finances and books.	Pay Financial Department staff for accounting services rendered to the SW Utility.	
A3. SW Utility account management. Includes processing requests for credits and waivers, response to customer questions and complaints, enforcing payment of utility fees.	Assume that there will always be some level of on-going customer service efforts.	Assume no activity in permit year 1.	
YEAR 2			
A1. Review Assessor and land use data (annexations, new developments, etc.), update assignment of impervious surface coverage and ERUs for non-residential parcels in City based on year 1 analysis and assumed ERU, update SW Utility customer database and billing rolls, coordinate with City Utility Department staff to update and process billing rolls and send out utility bills, update public information material for Utility Department staff as needed, provide refresher training for staff on customer response as needed.	Per the direction provided by the City, an interim SW Utility rate structure shall be developed and implemented in years 1. A permanent SW Utility rate structure will be funded and developed in year 3 and will include a formal impervious surface analysis (ERU definition, impervious surface measurements on non-residential parcels). For the interim rate structure developed, assume that an annual process must be conducted to prepare updated and correct utility billing rolls, but the effort is much less than for the start-up year.	Review Assessor and land use data, update assignment of non-residential coverages and ERUs, customer database, billing rolls, arrange for Utility Department to send out utility bills, public information materials, train staff on customer response.	
A2. General Financial Department services.	Payment to Financial Department staff for accounting services rendered to the utility to manage SW Utility fee finances and books.	Pay Financial Department staff for accounting services rendered to the SW Utility.	
A3. SW Utility account management. Includes processing requests for credits and waivers, response to customer questions and complaints, enforcing payment of utility fees.	Assume that there will always be some level of on-going customer service efforts.	SW Utility customer service.	
A4. Prepare budgets for following year and adjust SW Utility fee rates as needed.	Assume rate increases must be approved by the governing body and may require a public hearing. The need for rate increases may be avoided if the original ordinance either: (1) uses a flat five year average rate, or (2) includes a set schedule for rate increases over the first five years.	Prepare budget for following year and adjust SW Utility fee rates as needed. Analysis by staff, support by accounting, review by elected leaders, hearing adoption for new rates.	
YEAR 3			
A1. Review Assessor and land use data (annexations, new developments, etc.), perform GIS analysis (ERU definition, impervious surface measurements on non-residential parcels), finalize and update existing SW Utility customer database and billing rolls, coordinate with City Utility Department staff to update and process billing rolls and send out utility bills (on monthly utility billing statements), update public information material for Utility Department staff, provide refresher training for staff on customer response.	Per the direction provided by the City, a permanent SW Utility rate structure will be funded and developed in year 3 and will include a formal impervious surface analysis (ERU definition, impervious surface measurements on non-residential parcels). Assume that an annual process must be conducted to prepare updated and correct utility billing rolls. Assume that initial work will be completed in permit year 3.	Review Assessor and land use data, perform GIS analysis, update customer database, billing rolls, arrange for Utility Department to send out utility bills, public information materials, train staff on customer response.	
A2. General Financial Department services.	Payment to Financial Department staff for accounting services rendered to the utility to manage SW Utility fee finances and books.	Pay Financial Department staff for accounting services rendered to the SW Utility.	
A3. SW Utility account management. Includes processing requests for credits and waivers, response to customer questions and complaints, enforcing payment of utility fees.	Assume that there will always be some level of on-going customer service efforts.	SW Utility customer service.	
A4. Prepare budgets for following year and adjust SW Utility fee rates as needed.	Assume rate increases must be approved by the governing body and may require a public hearing. The need for rate increases may be avoided if the original ordinance either: (1) uses a flat five year average rate, or (2) includes a set schedule for rate increases over the first five years.	Prepare budget for following year and adjust SW Utility fee rates as needed. Analysis by staff, support by accounting, review by elected leaders, hearing adoption for new rates.	
YEAR 4			
A1. Review Assessor and land use data (annexations, new developments), perform updated GIS analysis, update SW Utility customer database and billing rolls, coordinate with City Utility Department staff to update and process billing rolls and send out utility bills, update public information material for Utility Department staff as needed, provide refresher training for staff on customer response as needed.	Per the direction provided by the City, a permanent SW Utility rate structure will be funded and developed in year 3 and will include a formal impervious surface analysis (ERU definition, impervious surface measurements on non-residential parcels). Assume that an annual process must be conducted to prepare updated and correct utility billing rolls, but the effort is much less than for the start-up year.	Review Assessor and land use data, update GIS analysis, customer database, billing rolls, arrange for Utility Department to send out utility bills, public information materials, train staff on customer response.	
A2. General Financial Department services.	Payment to Financial Department staff for accounting services rendered to the utility to manage SW Utility fee finances and books.	Pay Financial Department staff for accounting services rendered to the SW Utility.	
A3. SW Utility account management. Includes processing requests for credits and waivers, response to customer questions and complaints, enforcing payment of utility fees.	Assume that there will always be some level of on-going customer service efforts.	SW Utility customer service.	
A4. Prepare budgets for following year and adjust SW Utility fee rates as needed.	Assume rate increases must be approved by the governing body and may require a public hearing. The need for rate increases may be avoided if the original ordinance either: (1) uses a flat five year average rate, or (2) includes a set schedule for rate increases over the first five years.	Prepare budget for following year and adjust SW Utility fee rates as needed. Analysis by staff, support by accounting, review by elected leaders, hearing adoption for new rates.	
YEAR 5			
A1. Review Assessor and land use data (annexations, new developments), perform updated GIS analysis, update SW Utility customer database and billing rolls, coordinate with City Utility Department staff to update and process billing rolls and send out utility bills (on monthly utility billing statements), update public information material for Utility Department staff as needed, provide refresher training for staff on customer response as needed.	Assume that an annual process must be conducted to prepare updated and correct utility billing rolls, but the effort is much less than for the start-up year.	Review Assessor and land use data, update GIS analysis, customer database, billing rolls, arrange for Utility Department to send out utility bills, public information materials, train staff on customer response.	
A2. General Financial Department services.	Payment to Financial Department staff for accounting services rendered to the utility to manage SW Utility fee finances and books.	Pay Financial Department staff for accounting services rendered to the SW Utility.	
A3. SW Utility account management. Includes processing requests for credits and waivers, response to customer questions and complaints, enforcing payment of utility fees.	Assume that there will always be some level of on-going customer service efforts.	SW Utility customer service.	
A4. Prepare budgets for following year and adjust SW Utility fee rates as needed.	Assume rate increases must be approved by the governing body and may require a public hearing. The need for rate increases may be avoided if the original ordinance either: (1) uses a flat five year average rate, or (2) includes a set schedule for rate increases over the first five years.	Prepare budget for following year and adjust SW Utility fee rates as needed. Analysis by staff, support by accounting, review by elected leaders, hearing adoption for new rates.	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List √
Stormwater Program Funding - Utility Assumed			
B. Stormwater Development Permit Fees			
YEAR 1			
YEAR 2			
B1. Estimate the full annual cost of service for conducting stormwater plan review, site inspection, enforcement of standards, and providing technical assistance to developers, contractors, and engineers. Consider the cost of serving different types/classes of development customers.	Per the direction provided by the City, a formal cost of service analysis will not be conducted at this time for activities related to stormwater plan review, site inspection, or enforcement. The City has an established permit structure and fee schedule (including plan review and inspection) as outlined in the City's Public Works Development Standards (Section 11 - Permitting). Assume that a formal cost of service analysis will be conducted by the City in later years as part of an overall update to the City's permitting process, and will include a re-evaluation of enhanced stormwater/drainage/development review activities and costs.	Complete cost of service for stormwater/drainage/development review - assumed to be done as part of future, overall cost of service study for development fees.	
B2. Work with directors and/or elected leaders to determine what portion of stormwater development review costs will be funded using permit fees, and how any remaining portions will be funded.	Per the direction provided by the City, assume that stormwater development review costs will be funded using existing permit structure and fee schedule. Assume that after future cost of service analysis is conducted, elected leaders will determine if the full cost of enhanced stormwater development review activities will be funded by permit fees or whether a portion will be funded in other ways.	Cost of service report presentation, alternatives, meetings with staff and elected leaders, approval to proceed - assumed to be done as part of future, overall cost of service study for development fees.	
B3. Update or prepare local codes establishing permit fees, conduct any needed legal reviews, prepare informational material, hold at least one public hearing, adopt new or updated stormwater development permit fees.	Per the direction provided by the City, assume that local code establishing permit structure and fee schedule adequate.	Draft updated or new codes for development review fees, public process, hearing adoption, implementation - assume to be done as part of future, overall cost of service study for development fees.	
B4. Train local front-line staff on the details of the stormwater permit fee and how to respond to customer concerns.		Develop training materials, FAQs, etc. for front-line staff dealing with customers.	
B5. Implement (or use existing mechanisms as developed in J4) methods to track stormwater development review costs.		Track stormwater development review costs, mainly provided by Financial Department accounting staff, with some involvement by stormwater compliance staff.	
YEAR 3			
B4. Re-train local front-line staff on the details of the stormwater permit fee and how to respond to customer concerns.	Assume minor training updates as needed.	Develop training materials, FAQs, etc. for front-line staff dealing with customers.	
B5. Continue methods to track stormwater development review costs.		Track stormwater development review costs, mainly provided by Financial Department accounting staff, with some involvement by stormwater compliance staff.	
B6. Continue to implement development permit fee process and collect revenue.		Continue to collect development permit fees.	
B7. General Financial Department accounting services.	Assume no additional costs to manage stormwater development permit fees since included as part of overall management of development permit fee finances and books by Financial Department accounting staff.	Pay accounting staff for services supporting stormwater development permit fees - stormwater permit fees included as part of overall permit structure.	
YEAR 4			
B4. Re-train local front-line staff on the details of the new stormwater permit fee and how to respond to customer concerns.	Assume minor training updates as needed.	Develop training materials, FAQs, etc. for front-line staff dealing with customers.	
B5. Continue methods to track stormwater development review costs.		Track stormwater development review costs, mainly provided by Financial Department accounting staff, with some involvement by stormwater compliance staff.	
B6. Continue to implement development permit fee process and collect revenue.		Continue to collect development permit fees.	
B7. General Financial Department accounting services.	Assume no additional costs to manage stormwater development permit fees since included as part of overall management of development permit fee finances and books by Financial Department accounting staff.	Pay accounting staff for services supporting stormwater development permit fees - stormwater permit fees included as part of overall permit structure.	
YEAR 5			
B4. Re-train local front-line staff on the details of the new stormwater permit fee and how to respond to customer concerns.	Assume minor training updates as needed.	Develop training materials, FAQs, etc. for front-line staff dealing with customers.	
B5. Continue methods to track stormwater development review costs.		Track stormwater development review costs, mainly provided by Financial Department accounting staff, with some involvement by stormwater compliance staff.	
B6. Continue to implement development permit fee process and collect revenue.		Continue to collect development permit fees.	
B7. General Financial Department accounting services.	Assume no additional costs to manage stormwater development permit fees since included as part of overall management of development permit fee finances and books by Financial Department accounting staff.	Pay accounting staff for services supporting stormwater development permit fees - stormwater permit fees included as part of overall permit structure.	
B8. Perform a new cost of service study and update stormwater development permit fees as needed.	Assume that the City conducts a future cost of service study for development fees as part of an overall update process. Assume that permit fee increases must be approved by the governing body and may require a public hearing.	Perform new cost of service, work with staff and elected leaders, public hearing, update fees - assumed to be done as part of future, overall cost of service study and update process.	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List √
Stormwater Program Funding - Utility Assumed			
C. Stormwater Program Reserve Fund			
YEAR 1			
YEAR 2			
C1. Set-aside funds in years 2-3 to build a SWM Program reserve fund equal to 25% of the estimated year 5 cost (fully implemented program cost estimate).	Assume that funds are set-aside in earlier years to build fund while rates are still low.	Build reserve fund to ensure financial stability and financing capacity.	
YEAR 3			
C1. Set-aside funds in years 2-3 to build a SWM Program reserve fund equal to 25% of the estimated year 5 cost (fully implemented program cost estimate).	Assume that funds are set-aside in earlier years to build fund while rates are still low.	Build reserve fund to ensure financial stability and financing capacity.	
YEAR 4			
YEAR 5			