



Central Washington University Stormwater Planning Project

Stormwater Program Implementation Plan



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Acknowledgements

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Section I—Background

As Central Washington University (CWU) addresses the requirements and deadlines of a National Pollutant Discharge Elimination System (NPDES) Phase II Permit, it will be important that tools be available to help them 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 for Secondary Permittee's has been prepared for CWU. The detailed annual listing of required activities, combined with estimates of needed equipment, staffing, and funding, represents an "Implementation Plan" that CWU 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 CWU's required NPDES Phase II Stormwater Management Program (SWMP); 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 over the five-year term of the NPDES Phase II Permit. The activities described in the Implementation Plan address Ecology's final NPDES Phase II General Permit for Eastern Washington, effective February 16, 2007. However, it should be pointed out that CWU's actual effective date is November 8, 2007—the date on which CWU was given notification of coverage under the Phase II Permit by Ecology.

The Implementation Plan developed for CWU represents the culmination of various work and related analyses performed to date. The work conducted as part of this process included: (1) documentation of CWU'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

CWU's existing stormwater program has been documented based on various sources of data and information provided by CWU staff. Information provided by CWU included organizational charts, responsibility matrices, annual budgets, staff salaries and benefits, maps, inventories of existing storm system facilities and infrastructure, existing operation and maintenance activities, and other related information. A "stormwater program self-assessment questionnaire form" was also developed and used to establish a baseline understanding of CWU's existing stormwater management activities and priorities. The questionnaire sought information about existing activities related to the regulatory requirements, as well as existing equipment, capital project needs, and estimates of current expenditures. A meeting was held with CWU staff on December 7, 2007 to review and complete the questionnaire form. A copy of the stormwater questionnaire with responses provided by CWU staff is attached (Appendix A). Note that additional information on existing stormwater program activities and costs were provided after completion of the questionnaire. This additional detail is shown in CWU's stormwater program gap analysis (Appendix B).

Local receiving water issues [303(d) listings, Total Maximum Daily Loads (TMDLs), etc.] and other issues that may affect stormwater management requirements were downloaded from various agency sources and reviewed. Additional CWU stormwater program components will be recommended to help comply with any applicable local TMDLs. TMDL related recommendations include activities such as participating in local water quality monitoring activities, providing educational information to students and staff, and other related activities.

Section 3—Summary of Regulatory Gap Analysis Process and Results

The stormwater regulatory assessment was conducted based on review of the final version of the NPDES Phase II Permit, along with guidance provided in the Model Municipal Stormwater Program for Eastern Washington. Information about CWU'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 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

CWU must develop and implement a Public Education and Outreach (PE&O) Program aimed at distributing educational materials to their students and staff about the impacts of stormwater discharges to water bodies and the steps that can be taken to reduce pollutants in stormwater. The education and outreach information should address the following topics:

- How stormwater runoff affects local waterbodies;
- Proper use and application of pesticides and fertilizers;
- Benefits of using well-adapted vegetation;
- Alternative equipment washing practices including cars and trucks that minimize pollutants in stormwater;
- Benefits of proper vehicle maintenance and alternative transportation choices; proper handling and disposal of wastes, including the location of hazardous waste collection facilities in the area;
- Hazards associated with illicit connections; and
- Benefits of litter control and proper disposal of pet waste.

CWU must also label all their storm drain inlets by the end of the five-year permit term.

Status of Existing Activities and Needs

CWU currently does not distribute stormwater educational materials to students and staff. Additionally, storm drains inlets operated and maintained by CWU have not been labeled by staff or other groups (e.g., campus volunteers or student groups). CWU will need to develop and distribute educational information to students and staff by Year 3 (2009). CWU may choose to coordinate with the City of Ellensburg (City) as the City begins to implement its own PE&O Program to comply with the requirements of the NPDES Phase II Permit.

Section 3—Summary of Regulatory Gap Analysis Process and Results

Continued

Public Involvement and Participation

Regulatory Requirements

The Public Involvement and Participation (PI&P) activities to be implemented by CWU include publishing a public notice in the local newspaper, soliciting public review of the SWMP, and making the latest version of the SWMP available to the public. All of these items are due in Year 5 (required by August 2011).

Status of Existing Activities and Needs

CWU has not approved a public involvement policy specifically for stormwater. Additional information and involvement efforts to be conducted by CWU include publishing a public notice in a local news paper and posting the most current version of the SWMP on CWU's website. Public comments will be taken into consideration when making future revisions to the SWMP.

Illicit Discharge Detection and Elimination

Regulatory Requirements

CWU must develop, implement, and enforce a program to detect and eliminate illicit discharges into its municipally separate storm sewer system (MS4). This element of the SWMP requires that CWU: (1) develop and adopt appropriate policies that prohibit non-stormwater (illicit) discharges and illegal dumping; (2) develop and implement an enforcement plan to ensure compliance with the illicit discharge policies; (3) develop a map of the MS4, showing the location of all known storm drain outfalls, labeling the receiving waters, and delineating the areas contributing runoff to each outfall; (4) conduct field inspections and visually inspect for illicit discharges at all known outfalls; (5) develop procedures for characterizing illicit discharges, spills, or illegal dumping, and procedures for tracing and removing sources of illicit discharges; (6) develop and implement a spill response plan that includes coordination with a qualified spill responder; (7) provide adequate training for relevant staff; and (8) keep records of inspections and follow-up activities, staff training, and other related items.

Status of Existing Activities and Needs

CWU has a fairly complete map of its MS4, including an inventory of existing storm system facilities and infrastructure. The location of known storm drain outfalls is included on the map; however, areas contributing runoff to each outfall need to be delineated. Source tracing

Section 3—Summary of Regulatory Gap Analysis Process and Results

Continued

and removal activities are limited and conducted on an as-needed basis. CWU needs to adopt and enforce a policy that specifically prohibits non-stormwater (illicit) discharges to its MS4. CWU also needs to comply with all relevant City ordinances, rules, and regulations that pertain to non-stormwater discharges.

Construction Site Stormwater Runoff Control

Regulatory Requirements

This element of the SWMP requires that CWU: (1) comply with all City ordinances, rules, and regulations that govern construction phase stormwater pollution prevention measures; (2) obtain coverage under the *General NPDES Permit for Stormwater Discharges Associated with Construction Activities* for all applicable construction projects under the control of CWU; (3) coordinate with the City regarding construction projects owned and operated by other entities that have the potential to discharge into CWU's storm sewer lines to ensure that the City achieves compliance with its own ordinances; (4) provide training to educate staff in erosion and sediment control best management practices (BMPs) and requirements; and (5) coordinate with Ecology and the City to provide access for inspection of construction sites or other land disturbances during the active grading and/or construction period.

Status of Existing Activities and Needs

CWU currently complies with all City ordinances, rules, and regulations regarding stormwater through the local building permit process. CWU does not have a formal process in place to ensure coordination with the City regarding the use of stormwater pollution prevention measures on construction projects that occur on campus property that are not specifically CWU projects. A formal Memorandum of Understanding (MOU) with the City, Ellensburg Water Company, and the Washington State Department of Transportation may be the preferred avenue for having formal documentation and notification of construction activities. CWU currently coordinates with Ecology and the City to provide access for inspection of construction sites. CWU needs to provide training to relevant staff to educate them on erosion and sediment control BMPs and requirements. CWU may want to begin incorporating the minimum technical requirements for stormwater management listed in Appendix 1 of the NPDES Phase II Permit for new development and redevelopment projects. The City is required to adopt Appendix 1 (or equivalent requirements) into their ordinances by Year 3 to control construction and post-construction stormwater runoff, at which time CWU will have to comply. Becoming familiar with the language and requirements now will ease the transition in Year 3.

Section 3—Summary of Regulatory Gap Analysis Process and Results

Continued

Post-Construction Stormwater Management for New Development and Redevelopment

Regulatory Requirements

This element of the SWMP requires that CWU: (1) comply with all City ordinances, rules, and regulations that govern post-construction stormwater pollution prevention measures; and (2) coordinate with the City regarding projects owned and operated by other entities that have the potential to discharge into CWU's storm sewer lines to ensure that the City achieves compliance with its own ordinances.

Status of Existing Activities and Needs

CWU currently complies with the City's existing ordinance and storm drainage standards which address post-construction stormwater management. However, the City's ordinance and existing standards need to be updated to meet NPDES Phase II requirements. As discussed previously, the City is required to adopt Appendix 1 (or equivalent requirements) into their stormwater-related ordinances. CWU will need to incorporate these new/revised post-construction stormwater pollution prevention measures into planned future projects.

Pollution Prevention and Good Housekeeping for University Operations

Regulatory Requirements

CWU must develop and implement a municipal operation and maintenance (O&M) plan to minimize stormwater pollution from activities conducted by CWU. The O&M Plan shall include appropriate pollution prevention and good housekeeping (PP&GH) procedures for various CWU operations, activities, and/or facilities (e.g., maintenance associated with stormwater collection and conveyance system, municipal buildings, parks and open space, vehicle fleets, etc.). The O&M Plan shall include a schedule of inspections and record keeping requirements. CWU must obtain permit coverage for all facilities that are required to be covered under the *General NPDES Permit for Stormwater Discharges Associated with Industrial Activities*. In addition, CWU must develop and implement a formal training program for all staff whose job functions may impact stormwater quality.

Status of Existing Activities and Needs

CWU has an informal street sweeping program in place for campus roads and parking lots. Facilities Management Department staff currently perform catch basin and other storm system maintenance on a limited basis. University fleet washing and maintenance is currently

Section 3—Summary of Regulatory Gap Analysis Process and Results

Continued

conducted in a contained building, which likely meets this component of the regulatory requirements. However, these and other existing activities and policies need to be documented in a formal O&M Manual. In addition, numerous other CWU operation and maintenance activities (e.g., parks and open space, University buildings, stormwater management facilities, etc.) need to be examined, and modified as needed, to protect water quality. A documented training program needs to be established. CWU may consider partnering with the City to have a regional decant facility constructed for the management of wastes generated as a result of stormwater maintenance activities (catch basin cleaning, etc.).

Compliance with Total Maximum Daily Load Allocations

Regulatory Requirements

Ecology conducted a review of all TMDLs approved by EPA at the time of the final permit issuance (January 17, 2007) to determine whether stormwater, including municipal stormwater sources, were identified in any of 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 Phase II Permit, compliance with the permit constitutes compliance with applicable TMDLs. However, CWU is encouraged to participate in the development of local TMDLs to ensure that stormwater impacts are responsibly addressed and to 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, CWU must annually report any stormwater monitoring or studies and investigations conducted by, on behalf of, or reported to CWU. CWU must also perform an annual assessment of the appropriateness of the BMPs identified for each SWMP component.

Status of Existing Activities and Needs

These requirements will be fulfilled as the SWMP is further developed and implemented. CWU is encouraged to sponsor or participate with the City and/or local agencies conducting routine or special water/stormwater quality monitoring studies to assess baseline conditions in local area receiving waters.

Section 3—Summary of Regulatory Gap Analysis Process and Results

Continued

Reporting and Record Keeping Requirements

Regulatory Requirements

CWU is required to prepare and submit annual reports to Ecology. The report must include the most current version of CWU's SWMP and status of compliance with the various conditions outlined in the permit. The annual reports must include: (1) the status of implementation of each SWMP component; (2) an assessment of CWU's progress in meeting the minimum performance standards; (3) a summary of CWU's evaluation of their SWMP; (4) if applicable, notification that CWU is relying on another governmental agency (City of Ellensburg) to satisfy any of the obligations under the permit; and (5) other reporting requirements.

Status of Existing Activities and Needs

CWU will need to develop and implement an on-going process for gathering, recording, maintaining, and using information to track the development and implementation of their SWMP. Designated staff will need to itemize the types of record keeping needed for the various program components, meet with various departments 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

CWU's stormwater program activities can be divided into the following major categories: (1) NPDES Phase II Requirements, (2) NPDES Equipment, and (3) Capital Projects.

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 CWU's expected activities over the five-year permit term (Appendix C). Appendix C is in a check list format to assist CWU 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 final 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 CWU may already be doing. In some cases, CWU 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 five-year term of the permit. However, some activities will be started in earlier years based on anticipated level-of-effort, expected timeframes, and local preferences.

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

Annual Revenue Needs

The estimated annual revenue for implementing CWU’s stormwater program over the five-year term of the permit (2007-2011) is summarized in Table 5.1. The table includes a summary of estimated annual costs for each program area category, total annual program costs, and total five-year program cost. Table 5.1 also includes a breakdown in revenue needed for the following major areas: (1) equipment; (2) capital projects; and (3) staff, fees, overhead, and services. A detailed listing of the estimated annual costs for each of the required activities is presented in the Gap Analysis matrices in Appendix B.

NPDES equipment and funding needs have been identified and are included in Appendix B for the following categories: (1) illicit discharge detection and elimination (IDDE Program) and (2) good housekeeping (O&M Program). Additional funds will need to be obtained through future (2009/2011) biennial budget requests to support the purchase, repair, and replacement of needed IDDE and O&M Program equipment.

A formal list of stormwater capital projects with estimated costs was not provided or developed as part of this project. However, stormwater capital project and funding needs have been identified and are included in Appendix B for the following types of projects: (1) known or planned projects and (2) unforeseen projects discovered as the stormwater program is implemented. Additional funds to support the planning, design, and construction of stormwater capital projects will need to be obtained through future biennial budget requests.

The following list of assumptions was used in developing costs:

- Currently funded activities, such as storm system maintenance, street/parking lot sweeping, and staff education will continue to be performed at current levels of effort for the first few years of the permit with new/enhanced practices to be phased-in during later years of the program.
- Costs associated with the base sweeping program will be increased on an annual basis (approximately 30%) to account for escalating fuel, maintenance, and other related costs.
- NPDES equipment funds will be deferred until Permit Year 4. It is assumed that additional funds totaling \$250,000 will be requested during the 2009/2011 biennial budgeting process. Funds will be used to cover equipment needs associated with the IDDE Program (\$50K) and the O&M Program (\$200K total; \$150K for purchase of a new high-efficiency sweeper unit and \$50K for other O&M related equipment).
- Stormwater capital improvement project funds totaling \$300,000 will be requested during the 2009/2011 biennial budgeting process. Funds will be used to support the construction of a future equipment washout station at the Jongeward Complex (estimated at \$250K) and to cover any minor unforeseen projects (\$50K).

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

Table 5.1 Summary of Estimated Annual Program Revenue Needs						
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	\$2,700	\$2,700	\$3,500	\$4,000	\$4,500	\$17,400
B. Public Education and Outreach	\$0	\$0	\$9,500	\$9,500	\$6,000	\$25,000
C. Public Involvement	\$0	\$0	\$0	\$0	\$3,500	\$3,500
D. Illicit Discharge Detection & Elimination	\$12,000	\$36,500	\$26,500	\$21,500	\$18,500	\$115,000
E. Construction Site Stormwater Runoff	\$12,500	\$6,500	\$6,500	\$6,500	\$6,500	\$38,500
F. Post Construction Stormwater Management	\$0	\$500	\$500	\$500	\$500	\$2,000
G. Pollution Prevention/Good Housekeeping	\$57,000	\$95,000	\$195,000	\$219,500	\$255,500	\$822,000
H. Compliance with TMDLs	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$7,500
I. Monitoring and Program Evaluation	\$500	\$500	\$500	\$1,000	\$1,000	\$3,500
J. Reporting and Record Keeping	\$14,000	\$26,500	\$24,000	\$28,000	\$28,000	\$120,500
K. NPDES Equipment Funds	\$0	\$0	\$0	\$250,000	\$0	\$250,000
L. NPDES Capital Project Funds	\$0	\$0	\$0	\$300,000	\$0	\$300,000
Annual Total	\$100,200	\$169,700	\$267,500	\$842,500	\$325,500	\$1,704,900
Equipment	\$0	\$0	\$0	\$250,000	\$0	\$250,000
Capital	\$0	\$0	\$0	\$300,000	\$0	\$300,000
Staff, Fees, Overhead, Services	\$100,200	\$169,700	\$267,500	\$292,500	\$325,500	\$1,154,900

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

Continued

- Staff salary estimates were based on information included in the Model Municipal Stormwater Program for Eastern Washington and from current salary and benefit information provided by CWU staff during the stormwater planning project.

Staffing Needs

Maintenance and Operations Staff

Maintenance and operations staff include those involved in: (1) implementing pollution prevention and good housekeeping practices for various CWU operations, activities, and/or facilities; (2) storm system inspection, maintenance, and source control functions; (3) illicit discharge detection and elimination activities and spill/complaint response; (4) coordination with technical support staff during implementation of new/enhanced practices; and (5) proper documentation and record keeping.

Assuming that maintenance and operations staff with benefits and overhead costs about \$100,000 per FTE (assuming average base salary of about \$60,000 per year), then approximately 2.0 FTE above current staffing will be needed to perform the above stated activities. “Overhead” refers to the cost of providing an employee with things like space, utilities, 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.

Project Administration/Technical Support Staff

Project administration and technical support staff include those involved in enhanced efforts such as: (1) conducting targeted stormwater public education and outreach for staff and students; (2) conducting illicit discharge detection and elimination activities and enforcement; (3) coordinating with the City, Ecology, and other entities to ensure compliance with local construction/post-construction stormwater pollution control measures; (4) reviewing and updating University policies and plans that pertain to stormwater when necessary; (5) providing stormwater technical assistance to various department staff; (6) oversight of good housekeeping training and program implementation by various departments; (7) attending periodic training; (8) SWMP planning and management; and (9) record keeping and reporting.

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

Continued

Given the wide array of activities, it is difficult to 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 it is assumed that miscellaneous services and fees (e.g., NPDES permit fee, legal services, consultant service agreements, etc.) consume about 20% of the “*Staff, Fees, Overhead, and Services*” budget, then approximately 1.0 FTE would be required for the above stated activities.

A very rough breakdown of the above-mentioned additional FTEs needed by Permit Year 5 might include the following:

- Storm system inspection, maintenance, and source control—1.75 FTE
- IDDE activities, spill/complaint response, enforcement—0.2 FTE
- Good housekeeping training and programs and support for program implementation—0.5 FTE
- Stormwater public education and outreach efforts—0.1 FTE
- Administrative support and NPDES record keeping and reporting—0.2 FTE
- Program planning and management—0.5 FTE

Total additional staff—3.0 FTE

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

Appendix A—Existing CWU Stormwater
Program Questionnaire

Central Washington University Existing Stormwater Program Activity Information

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 SWM Program, Identify Local Compliance Needs, Priorities, Costs, Space, Staffing, Equipment, and Funding Needs		To be developed as part of the Central Washington University (CWU) Stormwater Planning Project.			
BMP S2 - Develop Local SWM Action Plan/Schedule		To be developed as part of the CWU Stormwater Planning Project.			
BMP S3 - Adopt Needed Interlocal Agreements		To be developed. Agreements with City of Ellensburg 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 determined.			
Permit Compliance:					
1. Public Education and Outreach					
Required BMP 1.1 - Public Education and Outreach: Develop and implement stormwater education strategies consisting of the following: - Storm drain inlets owned and operated by the Secondary Permittee that are located in maintenance yards, parking lots, along sidewalks, and at pedestrian access points shall be clearly and permanently labeled with the message "Dump No Waste" and indicating the point of discharge as a river, lake, or groundwater. - Develop and distribute educational information to tenants and residents about the impacts of stormwater discharges and the steps that can be taken to reduce pollutants in stormwater runoff. Note: Compliance can be achieved through participation in the City's public education and outreach programs. Measurable Goals: By the end of Permit Year 3, label at least 50% of the storm drain inlets. No later than 180 days prior to the expiration of the permit, label all remaining storm drain inlets. Re-label any storm drain inlet that is no longer clearly visible and/or easily readable within 90 days. No later than 3 years from the date of permit coverage, and each year thereafter, distribute educational information to tenants and residents.	Has CWU conducted any labeling/stenciling of known storm drain inlets to receiving waters? Has CWU developed and distributed (or presented) educational material related to stormwater, in any form, to tenants and/or residents?	None are labeled at present			Get stencil from city for use or copy? Akers For educational materials in curriculum, start with Carey Gazis and Bill Bender, IET, and in residence halls, Rich DeShields would provide information. Kevin Higgins, police and public safety Bob Hendrickson, Maintenance Supervisor John Akers coordinates Boy Scouts and childcare groups stenciling. Lorinda Anderson, civic engagement and service learning Look for documents on the Ecology website or from the city for educational distribution. See Univ. of Minnesota Deluth for a model. We can create a fact sheet and workshops too.
BMP 1.1.1 - Stormwater Website: Create a stormwater website that contains educational information related to stormwater. Measurable Goal: Complete a stormwater website section on an existing web page or independently; update monthly. (Per Model Muni SW Program for E WA)	Does CWU currently maintain a stormwater website (section within CWU website or independent site) that contains educational information related to stormwater?	There is no website currently. A site for sustainability will include information on our stormwater protection measures (www.cwu.edu/~sustainability/stormwater).			This site should be completed by end of winter quarter 2008. We could possibly link up with a city site -- ask Akers.

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
2. Public Involvement and Participation					
<p>Required BMP 2.1 - Public Involvement & Participation: Publish a public notice in the local newspaper and solicit public review of the SWMP. Make available to the public the most current version of the SWMP. Note: Recommend development and implementation of a process for considering public comments on the SWMP.</p> <p>Measurable Goal: No later than 180 days prior to the expiration of the permit, publish a public notice in the local newspaper and make the latest updated version of the SWMP available to the public (post on website if available).</p>	Does CWU have a mechanism in place for consideration of public comments anticipated on the proposed stormwater management program (SWMP)?	Public comments will be sent to Bill Vertrees, then copied and responded to by Karen Bicchieri, with approval by Greg Poe and Bill Yarwood, to be signed by Vertrees as a public document. For Residence Halls related policy and public comment, Richard DeShields will also approve.			NOI for the permit has been submitted. An NOI for the plan will have to be submitted.
3. Illicit Discharge Detection and Elimination					
<p>Required BMP 3.1 - Comply with Local Ordinances, Rules, and Regulations: Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Secondary Permittee is located that govern non-stormwater discharges.</p> <p>Measurable Goal: By the effective date of the permit, comply with all relevant ordinances, rules, and regulations of local jurisdiction(s).</p>	Does CWU currently comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern non-stormwater discharges?	Gap analysis with Otak.			confirm with John Akers. Greg Poe and Bob Hendrickson are the primary involved. Involve supervisors to find examples of non-compliance. Check for a policy that says CWU follows local ordinance.
<p>Required BMP 3.2 - Regulatory Policy: Develop and adopt appropriate policies prohibiting illicit discharges and illegal dumping into the MS4. The policies shall address: illicit connections; non-stormwater discharges; and spilling, dumping, or otherwise improperly disposing of haz. materials, pet waste, and litter. Identify possible enforcement mechanisms and develop and implement an enforcement plan using these mechanisms to ensure compliance with illicit discharge policies.</p> <p>Measurable Goal: No later than 1 year from the date of permit coverage, develop and adopt policies prohibiting non-stormwater discharges. No later than 1 year from the date of permit coverage, identify possible enforcement mechanisms. No later than 18 months from the date of permit coverage, develop and implement an enforcement plan to ensure compliance with policies. (One time cost for illicit discharge policies and enforcement plan; ongoing enforcement needed)</p>	Does CWU currently have regulatory policies that prohibit illicit discharges and illegal dumping from entering the storm drainage system and authorizes enforcement actions? If so, has an enforcement plan/strategy been developed, which sets goals and courses of action that are carried out to meet the regulatory provisions?	No.			Not yet. We mainly follow state law as practice, says Calvin Lang. Munson and supervisors should be involved. We need to have/ create an internal policy (even if it says only that we are "adopting city policy" and tailor it to CWU).
<p>Required BMP 3.3 - Develop Map of Storm Sewer System: Develop and maintain a map showing the location of the following: all known storm drain outfalls; the names and locations of all receiving waters; and areas contributing runoff to each outfall. Provide maps and mapping information to Ecology and/or other entities covered under the permit (upon request). Maintain documentation of map information; update periodically.</p> <p>Measurable Goals: No later than 180 days prior to the expiration of the permit, develop a storm sewer system map. (One time cost to develop map; ongoing activities to update and maintain)</p>	Does CWU maintain a map of their storm sewer system showing the locations of all known outfalls, connections to the City's MS4, receiving waters, and areas contributing runoff to each outfall?	Map is approximately 75-80% complete in AutoCAD. Need topographic data added in.			Bob Tosch, Charles Pringle are responsible. Draw the main trunk lines (drain pipes) with ours and the city's in different colors. Make a layer on the map called "subbasins", plus surface features, stormdrains, and contour lines.

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<p>Required BMP 3.4 - Field Assessments: Conduct field inspections and visually inspect for illicit discharges at all known outfalls that discharge to surface waters. Develop and implement procedures to identify and remove any illicit discharges. Keep records of inspections and follow-up activities.</p> <p>Measurable Goal: No later than 2 years from the date of permit coverage, visually inspect 1/3 (on average) of all known outfalls each year, develop and implement procedures to identify and remove illicit discharges, and keep records.</p>	<p>Does CWU currently conduct field inspections and visually inspect for illicit discharges at known outfalls?</p> <p>Has CWU developed and implemented procedures for the identification and removal of illicit discharges? If so, are records of inspections and follow-up activities maintained?</p>	No.			<p>Define what we are looking for, where we are looking, and schedule. If applicable, we will do testing, and further measures to protect the creek. Greg Poe and Bob Tosch are responsible.</p> <p>Karen Bicchieri will develop an initial policy/ plan.</p> <p>Bill Rice will send the document from the Center for Watershed Protection.</p>
<p>Required BMP 3.5 - Spill Response Plan Develop and implement a spill response plan that includes coordination with a qualified spill responder.</p> <p>Measurable Goal: No later than 180 days prior to expiration of the permit, develop and implement a spill response plan. (One time cost for plan)</p>	Does CWU currently have a spill response plan coordinated through a qualified spill responder? DEFINE (is this a 40 hour HAZMAT class?)	Yes, but it needs update.			Ron Munson in Environmental Health and Safety made a plan in 1999 with GN Northern. The updated plan should be shared with the city public works and emergency response/ fire department.
<p>Required BMP 3.6 - Training: Provide staff training or coordinate with existing training efforts to educate all relevant staff on proper best management practices (BMPs) for preventing spills and illicit discharges.</p> <p>Measurable Goal: No later than 180 days prior to expiration of the permit, train all relevant staff.</p>	Does CWU currently provide or receive training on proper BMPs for preventing spills and illicit discharges?	Yes. Ron Munson and Pam Coppersmith in EHS are trained.			Ron Munson has a BA in safety management and Pam Coppersmith has a BA in industrial hygiene. They both received Hazwoper training with refreshers of 40 hours/year/person. They also participate in a lab safety campus wide program. (how many hours per year training for each and total?)
4. Construction Site Stormwater Runoff Control					
<p>Required BMP 4.1 - Comply with Local Ordinances, Rules, and Regulations: Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Permittee is located that govern construction phase stormwater pollution prevention measures.</p> <p>Measurable Goal: By the effective date of the permit, comply with all relevant ordinances, rules, and regulations of local jurisdiction(s).</p>	Does CWU currently comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern construction phase stormwater pollution prevention measures?	We comply locally, through building permit.			<p>Bill Yarwood and Eric Fraley -- add things in capital project bid documents and design standards to involve the design team.</p> <p>Does our standard language written into capital project bid documents reference state or local law, or other?</p>
<p>Required BMP 4.2 - Construction Projects: Obtain coverage under the NPDES Construction Stormwater General Permit for all construction projects under the control of the Secondary Permittee that require a construction stormwater permit.</p> <p>Measurable Goal: By the effective date of the permit, obtain coverage under the NPDES Construction Stormwater General Permit for construction projects that require coverage.</p>	Does CWU seek coverage under the NPDES Construction Stormwater General Permit for all construction projects that are owned and operated by the University that require permit coverage?	No, we will have to follow city ordinance.			<p>Permits for capital projects are largely obtained by the contractor and design team. Bill Yarwood and Eric Fraley are responsible for capital projects. If there is no fence: Bob and Greg responsible for maintenance, repair and upgrades.</p> <p>Write up internal procedures for FMD level NPDES application. Find out what the threshold requirements are (is now >1 acre, used to be 5), and whether we have applied in the past, or only the contractor. Is this part of the city building permit?</p>

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<p>Required BMP 4.3 - Coordination with Local Jurisdiction(s): Coordinate with the local jurisdiction(s) regarding construction projects owned and operated by other entities, which discharge into the Permittee's MS4, to assist the local jurisdiction with achieving compliance with all relevant ordinances, rules, and regulations of the local jurisdiction(s).</p> <p>Measurable Goal: By the effective date of the permit, coordinate with local jurisdiction(s) on construction projects owned and operated by other entities to assist local jurisdiction(s) with achieving compliance.</p>	Does CWU currently coordinate with the City of Ellensburg on construction projects that are owned and operated by other entities to assist the City with achieving compliance with all relevant ordinances, rules, and regulations of the City that govern construction phase stormwater pollution prevention measures?	Yes, but this coordination could be formalized and improved.			<p>We could write up a MOU with the EWC, city and state DOT for formalized documentation and notification of activities..</p> <p>Ask Bruce Porter if there is legal agreement for cooperation.</p>
<p>Required BMP 4.4 - Training: Provide staff training or coordinate with existing training efforts to educate all relevant staff in erosion and sediment control best management practices (BMPs) and requirements, or hire trained contractors to perform the work.</p> <p>Measurable Goal: By the effective date of the permit, train all relevant staff or hire trained contractors.</p>	Does CWU currently provide or receive training in erosion and sediment control BMPs and requirements?	No.			Bill Bender says cursory training is provided in IET, in the Const. Mgmt. standard curriculum. IET could provide training or recommend consultant. FMD needs training.
<p>Required BMP 4.5 - Coordination to Provide Access for Construction Site Inspection: Coordinate with Ecology or the local jurisdiction(s) to provide access for inspection of construction sites or other land disturbances, which are under control of the Secondary Permittee, during the active grading and/or construction period.</p> <p>Measurable Goal: By the effective date of the permit, coordinate with Ecology or local jurisdiction(s) to provide access for inspection of construction sites.</p>	Does CWU currently coordinate with Ecology and/or the City of Ellensburg to provide access for inspection of construction sites or other land disturbing activities during the active grading and/or construction period?	Yes, there is coordination.			Responsible parties: Bill Yarwood and Eric Fraley, John Akers and Bill Vertrees, Bob Tosch and Greg Poe.
5. Post-Construction Stormwater Management for New Development and Redevelopment					
<p>Required BMP 5.1 - Comply with Local Ordinances, Rules, and Regulations: Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Permittee is located that govern post-construction stormwater pollution prevention measures.</p> <p>Measurable Goal: By the effective date of the permit, comply with all relevant ordinances, rules, and regulations of local jurisdiction(s).</p>	Does CWU currently comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern post-construction stormwater pollution prevention measures?	Yes, we comply, but formal policy/ procedures need to be written.			<p>We will need to confirm with John Akers that we properly comply as new ordinances are written.</p> <p>Project managers responsible for this. We will need to look at what gets written into specifications for projects and probably enhance the standard language to comply with this measure. For example, specifying that we have underground storage or swales that hold peak discharge for the one and two-year, 24-hour design storms.</p>
<p>Required BMP 5.2 - Coordination with Local Jurisdiction(s): Coordinate with the local jurisdiction(s) regarding construction projects owned and operated by other entities, which discharge into the Permittee's MS4, to assist the local jurisdiction with achieving compliance with all relevant ordinances, rules, and regulations of the local jurisdiction(s).</p> <p>Measurable Goal: By the effective date of the permit, coordinate with local jurisdiction(s) on construction projects owned and operated by other entities to assist local jurisdiction(s) with achieving compliance.</p>	Does CWU currently coordinate with the City of Ellensburg on construction projects that are owned and operated by other entities to assist the City with achieving compliance with all relevant ordinances, rules, and regulations of the City that govern post-construction stormwater pollution prevention measures?	Yes.			Responsible parties: Vertrees, Akers, Poe, Porter.

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6. Pollution Prevention and Good Housekeeping for Municipal Operations					
<p>Required BMP 6.1 - Municipal O&M Plan: Develop and implement an operation and maintenance plan (O&M Plan) to minimize stormwater pollution from various activities conducted by the Secondary Permittee. The O&M Plan shall include the following: - BMPs or pollution prevention and good housekeeping (PPGH) procedures that are to be applied for the various types of operations, activities, and/or types of facilities described below; - A schedule of inspections and maintenance activities; and - Procedures for record keeping to ensure sufficient documentation and records as necessary to demonstrate compliance.</p> <p>Measurable Goal: No later than 3 years from the date of permit coverage, develop and implement an O&M Plan. (One time cost for plan; ongoing program needed)</p>	<p>Has CWU developed and currently implementing a municipal O&M Plan that includes the application of specific BMPs for various operations, activities, and/or facilities that are protective of water quality?</p>	<p>No.</p>			<p>Develop based on model from city or other entity, such as U of Minn. example. Responsible parties: Poe, Sparks, Bicchieri.</p>
<p>Required BMP 6.1.1 - Stormwater Collection & Conveyance System: Per the O&M Plan, implement catch basin and other system cleaning, stormwater system maintenance, scheduled structural post-construction stormwater control BMP inspections and maintenance to ensure facility function, and other PPGH practices. Includes conducting spot checks of all stormwater treatment and flow control facilities (BMPs) following a 24-hour storm event with a 10-year or greater recurrence interval. Keep records of all inspections, spot checks, and repairs or maintenance performed.</p> <p>Measurable Goal: No later than 3 years from the date of permit coverage, implement schedule of required cleaning, inspection, and maintenance activities established in the O&M Plan.</p>	<p>Does CWU 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? Are wastes removed from the system disposed of properly? Are stormwater treatment and flow control facilities (BMPs) regularly inspected, especially after larger storm events? Are records of such activities maintained?</p>	<p>Not consistently, and very limited. There is no maintenance information for the storage vaults.</p>			<p>Develop inspection and maintenance procedures. Responsible parties: Brad Sparks, Bob Tosch, Greg Poe, Calvin Lang.</p>
<p>Required BMP 6.1.2 - Roads, Highways, and Parking Lots: Per the O&M Plan, implement PPGH practices for all roads, highway, and parking lots. Address de-icing, anti-icing, and snow removal practices; snow disposal areas; material storage areas; and all-season BMPs to reduce road/parking lot debris and other pollutants from entering the MS4.</p> <p>Measurable Goal: No later than 3 years from the date of permit coverage, implement all required PPGH practices established in the O&M Plan.</p>	<p>Does CWU currently employ pollution prevention and good housekeeping practices for O&M activities related to roads, highways, and parking lots? Does CWU currently have a road and parking lot sweeping program?</p>	<p>Some measures are taken. We have an informal sweeping program that happens 3-4 times/year, or more frequently for parking lots.</p>			<p>Define "good housekeeping" measures. Poe will look at time cards for hours and costs on sweeping/cleaning. Write procedures for use and storage of de-icers/sand, snow removal and storage, and sweeping. Responsible parties: Poe, Higgins, Lang, Tosch.</p>
<p>Required BMP 6.1.3 - Vehicle Fleets: Per the O&M Plan, implement PPGH practices for storage, washing, and maintenance of vehicle fleets and fueling facilities. Includes conducting all vehicle and equipment washing and maintenance in a self-contained covered building or other designated area.</p> <p>Measurable Goal: No later than 3 years from the date of permit coverage, implement all required PPGH practices established in the O&M Plan.</p>	<p>Does CWU currently employ pollution prevention and good housekeeping practices for O&M activities related to vehicle fleet storage, washing, fueling, and maintenance? Does CWU conduct vehicle and equipment washing and maintenance in a self-contained covered building?</p>	<p>Some for storage. Yes washing and maintenance of fleet in contained building. Equipment: Lawn movers, street sweeper, concrete truck washing done uncontained. No for fueling. Consideration: Paint striping, trucks.</p>			<p>What does the drain near the fueling pump do/ where does it go? Note that too clean of water messes up the sewage treatment plant and it can't be put in storm drain either. Responsible parties: Poe, Munson, Bob Hendrickson, Calvin Lang, Steve Johnson.</p>

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<p>Required BMP 6.1.4 - External Building Maintenance: Per the O&M Plan, implement PPGH practices for building exterior cleaning and maintenance, including cleaning, washing, painting, and other maintenance activities.</p> <p>Measurable Goal: No later than 3 years from the date of permit coverage, implement all required PPGH practices established in the O&M Plan.</p>	Does CWU currently employ pollution prevention and good housekeeping practices for O&M activities related to building exterior cleaning, washing, painting, and other related maintenance?	No capture on window washing. On restoration, the job is contracted out and all effluent is captured.			Poe will check on the soap used (biodegradable?) and other housekeeping that could affect groundwater. Tosch will provide info on procedures for exterior cleaning, with and without chemical solutions. Tosch will also check for regulations written into contracts for facade cleaning. Also responsible: Otto Bach (SURC), Sunny Bloxum, Ken Baxter, Dan Layman (dining), and Steve Johnson (Housing)
<p>Required BMP 6.1.5 - Parks and Open Space: Per the O&M Plan, implement maintenance PPGH practices at all park areas and other open spaces. Address proper application of fertilizers, pesticides, and herbicides; sediment and erosion control; BMPs for landscape maintenance and vegetation disposal; trash management; etc.</p> <p>Measurable Goal: No later than 3 years from the date of permit coverage, implement all required maintenance PPGH practices established in the O&M Plan.</p>	Does CWU currently employ pollution prevention and good housekeeping practices for O&M activities at parks and open spaces to minimize impacts to water quality? Are fertilizers, pesticides, and herbicides applied at proper rates and by properly trained staff? Are sediment and erosion control BMPs utilized? Are BMPs for landscape maintenance and vegetation disposal utilized?	Incomplete practices.			See Ecology's guide for BMPs. Fertilizer, etc. applied according to good practices/ law, but sediment and erosion control are not really considered. Responsible parties: Poe and Lang (grounds), Steve Johnson and Greg Poe (trash management).
<p>Required BMP 6.1.6 - Material & Heavy Equipment Storage and Maintenance Areas: Develop and implement Stormwater Pollution Prevention Plans (SWPPPs) for select facilities <u>not</u> covered under an NPDES Industrial Stormwater General Permit.</p> <p>Measurable Goal: No later than 3 years from the date of permit coverage, develop and implement SWPPPs for select facilities or generic SWPPP applied to multiple facilities.</p>	Has CWU developed stormwater plans for select facilities (e.g., material and heavy equipment storage areas and maintenance areas) that would reasonably be expected to discharge contaminated runoff and are also not covered under Ecology's Industrial Stormwater General Permit?	no. SURC has its own SWP.			Responsible parties: Bob Hendrickson and Calvin Lang
<p>Required BMP 6.1.7 - Other Facilities: Per the O&M Plan, implement stormwater pollution prevention practices or BMPs at facilities that would reasonably be expected to discharge contaminated runoff.</p> <p>Measurable Goal: No later than 3 years from the date of permit coverage, implement stormwater pollution prevention practices or BMPs established in O&M Plan at identified facilities.</p>	Does CWU have additional facilities, not covered in BMPs 6.1.1 through 6.1.6, that are likely to discharge contaminated runoff?	Roof leaders are all protect from pollution on a case-by-case basis, so this is not applicable.			Science labs, and possibly IET labs should be specifically contained as haz mat, or directed to sanitary sewer, so this is not applicable.
<p>Required BMP 6.2 - Industrial Activities: Obtain coverage under NPDES Industrial Stormwater General Permit at all designated facilities owned or operated by the Secondary Permittee.</p> <p>Measurable Goal: By the effective date of the permit, obtain permit coverage. (One time cost to obtain permit coverage; ongoing program needed)</p>	Does CWU currently operate industrial facilities that discharge stormwater runoff to surface water and/or the storm drainage system? Are these facilities currently covered under Ecology's NPDES Industrial Stormwater General Permit?	Not applicable at this time.			May need to be addressed for future innovation park.
<p>Required BMP 6.3 - Staff Training: Provide adequate training for all construction, operations, and maintenance staff who perform activities consistent with the O&M Plan or related activities. Includes identification of target employees with training on the following: importance of protecting water quality, requirements of the permit, O&M requirements; inspection procedures; procedures for reporting illicit discharges; etc. Keep records of training provided and staff trained.</p> <p>Measurable Goal: No later than 180 days prior to expiration of the permit, train all relevant staff.</p>	Does CWU currently provide or receive training on operation and maintenance requirements, inspection procedures, ways to perform duties while minimizing impacts to water quality, and other relevant training?	No.			Poe is currently developing a training program, but it is not yet implemented. Poe -- custodial. Tosch -- exterior See 6.1.4

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7. Compliance with Total Maximum Daily Load Requirements					
<p>Required BMP 7.1 - Compliance with TMDLs: Comply with the requirements of all applicable TMDLs approved by EPA, on or before the effective date of the permit, for stormwater discharges from the MS4. (Refer to Appendix 2 of the Permit.) Keep records of all TMDL related actions required of the permit, including water quality monitoring, if required. Include a summary in the annual report to Ecology. Note: For applicable TMDLs not listed in Appendix 2, compliance with the permit shall constitute compliance with those TMDLs.</p> <p>Measurable Goals: Include the status of TMDL implementation in the annual report, if applicable.</p>	<p>Note: At the time of permit issuance, Ecology had not identified any applicable TMDLs with more specific requirements than those listed in the permit. Thus, compliance with the permit constitutes compliance with all local TMDLs. However, for TMDLs that are approved by EPA after the permit is issued, Ecology may establish TMDL-related permit requirements for municipal stormwater sources through a formal permit modification or through the issuance of an administrative order.</p>	N/A			<p>Confirm with John Akers. Bill Rice will ask Jane Creech of Ecology if a temperature TMDL is happening.</p>
<p>Recommended: <i>Actively Participate in Development of Future TMDLs for Receiving Waters within Jurisdiction.</i></p>	<p>Has CWU participated, or plan to participate, in the development of local TMDLs (e.g., Wilson Creek Fecal Coliform TMDL, etc.)?</p>	No.			
<p>Recommended: <i>Coordinate with City of Ellensburg to Monitor Outfall Quality for Discharges to Impaired Waters [303(d) listed waters].</i></p>	<p>Has CWU (or other local agency) conducted, or plan to conduct, water quality monitoring of impaired water bodies within the city limits, including stormwater outfalls?</p>	No.			<p>Maybe this is in city implementation plan -- ask Akers. Or could be made part of the Wilson Creek study -- Vertrees, Clay Arango.</p>
<p>Recommended: <i>Coordinate with City of Ellensburg to Establish Monitoring Program to Assess Baseline Conditions and Evaluate City/CWU SWM Program Effectiveness.</i></p>	<p>Does CWU (or other local agency) currently have, or plan to have, an established water quality monitoring program within the city limits, to assess baseline conditions?</p>	No.			<p>Maybe this is in city implementation plan -- ask Akers. Or could be made part of the Wilson Creek study -- Vertrees, Clay Arango.</p>
8. Monitoring and Program Evaluation					
<p>Required BMP 8.1 - Monitoring and SWMP Evaluation Provide a description of stormwater monitoring, studies, or investigations conducted by, on behalf of, or reported to the Permittee during the reporting period in the annual report. Provide an assessment of the appropriateness of the BMPs selected for each SWMP component, along with rationale for changes or proposed changes to selected BMPs. Provide information in annual report to Ecology.</p> <p>Measurable Goal: Include a summary in the annual report.</p>		To be developed during the first permit cycle as part of the CWU Stormwater Management Program.			<p>Annual report templates are in the back of the permit documentation.</p>
9. Reporting and Record Keeping					
<p>Required BMP 9.1 - Reporting Requirements Submit annual reports each year on the previous year's NPDES Phase II activities. Include two printed copies and one electronic copy (PDF). Measurable Goal: No later than March 31, submit an annual report to Ecology for activities during the previous year.</p>		To be developed during the first permit cycle as part of the CWU Stormwater Management Program.			<p>Annual report templates are in the back of the permit documentation.</p>

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<p>Required BMP 9.2 - Annual Report Each annual report shall include a copy of the most current SWMP and submittal of the Annual Report Form for Sec. Permittees (Appendix 4) summarizing compliance with permit conditions, including: status of implementation of SWMP components; assessment of progress toward meeting min. performance measures; a summary of SWMP evaluation; notice if MS4 is relying on another jurisdiction to satisfy any permit obligations; updated and/or new info.; and jurisdictional boundary changes.</p> <p>Measurable Goal: No later than March 31, submit current SWMP and annual reporting forms to Ecology for previous year.</p>		To be developed during the first permit cycle as part of the CWU Stormwater Management Program.			Annual report templates are in the back of the permit documentation. Write in the policy that we will make this publically available.
<p>Required BMP 9.3 - Maintaining Records Maintain all records related to the NPDES Phase II permit and the SWMP for at least five years.</p> <p>Measurable Goal: Ongoing activity.</p>		To be developed during the first permit cycle as part of the CWU Stormwater Management Program.			Update SWMP and THEN write the annual report.
<p>Required BMP 9.4 - Pubic Access Make all records related to the NPDES Phase II permit and the SWMP available to the public at reasonable times during business hours.</p> <p>Measurable Goal: Ongoing activity.</p>		To be developed during the first permit cycle as part of the CWU Stormwater Management Program.			
10. Program Implementation					
<p>Required BMP 10.1 - SWMP Implementation Develop and implement a SWMP that is designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable and to protect water quality. Compliance is achieved by conducting activities outlined in Elements 1-8 in accordance with permit schedules. Note: Secondary Permittee's may implement parts of their SWMP in accordance with the schedules for cities/counties provided they have a signed agreement to jointly implement the activity or activities with one or more jurisdictions, and submit a copy to Ecology.</p> <p>Measurable Goal: No later than 180 days prior to the expiration of the permit, fully develop and implement SWMP.</p>		To be developed during the first permit cycle as part of the CWU Stormwater Management Program. Note: CWU may implement parts of their SWMP in accordance with the schedule for the City of Ellensburg provided that CWU/City have a signed agreement to jointly implement certain required activities.			
<p>Required BMP 10.2 - SWMP Documentation Prepare written documentation of the SWMP and maintain annual updates for submittal with annual reports to Ecology. SWMP document shall include: a description of each of the program components; and any additional activities necessary to meet the requirements of applicable TMDLs.</p> <p>Measurable Goal: No later than March 31, submit current SWMP with annual report.</p>		To be developed during the first permit cycle as part of the CWU Stormwater Management Program.			
<p>Required BMP 10.3 - Coordination Among Permittees Recommended that SWMP include coordination mechanisms between: permittees to encourage coordinated stormwater-related policies, programs, and projects within adjoining or shared areas; and among departments within each jurisdiction to eliminate compliance barriers.</p> <p>Measurable Goal: No later than 180 days prior to the expiration of the permit, identify potential coordination mechanisms for inclusion in the SWMP.</p>	Does CWU anticipate expending staff time for initial and ongoing coordination, including possible future agreements with the City of Ellensburg, related to stormwater program implementation? Please explain.	We do not plan to add additional staff. Stormwater project time is coming out of existing staff work load.			

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BMP 10.4 - Program Tracking Develop an ongoing program for gathering, maintaining, and using information to conduct planning, set priorities, evaluate permit compliance, evaluate effectiveness of SWMP implementation, and track SWMP development and implementation. Note: Recommended activity. Measurable Goal: Ongoing activity.		Recommended activity to be developed during the first permit cycle as part of the CWU Stormwater Management Program.			Create a system in which we keep all documentation together and ongoing.
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.	A permanent program? Needs to be discussed with Vertrees, Otak, Akers, Ecology (Terry Whitmeier)			Tosch and Poe will develop and add to a wish list in priority order.
Field and Monitoring Equipment: ~ Vehicle ~ Water quality sensors/probes (pH, DO., 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.	In development.			Tosch and Poe will develop and add to a wish list in priority order.
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.	In development.			Tosch and Poe will develop and add to a wish list in priority order.
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 Phase II program is implemented.	There is no stormwater capital project in development, unless affiliated with a major capital project.			Tosch and Poe will develop and add to a wish list in priority order.

Appendix B—Stormwater Program Gap
Analysis and Costs

Summary of Estimated Annual Program Revenue Needs						
Program Area	Year 1 Cost	Year 2 Cost	Year 3 Cost	Year 4 Cost	Year 5 Cost	5 Year Total
NPDES						
A. General NPDES Requirements	\$2,700	\$2,700	\$3,500	\$4,000	\$4,500	\$17,400
B. Public Education and Outreach	\$0	\$0	\$9,500	\$9,500	\$6,000	\$25,000
C. Public Involvement	\$0	\$0	\$0	\$0	\$3,500	\$3,500
D. Illicit Discharge Detection & Elimin	\$12,000	\$36,500	\$26,500	\$21,500	\$18,500	\$115,000
E. Construction Site Stormwater Runoff	\$12,500	\$6,500	\$6,500	\$6,500	\$6,500	\$38,500
F. Post Construction Stormwater Mng	\$0	\$500	\$500	\$500	\$500	\$2,000
G. Pollution Prevent/Good Housekeeping	\$57,000	\$95,000	\$195,000	\$219,500	\$255,500	\$822,000
H. Compliance with TMDLs	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$7,500
I. Monitoring and Program Evaluation	\$500	\$500	\$500	\$1,000	\$1,000	\$3,500
J. Reporting and Record Keeping	\$14,000	\$26,500	\$24,000	\$28,000	\$28,000	\$120,500
K. NPDES Equipment Funds	\$0	\$0	\$0	\$250,000	\$0	\$250,000
L. NPDES Capital Project Funds	\$0	\$0	\$0	\$300,000	\$0	\$300,000
Annual Total	\$100,200	\$169,700	\$267,500	\$842,000	\$325,500	\$1,704,900
Equipment	\$0	\$0	\$0	\$250,000	\$0	\$250,000
Capital	\$0	\$0	\$0	\$300,000	\$0	\$300,000
Staff, Fees, Overhead, Services	\$100,200	\$169,700	\$267,500	\$292,000	\$325,500	\$1,154,900

YEAR 1

Summary of Regulatory Requirements	Notes & Assumptions	Summary of Existing University Activities Aiding Compliance	Current Average Annual Expenditures	New Funding Needed?	Assessment of New Activities Needed for Compliance	Estimated Annual Cost to Comply
NPDES						
A. General NPDES Requirements						
A1. Prepare Notice of Intent (NOI).	CWU prepared and submitted NOI on October 11, 2007.	None	None	N	NOI prepared and submitted.	\$0
A2. Pay Annual Permit Fee.	CWU - \$2,700	None	None	Y	Pay fee.	\$2,700
B. Public Education and Outreach: Students, staff, etc.						
Note that minimum requirements do not begin until Year 3.						
C. Public Involvement and Participation: Solicit public review of stormwater management program via public notification, website posting, etc.						
Note that minimum requirements do not begin until early in Year 5.						
D. Illicit Discharge Detection and Elimination: Develop, implement, and enforce program to detect and eliminate polluted non-stormwater discharges into the MS4.						
D1. From the date of permit coverage, comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern non-stormwater discharges.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses existing and relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Utilize the Minimum Technical Requirements in Appendix 1 of the Permit as a basis for the development of the written policy (see E1 and F1 below) since CWU will be required to follow requirements (or equivalent) when the City develops and adopts discrete ordinances to comply with NPDES requirements, which is assumed to occur during Year 2. Costs shown here are for overall policy that addresses both IDDE and activities identified under E1 and F1.	Currently comply with existing City Code.	None	Y	Create a written policy and formally adopt existing and relevant City ordinances, rules, and regulations. Incorporate Minimum Technical Requirements included in Appendix 1 of the Permit into written policy (see E1 and F1).	\$5,000
D2. Develop and adopt appropriate policies prohibiting illicit discharges and illegal dumping; Identify possible enforcement mechanisms for use in the development of an Enforcement Plan.	The policies shall address, at a minimum: illicit connections; non-stormwater discharges as defined in the Phase II Permit; and spilling, dumping, or otherwise improperly disposing of hazardous materials, pet waste, and litter. Policy must be developed and adopted by Board of Trustees by end of Year 1. Assume some time by staff to investigate and identify possible enforcement mechanisms by the end of Year 1; consider those currently employed by the University for other purposes. Enforcement plan to be developed in Year 2 (by May 2009) and included as part of written IDDE Program Plan.	None	None	Y	Create an internal policy for adoption by Board of Trustees. Consider adopting City's or other similar IDDE policy.	\$5,000
D5. Provide continued staff training or coordinate with existing training efforts to educate relevant staff on proper BMPs for preventing spills and illicit discharges.	Assume that existing trained staff continue to receive annual refresher courses. Training of additional staff must be conducted no later than 180 days prior to expiration date of Permit (by Aug 2011). However, assume that some training of additional staff begins in Year 2 in order to conduct activities related to IDDE Program, including illicit discharge detection, field assessments, tracing methods, spill response, enforcement activities, etc.	Ron Munson and Pam Coppersmith are trained. They each receive HAZWOPER training with refreshers of 8 hours per year per person. They also participate in a campus-wide lab safety program.	\$2,000	Y	Continue to provide staff training through annual refresher courses for those currently trained. Identify additional staff to be trained starting in Year 2.	\$2,000

E. Construction Site Stormwater Runoff Control: Conduct activities and coordinate with local jurisdiction to reduce pollutants in runoff to the MS4 from construction sites one or more acres in size.						
E1. Comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses existing and relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Utilize the Minimum Technical Requirements in Appendix 1 of the Permit as a basis for the development of the written policy since CWU will be required to follow requirements (or equivalent) when the City develops and adopts discrete ordinances to comply with NPDES requirements (i.e., Construction and Post-Construction ordinances), which is assumed to occur during Year 2. Costs included under D1.	Currently comply with existing City Code.	None	Y	Create a written policy and formally adopt existing and relevant City ordinances, rules, and regulations. Incorporate Minimum Technical Requirements included in Appendix 1 of the Permit into written policy.	\$0
E2. For all construction projects under the control of CWU which require a construction stormwater permit, CWU shall obtain coverage under the statewide NPDES General Permit for Stormwater Discharges Associated with Construction Activities, or an alternative NPDES permit prior to discharging construction related stormwater.	Assume that NPDES Construction SW permits will be sought for University projects, as needed, and that appropriate construction and post-construction controls will be employed. Cost of seeking (submitting NOIs, public notification requirements, etc.) and compliance with the permit itself will be borne by the Department/Division executing the project and/or the project contractor. Assume some form of written internal procedures necessary to ensure permit coverage obtained.	CWU does not currently seek coverage under the NPDES Construction Stormwater General Permit.	None	Y	Write up internal procedures for FMD-level NPDES application. Need money and staff resources to create and maintain records of seeking and complying with construction stormwater permits for University projects.	\$5,000
E3. Coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern construction-phase stormwater pollution prevention measures.	Assume that a formal agreement needs to be developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction related activities. Agreement to also address post-construction stormwater management for new development and redevelopment projects (see F2).	CWU currently coordinates with the City and others; however, the coordination needs to be formalized and improved upon.	None	Y	Write up a MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-construction SW management.	\$3,000
E4. Provide training or coordinate with existing training efforts to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.	Assume that a formal ongoing training program for relevant staff needs to be established and documented. Existing training opportunities provided through IET Construction Management (standard curriculum) may be adequate for permit compliance but needs to be reviewed and updated/enhanced if IET willing to provide staff training. May also consider coordination of training with the City of Ellensburg.	Staff currently not trained.	None	Y	Develop training materials and provide in-house training or send relevant staff to external training on proper ESC BMPs, SWPPP requirements, and other related requirements.	\$4,000
E5. Coordinate as requested with Ecology or the City of Ellensburg to provide access for inspection of construction sites or other land disturbances, which are under the control of CWU during the active grading and/or construction period.	Assumed that coordination for access is a necessary compliance activity associated with Construction SW permits and the City's Construction Stormwater Management ordinance which will include procedures for site plan review, review of SWPPPs, site inspection, and enforcement of construction phase stormwater pollution prevention measures.	CWU currently coordinates with the City and/or Ecology as requested.	None	N	Continue to provide access for inspection of construction sites as requested.	\$500
F. Post Construction Stormwater Management: Coordinate with local jurisdiction to address post construction stormwater runoff to the MS4 from sites one or more acres in size.						
F1. Comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern post-construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses existing and relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Utilize the Minimum Technical Requirements in Appendix 1 of the Permit as a basis for the development of the written policy since CWU will be required to follow requirements (or equivalent) when the City develops and adopts discrete ordinances to comply with NPDES requirements (i.e., Construction and Post-Construction ordinances), which is assumed to occur during Year 2. Costs included under D1.	Currently comply with existing City Code.	None	Y	Create a written policy and formally adopt existing and relevant City ordinances, rules, and regulations. Incorporate Minimum Technical Requirements included in Appendix 1 of the Permit into written policy.	\$0
F2. Coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern post-construction stormwater pollution prevention measures.	Assume that a formal agreement needs to be developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction related activities (see E3). Agreement to also address post-construction stormwater management for new development and redevelopment projects. Costs to develop agreement included in E3.	CWU currently coordinates with the City and others; however, the coordination needs to be formalized and improved upon.	None	Y	Write up a MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-construction SW management.	\$0

G. Pollution Prevention and Good Housekeeping for University Operations: Develop and implement an ongoing O&M program, including a staff training program, aimed at preventing or reducing pollutant runoff from University operations.							
G3. CWU to continue performing existing storm system maintenance activities. Includes, where applicable, ongoing inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection, runoff treatment and flow control facility (BMP) maintenance, and proper disposal of waste.	Costs for existing storm system maintenance activities will continue to be funded. Costs for phasing-in full stormwater system maintenance, enhanced/changed practices, and oversight by stormwater compliance staff who review and record practices and provide technical assistance will be included in Years 3-5.	CWU currently performs very limited storm system maintenance. Activities limited to catch basin cleaning and system line flushing (vacuum out basins and jet outfalls to creeks). No formal documentation or record keeping.	Storm System Inspect/Maint: \$10,000	Y	CWU to continue existing storm system inspection and maintenance activities.	\$10,000	
G7. CWU to continue existing street sweeping program and other all season BMPs to reduce pollution into the MS4.	Costs for existing street sweeping program will continue to be funded. 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.	CWU currently performs parking lot and street sweeping during the winter and spring on an as needed basis. Areas typically swept following sanding and de-icing activities. Collected materials stock-piled at Brooklane area and utilized for pipe bedding material. Snow removal and ice control activities employed with snow piled at several locations on campus in undeveloped areas. Covered storage provided for sand/deicer materials (Jongeward Complex). Will need to review existing and additional practices required to ensure WQ is protected.	Sweeping Program: \$45,000	Y	CWU to continue existing parking lot and street sweeping program and other all season BMPs to reduce pollution into the MS4.	\$45,000	
G11. From the date of permit coverage, have reviewed all University "industrial" facilities/sites and sought coverage under the statewide NPDES General Permit for Stormwater Discharges Associated with Industrial Activities for facilities/sites meeting criteria for coverage.	Assume that some work still needs to be accomplished to assess University facilities/sites for possible coverage and is conducted in Year 1. Cost will be for permit compliance staff to review criteria and facilities, and to recommend facilities seek coverage if meet criteria. Records of the process must be developed. Cost of seeking and compliance with permits will be borne by Department/Division being covered.	CWU not aware of any facilities/sites that are covered under an existing Industrial SW General Permit. Future Innovation Park identified as possibly needing to seek permit coverage. Other facilities/sites to be assessed for possible coverage.	None	Y	Need money and staff to review facilities, assess need for permit, and to create and maintain records of assessment process, and if necessary, seeking and complying with industrial stormwater permits for University facilities/sites.	\$2,000	
H. Compliance with Total Maximum Daily Load Allocations: WRIA 39 - Wilson Creek Sub-Basin, Upper Yakima River							
H1. Participate in the development of TMDLs.	Review of Appendix 2 of the NPDES Phase II Permit reveals that existing (applicable) TMDLs approved by EPA for WRIA 39 do not include specific stormwater control elements over and above the implementation of standard NPDES BMPs. Thus, compliance with the Permit constitutes compliance with applicable TMDLs. However, it may be in CWU's best interest to budget for some effort just in case.	Assume this is required to know and control liability. Assume that this involves staff time to review materials, attend meetings, prepare and submit correspondence.	None	None	Y	Participation in TMDL development may be desirable. Upper Yakima River Temperature TMDL ongoing.	\$500
H2. Comply with applicable TMDL provisions (could involve education and outreach activities coordinated with local agencies, enhanced source control efforts, retrofitting treatment into existing storm drains, outfall monitoring, etc.).	Compliance with the Permit is the only requirement CWU presently needs to fulfill to be in compliance with applicable TMDLs. However, assume minimal estimate to allow for minor compliance activities.	Assume record keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of annual report to Ecology.	None	None	N	None presently; however, may be desirable to coordinate with City's TMDL implementation activities.	\$500
H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on local receiving waters.	Assume record keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of annual report to Ecology.	Assume record keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of annual report to Ecology.	None	None	Y	Track status of TMDL implementation and keep records.	\$500

I. Monitoring and Program Evaluation Requirements							
I1. Recommend that CWU participate in local water-quality monitoring program(s) aimed at assessing baseline conditions and/or to evaluate effectiveness of City/CWU stormwater management programs or TMDL implementation activities. Includes monitoring of outfall quality to receiving waters. Provide a description of any stormwater monitoring or other studies conducted by, on behalf of, or reported to CWU during the reporting period and include in the annual report to Ecology.	Recommended activity for CWU to consider. Specific water quality sampling and testing not required during the effective term of the Permit, unless required as part of applicable TMDL or required for characterizing illicit discharges. Assume some participation by CWU with City and/or local agencies (KCCD, KRD, others) conducting routine or special water/stormwater quality monitoring studies.	None	None	Y	Participate in local water/stormwater quality monitoring studies. Submit description of studies with annual report.	\$500	
J. Reporting and Record Keeping Requirements							
J1. Develop written Stormwater Management Program (SWMP) for submittal with annual report, follow program component format established by Ecology.	Must submit a copy of SWMP to Ecology with the annual report no later than March 31, 2008. Assume that development of the SWMP begins during Permit Year 1.	Assume some overlap with ongoing stormwater planning efforts.	None	Y	Prepare SWMP according to Ecology format. Assume effort by multiple staff and review/approval by designated individual(s).	\$4,000	
J2. Recommend that CWU 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 collected to be used for the preparation of annual reports consistent with reporting requirements outlined in the Permit.	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; and (5) 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.	\$10,000	
K. NPDES Equipment Funds							
NPDES equipment funds to be requested for 09/11 biennium.							
L. NPDES Capital Project Funds							
NPDES capital project funds to be requested for 09/11 biennium.							
						SUM =	\$100,200
						Equipment	\$0
						Capital	\$0
						Staff, Fees, Overhead, Services	\$100,200
							\$100,200

YEAR 2

Summary of Regulatory Requirements	Notes & Assumptions	Summary of Existing University Activities Aiding Compliance	Current Average Annual Expenditures	New Funding Needed?	Assessment of New Activities Needed for Compliance	Estimated Annual Cost to Comply
NPDES						
A. General NPDES Requirements						
A2. Pay Annual Permit Fee.	CWU - \$2,700	None	None	Y	Pay fee.	\$2,700
B. Public Education and Outreach: Students, staff, etc.						
Note that minimum requirements do not begin until Year 3.						
C. Public Involvement and Participation: Solicit public review of stormwater management program via public notification, website posting, etc.						
Note that minimum requirements do not begin until early in Year 5.						
D. Illicit Discharge Detection and Elimination: Develop, implement, and enforce program to detect and eliminate polluted non-stormwater discharges into the MS4.						
D1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern non-stormwater discharges.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses existing and relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted (see E1 and F1) since CWU will be required to follow requirements (or equivalent) when the City develops and adopts discrete ordinances to comply with NPDES requirements, which is assumed to occur during Year 2.	Currently comply with existing City Code.	None	Y	Continue to comply with all existing and relevant ordinances, rules, and regulations that pertain to stormwater. Track status of City's efforts to develop and adopt discrete stormwater-related ordinances. Update written policy, as necessary.	\$1,000
D2. Develop an Enforcement Plan using the enforcement mechanisms identified during Year 1 to ensure compliance with illicit discharge policies. Enforcement activities to begin in Year 2.	Assume that development of enforcement plan will require staff time, internal coordination, possible consultant assistance, and legal review. Enforcement plan to be developed and implement in Year 2 (by May 2009) and included as part of written IDDE Program Plan.	None	None	Y	Develop an enforcement plan consistent with the selected enforcement mechanism(s).	\$5,000
D3. Begin developing written IDDE Program Plan that addresses enforcement; staff training needs; field assessments; on-campus complaint handling; discharge characterization methods, hazard assessment, and spill response and containment; tracing methods; sampling and analysis techniques; termination/removal methods; interface with local agencies; and program evaluation methods.	Assume that once appropriate policies prohibiting illicit discharges and illegal dumping are approved, enforcement and other related activities are phased-in starting in Year 2. Assume that written guidance is needed for orderly implementation. Assume preparation involves various Departments and requires a fair amount of staff time to prepare plan. Funding estimate is only for lead compliance staff. Assume some initial training course is needed for staff involved in IDDE Program with costs covered under staff education (D4).	None	None	Y	Develop IDDE Program Plan using guidance documents from Center for Watershed Protection, Ecology, or others as an aid. Enforcement Plan and existing Spill Response Plan to be included with IDDE Plan. Involve multiple staff as needed. Provide initial training for relevant staff.	\$10,000
D4. Begin implementation of IDDE Program and enforcement mechanism. CWU staff to conduct field inspections and visually inspect for illicit discharges at 1/3 of all known outfalls that discharge to surface waters.	Field assessments include visual inspection of outfalls during dry weather and documentation of observations and findings consistent with IDDE Program Plan. 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 consistent with enforcement plan.	None	None	Y	Conduct field assessments at 1/3 of all known outfalls and conduct necessary follow-up activities to ensure termination of illicit discharges identified. Keep records of inspections and follow-up activities.	\$10,000
D5. Provide continued staff training or coordinate with existing training efforts to educate relevant staff on proper BMPs for preventing spills and illicit discharges.	Assume that existing trained staff continue to receive annual refresher courses. Training of additional staff must be conducted no later than 180 days prior to expiration date of Permit (by Aug 2011). However, assume that some training of additional staff begins in Year 2 in order to conduct activities related to IDDE Program, including illicit discharge detection, field assessments, tracing methods, spill response, enforcement activities, etc.	Ron Munson and Pam Coppersmith are trained. They each receive HAZWOPER training with refreshers of 8 hours per year per person. They also participate in a campus-wide lab safety program.	\$2,000	Y	Continue to provide staff training through annual refresher courses for those currently trained. Identify additional staff to be trained and provide appropriate training.	\$5,500
D6. CWU to complete remaining mapping of storm sewer system (MS4), showing locations of all known storm drain outfalls, labeling receiving waters, and delineating the areas (catchment areas) contributing runoff to each outfall. Include field surveys to verify locations of outfalls and identify previously unknown outfalls.	Note that minimum requirements do not require mapping to be completed until Year 5. However, map of MS4 necessary for staff to conduct visual inspections for illicit discharges during Year 2 as part of field assessment work required under IDDE Program. Assume that CWU has completed approximately 2/3 of required MS4 mapping and some field survey work. Assume that remaining mapping activities and additional field-related activities will be carried out under direction of permit compliance staff during Year 2.	Map is approximately 2/3 complete in AutoCAD as of January 1, 2008. Existing mapping may need to be reviewed, updated, and field checked. Topographic data need to delineate catchment areas on campus.	None	Y	Complete mapping of storm sewer system (MS4).	\$5,000

E. Construction Site Stormwater Runoff Control: Conduct activities and coordinate with local jurisdiction to reduce pollutants in runoff to the MS4 from construction sites one or more acres in size.						
E1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses existing and relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted since CWU will be required to follow requirements (or equivalent) when the City develops and adopts discrete ordinances to comply with NPDES requirements (i.e., Construction and Post-Construction ordinances), which is assumed to occur during Year 2. Cost to review and update included in D1.	Currently comply with existing City Code.	None	Y	Continue to comply with all existing and relevant ordinances, rules, and regulations that pertain to stormwater. Track status of City's efforts to develop and adopt discrete stormwater-related ordinances. Update written policy, as necessary.	\$0
E2. For all construction projects under the control of CWU which require a construction stormwater permit, CWU shall obtain coverage under the statewide NPDES General Permit for Stormwater Discharges Associated with Construction Activities, or an alternative NPDES permit prior to discharging construction related stormwater.	Assume that NPDES Construction SW permits will be sought for University projects, as needed, and that appropriate construction and post-construction controls will be employed. Cost of seeking (submitting NOIs, public notification requirements, etc.) and compliance with the permit itself will be borne by the Department/Division executing the project and/or the project contractor. Assume some form of written internal procedures necessary to ensure permit coverage obtained.	CWU does not currently seek coverage under the NPDES Construction Stormwater General Permit.	None	Y	Update internal procedures written for FMD-level NPDES application. Need money and staff resources to create and maintain records of seeking and complying with construction stormwater permits for University projects.	\$2,000
E3. Continue to coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern construction-phase stormwater pollution prevention measures.	Assume that the formal agreement developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction-related activities, and to address post-construction stormwater management for new development and redevelopment projects (see F2), is annually reviewed and updated as necessary. Assume minimal estimate for some coordination efforts.	CWU currently coordinates with the City and others; however, the coordination needs to be formalized and improved upon.	None	Y	Review and update written MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-const SW management. Continue to coordinate.	\$1,000
E4. Continue to provide training to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.	Assume that a formal ongoing training program for relevant staff is needed. Existing training opportunities provided through IET Construction Management may be adequate for permit compliance but needs to be reviewed and updated/enhanced if IET willing to provide staff training. May also consider coordination of training with the City of Ellensburg. Assume level of effort drops because most training materials and procedures have been established.	Staff currently not trained.	None	Y	Continue to provide in-house training or send relevant staff to external training on proper ESC BMPs, SWPPP requirements, and other related requirements.	\$3,000
E5. Continue to coordinate as requested with Ecology or the City of Ellensburg to provide access for inspection of construction sites or other land disturbances, which are under the control of CWU during the active grading and/or construction period.	Assumed that coordination for access is a necessary compliance activity associated with Construction SW permits and the City's Construction Stormwater Management ordinance which will include procedures for site plan review, review of SWPPPs, site inspection, and enforcement of construction phase stormwater pollution prevention measures.	CWU currently coordinates with the City and/or Ecology as requested.	None	N	Continue to provide access for inspection of construction sites as requested.	\$500

F. Post Construction Stormwater Management: Coordinate with local jurisdiction to address post construction stormwater runoff to the MS4 from sites one or more acres in size.						
F1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern post-construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses existing and relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted since CWU will be required to follow requirements (or equivalent) when the City develops and adopts discrete ordinances to comply with NPDES requirements (i.e., Construction and Post-Construction ordinances), which is assumed to occur during Year 2. Cost to review and update include in D1.	Currently comply with existing City Code.	None	Y	Continue to comply with all existing and relevant ordinances, rules, and regulations that pertain to stormwater. Track status of City's efforts to develop and adopt discrete stormwater-related ordinances. Update written policy, as necessary.	\$0
F2. Continue to coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern post-construction stormwater pollution prevention measures.	Assume that the formal agreement developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction-related activities (see E3), and to address post-construction stormwater management for new development and redevelopment projects, is annually reviewed and updated as necessary. Cost to review and update included in E3. Assume minimal estimate for some coordination efforts.	CWU currently coordinates with the City and others; however, the coordination needs to be formalized and improved upon.	None	Y	Review and update written MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-const SW management. Continue to coordinate.	\$500
G. Pollution Prevention and Good Housekeeping for University Operations: Develop and implement an ongoing O&M program, including a staff training program, aimed at preventing or reducing pollutant runoff from University operations.						
G1. Begin developing a schedule of municipal operation and maintenance activities (O&M Plan) to minimize stormwater pollution from activities conducted by the University. The O&M Plan must include appropriate pollution prevention and good housekeeping procedures for the following operations, activities, and/or types of facilities present within the University's boundaries: stormwater collection and conveyance system O&M; road, highway, and parking lot O&M; vehicle fleet storage, washing, and maintenance; building cleaning, washing, painting and other O&M activities; park and open space O&M activities; material and equipment storage areas and maintenance areas; and all other facilities that can reasonably be expected to discharge contaminated runoff. Maintenance standards must be established that are as protective or more protective of facility function than those specified in relevant chapters of the E. WA SW Manual. The O&M Plan must include a schedule of inspections and include requirements for proper doc. and record keeping. Must be developed & implemented no later than 3 years from date of coverage (Nov 2010).	Assume that it takes two years to fully develop the O&M Plan and that appropriate staff from various Departments/Divisions are involved.	Many activities currently performed but not formally documented in a standalone O&M Plan. No formal documentation or record keeping of O&M related activities.	None	Y	Begin developing an O&M Plan that includes appropriate pollution prevention and good housekeeping procedures for various University operations, activities, and/or facilities aimed at preventing and reducing water quality impacts. Must include schedule for inspections and activities and address methods of proper documentation and record keeping.	\$25,000
G3. CWU to continue performing existing storm system maintenance activities. Includes, where applicable, ongoing inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection, runoff treatment and flow control facility (BMP) maintenance, and proper disposal of waste.	Costs for existing storm system maintenance activities will continue to be funded. Costs for phasing-in full stormwater system maintenance, enhanced/changed practices, and oversight by stormwater compliance staff who review and record practices and provide technical assistance will be included in Years 3-5.	CWU currently performs very limited storm system maintenance. Activities limited to catch basin cleaning and system line flushing (vacuum out basins and jet outfalls to creeks). No formal documentation or record keeping.	Storm System Inspect/Maint: \$10,000	Y	CWU to continue existing storm system inspection and maintenance activities.	\$10,000

G7. CWU to continue existing street sweeping program and other all season BMPs to reduce pollution into the MS4.	Costs for existing street sweeping program will continue to be funded. 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. Assume base program cost increases 30% per year due to escalating fuel/maintenance costs.	CWU currently performs parking lot and street sweeping during the winter and spring on an as needed basis. Areas typically swept following sanding and de-icing activities. Collected materials stock-piled at Brooklane area and utilized for pipe bedding material. Snow removal and ice control activities employed with snow piled at several locations on campus in undeveloped areas. Covered storage provided for sand/deicer materials (Jongeward Complex). Will need to review existing and additional practices required to ensure WQ is protected.	Sweeping Program: \$45,000	Y Base program cost \$45,000 Cost increase \$15,000	CWU to continue existing parking lot and street sweeping program and other all season BMPs to reduce pollution into the MS4.	\$60,000
H. Compliance with Total Maximum Daily Load Allocations						
H1. Participate in the development of TMDLs.	Assume this is required to know and control liability. Assume that this involves staff time to review materials, attend meetings, prepare and submit correspondence.	None	None	Y	Participation in TMDL development may be desirable. Upper Yakima River Temperature TMDL ongoing.	\$500
H2. Comply with applicable TMDL provisions (could involve education and outreach activities coordinated with local agencies, enhanced source control efforts, retrofitting treatment into existing storm drains, outfall monitoring, etc.).	Compliance with the Permit is the only requirement CWU presently needs to fulfill to be in compliance with applicable TMDLs. However, assume minimal estimate to allow for minor compliance activities.	None	None	N	None presently; however, may be desirable to coordinate with City's TMDL implementation activities.	\$500
H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on local receiving waters.	Assume record keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of Annual Report to Ecology.	None	None	Y	Track status of TMDL implementation and keep records.	\$500
I. Monitoring and Program Evaluation Requirements						
I1. Recommend that CWU participate in local water-quality monitoring program(s) aimed at assessing baseline conditions and/or to evaluate effectiveness of City/CWU stormwater management programs or TMDL implementation activities. Includes monitoring of outfall quality to receiving waters. Provide a description of any stormwater monitoring or other studies conducted by, on behalf of, or reported to CWU during the reporting period and include in the annual report to Ecology.	Recommended activity for CWU to consider. Specific water quality sampling and testing not required during the effective term of the Permit, unless required as part of applicable TMDL or required for characterizing illicit discharges. Assume some participation by CWU with City and/or local agencies (KCCD, KRD, others) conducting routine or special water/stormwater quality monitoring studies.	None	None	Y	Continue to participate in local water/stormwater quality monitoring studies. Submit description of studies with annual report.	\$500

J. Reporting and Record Keeping Requirements						
J1. Update written Stormwater Management Program (SWMP) for submittal with annual report.	Assume this update occurs in the 4th quarter 2008 with the updated plan submitted with annual report by March 31, 2009 of the following year.	None	None	Y	Update SWMP according to Ecology format. Assume effort by multiple staff and review/approval by designated individual(s).	\$5,000
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 collected to be used for the preparation of annual reports consistent with reporting requirements outlined in Permit.	Assume that this involves reviewing and modifying the process developed as needed.	None	None	Y	Complete development of and enact record keeping forms/protocols; work with directors/managers/staff to implement. Fair effort by staff at multiple levels.	\$7,500
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, 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	None	Y	Develop evaluation approach, conduct evaluation, prepare narrative of process and results for inclusion in annual report to Ecology.	\$4,000
J4. 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; and (3) summary of SWMP evaluation (including eval of effectiveness of SWMP and appropriateness of BMPs selected); (4) notice if relying upon another entity (City) for implementation of any BMPs or other permit obligations; (5) any updated/new information since the last reporting period, and (6) notification of any jurisdictional boundary changes that increase/decrease Permit coverage area and SWMP implications.	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 one-third time from January 1 to March 31 to prepare the report - including gathering all of the records, meeting with department/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.	\$10,000
K. NPDES Equipment Funds	NPDES equipment funds to be requested for 09/11 biennium.					
L. NPDES Capital Project Funds	NPDES capital project funds to be requested for 09/11 biennium.					
					SUM =	\$169,700
					Equipment	\$0
					Capital	\$0
					Staff, Fees, Overhead, Services	\$169,700
						\$169,700

YEAR 3

Summary of Regulatory Requirements	Notes & Assumptions	Summary of Existing University Activities Aiding Compliance	Current Average Annual Expenditures	New Funding Needed?	Assessment of New Activities Needed for Compliance	Estimated Annual Cost to Comply
NPDES						
A. General NPDES Requirements						
A2. Pay Annual Permit Fee.	CWU - \$3,500	None	None	Y	Pay Fee.	\$3,500
B. Public Education and Outreach: Students, staff, etc.						
B1. Begin to develop and distribute educational information to students and staff on the impacts of stormwater discharges on receiving waters, and steps that can be taken to reduce pollutants in stormwater runoff. Different combinations of topics shall be addressed each year.	Assume that educational information developed distributed in the form of stormwater brochures. Topics to be covered include: 1) how stormwater runoff affects local waterbodies; 2) proper use and application of pesticides and fertilizers; 3) benefits of using well-adapted vegetation; 4) alternative equip. washing practices that minimize pollutants in stormwater; 5) benefits of proper vehicle maintenance and alternative transportation choices, proper handling and disposal of wastes, including location of hazardous waste collection facilities; 6) hazards associated with illicit connections; and 7) benefits of litter control and proper disposal of pet waste.	None	None	Y	Develop and distribute educational information to students and staff with different topic(s) addressed each year.	\$4,000
B2. Begin labeling storm drain inlets owned and operated by CWU. Storm drain inlets located in maintenance yards, parking lots, along sidewalks, and at pedestrian access points shall be clearly and permanently labeled with the message "Dump No Waste" or similar saying and indicating the point of discharge as a stream, lake, or ground water.	Assume 50% of all storm drain inlets labeled by end of Year 3 and remainder no later than 180 days prior to expiration date of Permit (by Aug 2011). Must also re-label inlets that are no longer clearly visible or easily readable within 90 days. Assume that work to label inlets starts in Year 3 due to relatively few inlets on university property (approx. 235 storm drain inlets).	None	None	Y	Label 50% of all storm drain inlets on university property. Maintain records of the location and number of inlets labeled annually.	\$5,500
C. Public Involvement and Participation: Solicit public review of stormwater management program via public notification, website posting, etc.						
Note that minimum requirements do not begin until early in Year 5.						
D. Illicit Discharge Detection and Elimination: Develop, implement, and enforce program to detect and eliminate polluted non-stormwater discharges into the MS4.						
D1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern non-stormwater discharges.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses existing and relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted (see E1 and F1) since CWU will be required to follow requirements (or equivalent). Assume that City has adopted discrete ordinances to comply with NPDES requirements and will begin to implement and enforce.	Currently comply with existing City Code.	None	Y	Continue to comply with all relevant ordinances, rules, and regulations that pertain to stormwater. Update written policy, as necessary.	\$1,000
D3. Complete written IDDE Program Plan started in Year 2 that addresses enforcement; staff training needs; field assessments; on-campus complaint handling; discharge characterization methods, hazard assessment, and spill response and containment; tracing methods; sampling and analysis techniques; termination/removal methods; interface with local agencies; and program evaluation methods.	Assume that once appropriate policies prohibiting illicit discharges and illegal dumping are approved, enforcement and other related activities are phased-in starting in Year 2. Assume that written guidance is needed for orderly implementation. Assume training course for staff involved in IDDE Program is continued from Year 2 with costs covered under staff education (D4).	None	None	Y	Complete IDDE Program Plan using guidance documents. Enforcement Plan and existing Spill Response Plan to be included with IDDE Plan. Provide continued training for relevant staff.	\$10,000
D4. Continue implementation of IDDE Program and enforcement mechanism. CWU staff to conduct field inspections and visually inspect for illicit discharges at 1/3 of all known outfalls that discharge to surface waters.	Field assessments include visual inspection of outfalls during dry weather and documentation of observations and findings consistent with IDDE Program Plan. 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 consistent with enforcement plan.	None	None	Y	Conduct field assessments at 1/3 of all known outfalls and conduct necessary follow-up activities to ensure termination of illicit discharges identified. Keep records of inspections and follow-up activities.	\$10,000
D5. Provide continued staff training or coordinate with existing training efforts to educate relevant staff on proper BMPs for preventing spills and illicit discharges.	Assume that existing trained staff continue to receive annual refresher courses. Training of additional staff must be conducted no later than 180 days prior to expiration date of Permit (by Aug 2011). However, assume that some training of additional staff begins in Year 2 in order to conduct activities related to IDDE Program, including illicit discharge detection, field assessments, tracing methods, spill response, enforcement activities, etc.	Ron Munson and Pam Coppersmith are trained. They each receive HAZWOPER training with refreshers of 8 hours per year per person. They also participate in a campus-wide lab safety program.	\$2,000	Y	Continue to provide staff training through annual refresher courses for those currently trained. Provide annual refresher for additional staff trained.	\$4,500

D6. Update completed map of CWU MS4, including new and removed connections, updates to system characteristic data and information, location of previously unknown outfalls and connections, etc.	Assume that CWU has completed MS4 mapping and field survey work by end of Year 2. Assume minimal work needed for annual updates to map by permit compliance staff.	Map is approximately 2/3 complete in AutoCAD as of Jan 1, 2008. Map to be completed by end of Year 2. Existing mapping may need to be reviewed, updated, and field checked.	None	Y	Annually update MS4 mapping.	\$1,000
E. Construction Site Stormwater Runoff Control: Conduct activities and coordinate with local jurisdiction to reduce pollutants in runoff to the MS4 from construction sites one or more acres in size.						
E1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses existing and relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted since CWU will be required to follow requirements (or equivalent). Assume that City has adopted discrete ordinances to comply with NPDES requirements and will begin to implement and enforce. Cost to review and update included in D1.	Currently comply with existing City Code.	None	Y	Continue to comply with all relevant ordinances, rules, and regulations that pertain to stormwater. Update written policy, as necessary.	\$0
E2. For all construction projects under the control of CWU which require a construction stormwater permit, CWU shall obtain coverage under the statewide NPDES General Permit for Stormwater Discharges Associated with Construction Activities, or an alternative NPDES permit prior to discharging construction related stormwater.	Assume that NPDES Construction SW permits will be sought for University projects, as needed, and that appropriate construction and post-construction controls will be employed. Cost of seeking (submitting NOIs, public notification requirements, etc.) and compliance with the permit itself will be borne by the Department/Division executing the project and/or the project contractor. Assume some form of written internal procedures necessary to ensure permit coverage obtained.	CWU does not currently seek coverage under the NPDES Construction Stormwater General Permit.	None	Y	Update internal procedures written for FMD-level NPDES application. Need money and staff resources to create and maintain records of seeking and complying with construction stormwater permits for University projects.	\$2,000
E3. Continue to coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern construction-phase stormwater pollution prevention measures.	Assume that the formal agreement developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction-related activities, and to address post-construction stormwater management for new development and redevelopment projects (see F2), is annually reviewed and updated as necessary. Assume minimal estimate for some coordination efforts.	CWU currently coordinates with the City and others; however, the coordination needs to be formalized and improved upon.	None	Y	Review and update written MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-const SW management. Continue to coordinate.	\$1,000
E4. Continue to provide training to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.	Assume that a formal on-going training program for relevant staff is needed. Existing training opportunities provided through IET Construction Management may be adequate for permit compliance but needs to be reviewed and updated/enhanced if IET willing to provide staff training. May also consider coordination of training with the City of Ellensburg. Assume level of effort drops because most training materials and procedures have been established.	Staff currently not trained.	None	Y	Continue to provide in-house training or send relevant staff to external training on proper ESC BMPs, SWPPP requirements, and other related requirements.	\$3,000
E5. Continue to coordinate as requested with Ecology or the City of Ellensburg to provide access for inspection of construction sites or other land disturbances, which are under the control of CWU during the active grading and/or construction period.	Assumed that coordination for access is a necessary compliance activity associated with Construction SW permits and the City's Construction Stormwater Management ordinance which will include procedures for site plan review, review of SWPPPs, site inspection, and enforcement of construction phase stormwater pollution prevention measures.	CWU currently coordinates with the City and/or Ecology as requested.	None	N	Continue to provide access for inspection of construction sites as requested.	\$500

F. Post Construction Stormwater Management: Coordinate with local jurisdiction to address post construction stormwater runoff to the MS4 from sites one or more acres in size.						
F1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern post-construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses existing and relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted since CWU will be required to follow requirements (or equivalent). Assume that City has adopted discrete ordinances to comply with NPDES requirements and will begin to implement and enforce. Cost to review and update included in D1.	Currently comply with existing City Code.	None	Y	Continue to comply with all relevant ordinances, rules, and regulations that pertain to stormwater. Update written policy, as necessary.	\$0
F2. Continue to coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern post-construction stormwater pollution prevention measures.	Assume that the formal agreement developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction-related activities (see E3), and to address post-construction stormwater management for new development and redevelopment projects, is annually reviewed and updated as necessary. Cost to review and update included in E3. Assume minimal estimate for some coordination efforts.	CWU currently coordinates with the City and others; however, the coordination needs to be formalized and improved upon.	None	Y	Review and update written MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-const SW management. Continue to coordinate.	\$500
G. Pollution Prevention and Good Housekeeping for University Operations: Develop and implement an on-going O&M program, including a staff training program, aimed at preventing or reducing pollutant runoff from University operations.						
G1. Complete development and begin implementation of 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 O&M Plan. Assume that some costs to carry out the new procedures is borne by the Department/Division responsible for a given activity.	Many activities currently performed but not formally documented in a standalone O&M Plan. No formal documentation or record keeping of O&M related activities.	None	Y	Complete development of O&M Plan that includes appropriate pollution prevention and good housekeeping procedures for various University operations, activities and/or facilities, including schedule for inspections and activities and methods for proper documentation and record keeping. Begin implementation of the plan working with affected Depts/Divisions.	\$15,000
G2. Begin developing a pollution prevention and 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 one 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 direct stormwater program cost.	Development of training program initiated but no training currently provided. Program needs to be reviewed for consistency with Permit requirements and revised as needed.	None	Y	Develop good housekeeping training materials and program, involve various affected Departments/Divisions and associated staff.	\$5,000
G3. Begin implementing storm system maintenance activities in accordance with appropriate schedules outlined in the O&M Plan. Includes inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection, runoff treatment and flow control facilities (BMP) maintenance, and 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 - consider regional facility shared with City). Assume that most necessary heavy equipment is available, however some specialized equipment may need to be purchased or rented as needed. Costs here are for phasing-in full stormwater system maintenance and oversight by stormwater compliance staff who review and record practices and provide technical assistance.	CWU currently performs very limited storm system maintenance. Activities limited to catch basin cleaning and system line flushing (vacuum out basins and jet outfalls to creeks). No formal documentation or record keeping.	Storm System Inspect/Maint: \$10,000	Y Existing costs \$10,000 Additional activities \$50,000	Estimated costs for enhanced maintenance program with stormwater compliance staff to provide oversight and technical assistance during implementation of new/changed practices, assure record as kept. Work closely with responsible Departments/Divisions.	\$60,000
G4. Locate and map all stormwater treatment and flow control facilities owned or operated by the University. Inspect each facility, making notes of conditions, maintenance needs, or other related concerns. Track all new systems coming into University ownership as development/redevelopment occurs.	Assume that locating and mapping these systems begins in the year that inspections have to be performed and that required mapping overlaps with IDDE Program (D6). University owned and operated stormwater treatment and control facilities must be regularly inspected and maintained. Assume facilities inspected on a 2-year cycle and that all facilities inspected during Year 3. 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.	Map is approximately 2/3 complete in AutoCAD as of January 1, 2008. University-owned SW treatment and flow control facilities to be added to existing maps. Location of facilities may be known since some inspections/cleaning occur on a limited basis.	None	Y	Verify location and map all stormwater treatment and flow control facilities owned or operated by the University. Inspect stormwater treatment and flow control facilities. Identify repair or maintenance needs, resolve concerns, and maintain records.	\$5,000

G5. Begin conducting spot checks of stormwater treatment and flow control facilities after major rainfall events (greater than a 10-year, 24-hour 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 stormwater treatment and flow control facilities after major rainfall events. Identify repair or maintenance needs, resolve concerns, and maintain records.	\$1,500
G6. As soon as practicable, execute any repair and/or maintenance projects needed based on observations made during regular inspections or spot checks of University owned and 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 University owned and operated stormwater treatment and flow control facilities after major storm events. Keep records of repairs and costs.	\$3,000
G7. Begin implementing enhanced pollution prevention and good housekeeping practices established in the O&M plan for roads, highways, and parking lots. Need to address deicing, anti-icing, and snow removal practices; snow disposal areas; material (e.g., salt, sand, or other chemical) storage areas; all-season BMPs to reduce road and parking lot debris and other pollutants from entering 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 CWU 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 stormwater compliance staff to review and record practices and provide technical assistance.	CWU currently performs parking lot and street sweeping during the winter and spring on an as needed basis. Areas typically swept following sanding and de-icing activities. Collected materials stock-piled at Brooklane area and utilized for pipe bedding material. Snow removal and ice control activities employed with snow piled at several locations on campus in undeveloped areas. Covered storage provided for sand/deicer materials (Jongeward Complex). Will need to review existing and additional practices required to ensure WQ is protected.	Sweeping Program: \$45,000	Y Base program cost \$60,000 Cost increase \$18,000 Additional activities \$10,000	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 Departments/Divisions.	\$88,000
G8. Begin conducting all vehicle and equipment washing and maintenance in a self-contained building or in designated wash and/or maintenance areas.	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.	Washing and maintenance of fleet is done within a self-contained covered building, but not for lawn mowers, street sweeper, concrete trucks, or refueling.	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
G9. Begin implementing pollution prevention and good housekeeping practices established in the O&M Plan for external building maintenance activities at all University-owned buildings. The O&M Plan shall address building exterior cleaning and maintenance, including cleaning, washing, painting, and other maintenance activities.	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.	Measures implemented to ensure wash effluent is captured during restoration jobs that are contracted out, but not for window washing.	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
G10. Begin implementing pollution prevention and good housekeeping practices established in the O&M Plan at all University-owned parks and open spaces. The O&M Plan shall address proper application of fertilizer, pesticides, and herbicides; sediment and erosion control; BMPs for landscape maintenance and vegetation disposal; and trash management.	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.	Measures implemented to ensure fertilizer, etc. applied according to good practices/law, but sediment and erosion control not considered.	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.	\$1,500
G12. Begin developing Stormwater Pollution Prevention Plans (SWPPPs) to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas not covered by a statewide NPDES Industrial Stormwater General Permit.	Assume that it takes at least one 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/facility.		None	Y	Develop SWPPPs 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.	\$10,000
G13. Begin implementing proper pollution prevention practices (source control and good housekeeping BMPs) for other University facilities and/or activities that would reasonably be expected to discharge contaminated runoff.	Assume that it takes at least one year to identify all other University 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.		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.	\$3,000

H. Compliance with Total Maximum Daily Load Allocations						
H1. Participate in the development of TMDLs.	Assume this is required to know and control liability. Assume that this involves staff time to review materials, attend meetings, prepare and submit correspondence.	None	None	Y	Participation in TMDL development may be desirable.	\$500
H2. Comply with applicable TMDL provisions (could involve education and outreach activities coordinated with local agencies, enhanced source control efforts, retrofitting treatment into existing storm drains, outfall monitoring, etc.).	Compliance with the Permit is the only requirement CWU presently needs to fulfill to be in compliance with applicable TMDLs. However, assume minimal estimate to allow for minor compliance activities.	None	None	N	None presently; however, may be desirable to coordinate with City's TMDL implementation activities.	\$500
H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on local receiving waters.	Assume record keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of Annual Report to Ecology.	None	None	Y	Track status of TMDL implementation and keep records.	\$500
I. Monitoring and Program Evaluation Requirements						
I1. Recommend that CWU participate in local water-quality monitoring program(s) aimed at assessing baseline conditions and/or to evaluate effectiveness of City/CWU stormwater management programs or TMDL implementation activities. Includes monitoring of outfall quality to receiving waters. Provide a description of any stormwater monitoring or other studies conducted by, on behalf of, or reported to CWU during the reporting period and include in the annual report to Ecology.	Recommended activity for CWU to consider. Specific water quality sampling and testing not required during the effective term of the Permit, unless required as part of applicable TMDL or required for characterizing illicit discharges. Assume some participation by CWU with City and/or local agencies (KCCD, KRD, others) conducting routine or special water/stormwater quality monitoring studies.	None	None	Y	Continue to participate in local water/stormwater quality monitoring studies. Submit description of studies with annual report.	\$500
J. Reporting and Record Keeping Requirements						
J1. Update written Stormwater Management Program (SWMP) for submittal with annual report.	Assume this update occurs in the 4th quarter 2009 with the updated plan submitted with annual report by March 31, 2010 of the following year.	None	None	Y	Update SWMP according to Ecology format. Assume effort by multiple staff and review/approval by designated individual(s).	\$7,000
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 collected to be used for the preparation of annual reports consistent with reporting requirements outlined in Permit.	Assume that this involves reviewing and modifying the process developed as needed.	None	None	Y	Enact record keeping forms/protocols; work with directors/managers/staff to implement. Fair effort by staff at multiple levels.	\$5,000
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	None	Y	Review/update evaluation approach, conduct evaluation, prepare narrative of process and results for inclusion in annual report to Ecology.	\$2,000
J4. Prepare and submit Year 2 annual report and updated SWMP to Ecology. Update prior year annual report and address same considerations as described under 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 one-third time from January 1 to March 31 to prepare the report - including gathering all of the records, meeting with department/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.	\$10,000
K. NPDES Equipment Funds						
	NPDES equipment funds to be requested for 09/11 biennium.					
L. NPDES Capital Project Funds						
	NPDES capital project funds to be requested for 09/11 biennium.					
					SUM =	\$267,500
					Equipment	\$0
					Capital	\$0
					Staff, Fees, Overhead, Services	\$267,500
						\$267,500

YEAR 4

Summary of Regulatory Requirements	Notes & Assumptions	Summary of Existing University Activities Aiding Compliance	Current Average Annual Expenditures	New Funding Needed?	Assessment of New Activities Needed for Compliance	Estimated Annual Cost to Comply
NPDES						
A. General NPDES Requirements						
A2. Pay Annual Permit Fee.	CWU - \$4,000	None	None	Y	Pay Fee.	\$4,000
B. Public Education and Outreach: Students, staff, etc.						
B1. Continue to develop and distribute educational information to students and staff on the impacts of stormwater discharges on receiving waters, and steps that can be taken to reduce pollutants in stormwater runoff. Different combinations of topics shall be addressed each year.	Assume that educational information developed distributed in the form of stormwater brochures. Topics to be covered include: 1) how stormwater runoff affects local waterbodies; 2) proper use and application of pesticides and fertilizers; 3) benefits of using well-adapted vegetation; 4) alternative equip. washing practices that minimize pollutants in stormwater; 5) benefits of proper vehicle maintenance and alternative transportation choices, proper handling and disposal of wastes, including location of hazardous waste collection facilities; 6) hazards associated with illicit connections; and 7) benefits of litter control and proper disposal of pet waste.	None	None	Y	Continue to develop and distribute educational information to students and staff.	\$4,000
B2. Continue labeling storm drain inlets owned and operated by CWU. Storm drain inlets located in maintenance yards, parking lots, along sidewalks, and at pedestrian access points shall be clearly and permanently labeled with the message "Dump No Waste" or similar saying and indicating the point of discharge as a stream, lake, or ground water.	Assume 50% of all storm drain inlets labeled by end of Year 3 and remainder no later than 180 days prior to expiration date of Permit (by Aug 2011). Must also re-label inlets that are no longer clearly visible or easily readable within 90 days. Assume that work to label inlets starts in Year 3 due to relatively few inlets on university property (approx. 235 storm drain inlets).	None	None	Y	Label remaining 50% of storm drain inlets on university property. Maintain records of the location and number of inlets labeled annually.	\$5,500
C. Public Involvement and Participation: Solicit public review of stormwater management program via public notification, website posting, etc.						
	Note that minimum requirements do not begin until early in Year 5.					
D. Illicit Discharge Detection and Elimination: Develop, implement, and enforce program to detect and eliminate polluted non-stormwater discharges into the MS4.						
D1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern non-stormwater discharges.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted (see E1 and F1) since CWU will be required to follow requirements (or equivalent). Assume that City has adopted discrete ordinances to comply with NPDES requirements and is fully implementing and enforcing.	Currently comply with existing City Code.	None	Y	Continue to comply with all relevant ordinances, rules, and regulations that pertain to stormwater. Update written policy, as necessary.	\$1,000
D3. Review and update written IDDE Program Plan as needed.	Assume limited staff time to review, evaluate, and update written IDDE Program Plan. Assume training course for staff involved in IDDE Program is continued from Year 3 with costs covered under staff education (D4).	None	None	Y	Review, evaluate, and update written IDDE Program Plan as needed. Includes review and update of Enforcement Plan and existing Spill Response Plan. Provide continued training for relevant staff.	\$1,000
D4. Continue implementation of IDDE Program and enforcement mechanism. CWU staff to conduct field inspections and visually inspect for illicit discharges at 1/3 of all known outfalls that discharge to surface waters.	Field assessments include visual inspection of outfalls during dry weather and documentation of observations and findings consistent with IDDE Program Plan. 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 consistent with enforcement plan.	None	None	Y	Conduct field assessments at 1/3 of all known outfalls and conduct necessary follow-up activities to ensure termination of illicit discharges identified. Keep records of inspections and follow-up activities.	\$10,000
D5. Provide continued staff training or coordinate with existing training efforts to educate relevant staff on proper BMPs for preventing spills and illicit discharges.	Assume that existing trained staff continue to receive annual refresher courses. Training of additional staff must be conducted no later than 180 days prior to expiration date of Permit (by Aug 2011). However, assume that some training of additional staff begins in Year 2 in order to conduct activities related to IDDE Program, including illicit discharge detection, field assessments, tracing methods, spill response, enforcement activities, etc.	Ron Munson and Pam Coppersmith are trained. They each receive HAZWOPER training with refreshers of 8 hours per year per person. They also participate in a campus-wide lab safety program.	\$2,000	Y	Continue to provide staff training through annual refresher courses for those currently trained. Provide annual refresher for additional staff trained.	\$4,500

D6. Update completed map of CWU MS4, including new and removed connections, updates to system characteristic data and information, location of previously unknown outfalls and connections, etc.	Assume that CWU has completed MS4 mapping and field survey work by end of Year 2. Assume minimal work needed for annual updates to map by permit compliance staff.	Map is approximately 2/3 complete in AutoCAD as of Jan 1, 2008. Map to be completed by end of Year 2. Existing mapping may need to be reviewed, updated, and field checked.	None	Y	Annually update MS4 mapping.	\$1,000
D7. Develop and implement a Spill Response Plan that includes coordination with a qualified spill responder.	Note that minimum requirements do not require that Spill Response Plan be completed until Year 5 (by Aug 2011). However, response plan necessary for staff to address spill response and containment, hazard assessment, coordination with qualified local spill responder, etc. Assume costs for incident response and related activities covered under implementation of IDDE Program (D3). Assume that existing Spill Prevention Control and Countermeasure (SPCC) Plan developed for CWU Main Campus addresses spill response and is included in IDDE Program Plan. However, existing plan likely need to be reviewed by permit compliance staff and updated in Year 4.	SPCC Plan developed in 1999 by Ron Munson (EH&S) and Consultant (GN Northern Inc.). Plan needs to be reviewed and updated.	None	Y	Review and update existing plan, including the collection of necessary information and coordination with qualified spill responder. Update IDDE Program Plan when completed. Incorporate into future staff training as appropriate. Distribute updated spill response plan with various CWU Depts., City, emergency response, fire department, and other involved parties.	\$4,000
E. Construction Site Stormwater Runoff Control: Conduct activities and coordinate with local jurisdiction to reduce pollutants in runoff to the MS4 from construction sites one or more acres in size.						
E1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted since CWU will be required to follow requirements (or equivalent). Assume that City has adopted discrete ordinances to comply with NPDES requirements and is fully implementing and enforcing. Cost to review and update included in D1.	Currently comply with existing City Code.	None	Y	Continue to comply with all relevant ordinances, rules, and regulations that pertain to stormwater. Update written policy, as necessary.	\$0
E2. For all construction projects under the control of CWU which require a construction stormwater permit, CWU shall obtain coverage under the statewide NPDES General Permit for Stormwater Discharges Associated with Construction Activities, or an alternative NPDES permit prior to discharging construction related stormwater.	Assume that NPDES Construction SW permits will be sought for University projects, as needed, and that appropriate construction and post-construction controls will be employed. Cost of seeking (submitting NOIs, public notification requirements, etc.) and compliance with the permit itself will be borne by the Department/Division executing the project and/or the project contractor. Assume some form of written internal procedures necessary to ensure permit coverage obtained.	CWU does not currently seek coverage under the NPDES Construction Stormwater General Permit.	None	Y	Update internal procedures written for FMD-level NPDES application. Need money and staff resources to create and maintain records of seeking and complying with construction stormwater permits for University projects.	\$2,000
E3. Continue to coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern construction-phase stormwater pollution prevention measures.	Assume that the formal agreement developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction-related activities, and to address post-construction stormwater management for new development and redevelopment projects (see F2), is annually reviewed and updated as necessary. Assume minimal estimate for some coordination efforts.	CWU currently coordinates with the City and others; however, the coordination needs to be formalized and improved upon.	None	Y	Review and update written MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-const SW management. Continue to coordinate.	\$1,000
E4. Continue to provide training to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.	Assume that a formal on-going training program for relevant staff is needed. Existing training opportunities provided through IET Construction Management may be adequate for permit compliance but needs to be reviewed and updated/enhanced if IET willing to provide staff training. May also consider coordination of training with the City of Ellensburg. Assume level of effort drops because most training materials and procedures have been established.	Staff currently not trained.	None	Y	Continue to provide in-house training or send relevant staff to external training on proper ESC BMPs, SWPPP requirements, and other related requirements.	\$3,000
E5. Continue to coordinate as requested with Ecology or the City of Ellensburg to provide access for inspection of construction sites or other land disturbances, which are under the control of CWU during the active grading and/or construction period.	Assumed that coordination for access is a necessary compliance activity associated with Construction SW permits and the City's Construction Stormwater Management ordinance which will include procedures for site plan review, review of SWPPPs, site inspection, and enforcement of construction phase stormwater pollution prevention measures.	CWU currently coordinates with the City and/or Ecology as requested.	None	N	Continue to provide access for inspection of construction sites as requested.	\$500

F. Post Construction Stormwater Management: Coordinate with local jurisdiction to address post construction stormwater runoff to the MS4 from sites one or more acres in size.							
F1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern post-construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted since CWU will be required to follow requirements (or equivalent). Assume that City has adopted discrete ordinances to comply with NPDES requirements and is fully implementing and enforcing. Cost to review and update included in D1.	Currently comply with existing City Code.	None	Y	Continue to comply with all relevant ordinances, rules, and regulations that pertain to stormwater. Update written policy, as necessary.	\$0	
F2. Continue to coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern post-construction stormwater pollution prevention measures.	Assume that the formal agreement developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction-related activities (see E3), and to address post-construction stormwater management for new development and redevelopment projects, is annually reviewed and updated as necessary. Cost to review and update included in E3. Assume minimal estimate for some coordination efforts.	CWU currently coordinates with the City and others; however, the coordination needs to be formalized and improved upon.	None	Y	Review and update written MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-const SW management. Continue to coordinate.	\$500	
G. Pollution Prevention and Good Housekeeping for University Operations: Develop and implement an on-going O&M program, including a staff training program, aimed at preventing or reducing pollutant runoff from University operations.							
G2. Finish developing and execute a 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 various Departments/Divisions are involved. Assume training is provided to approximately 4 groups, including Plant O&M, Facilities Planning/Construction, Facilities Services/Administration, and Custodial/Grounds/Motor Pool. This is assumed to be a large effort, including a formal day of training in-house and a full day in the field. Assume training is lead by stormwater compliance staff and is a direct stormwater program cost. Costs to send staff to training is borne by Department/Division that staff represent.	Development of training program initiated but no training currently provided.	None	Y	Conduct good housekeeping training program for various affected Departments/Divisions and associated staff.	\$12,000	
G3. Continue phasing-in and implementing enhanced storm system maintenance activities in accordance with appropriate schedules outlined in the O&M Plan. Includes inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection, runoff treatment and flow control facilities (BMP) maintenance, and 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 - consider regional facility shared with City). Assume that most necessary heavy equipment is available, however some specialized equipment may need to be purchased or rented as needed. Costs here are for phasing-in full stormwater system maintenance and oversight by stormwater compliance staff who review and record practices and provide technical assistance.	CWU currently performs very limited storm system maintenance. Activities limited to catch basin cleaning and system line flushing (vacuum out basins and jet outfalls to creeks). No formal documentation or record keeping.	Storm System Inspect/Maint: \$10,000	Y	Existing costs \$10,000 Additional activities \$60,000	Estimated costs for enhanced maintenance program with stormwater compliance staff to provide oversight and technical assistance during implementation of new/changed practices, assure record as kept. Work closely with responsible Departments/Divisions.	\$70,000
G4. Continue to inspect stormwater treatment and flow control facilities owned or operated by the University, making notes of conditions, maintenance needs, or other related concerns. Track all new systems coming into University ownership as development/redevelopment occurs.	University owned and operated stormwater treatment and control facilities must be regularly inspected and maintained. Assume facilities inspected on a 2-year cycle. 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. Assume that costs split in Years 4-5 since all facilities re-inspected by end of Year 5.	Map is approximately 2/3 complete in AutoCAD as of January 1, 2008. University-owned SW treatment and flow control facilities to be added to existing maps. Location of facilities may be known since some inspections/cleaning occur on a limited basis.	None	Y	Inspect SW treatment and flow control facilities. Identify repair or maintenance needs, resolve concerns, and maintain records.	\$2,500	
G5. Continue to conduct spot checks at stormwater treatment and flow control facilities after major rainfall events (greater than a 10-year, 24-hour 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 stormwater treatment and flow control facilities after major rainfall events. Identify repair or maintenance needs, resolve concerns, and maintain records.	\$1,500	

G6. As soon as practicable, execute any repair and/or maintenance projects needed based on observations made during regular inspections or spot checks of University owned and 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 University owned and operated stormwater treatment and flow control facilities after major storm events. Keep records of repairs and costs.	\$3,000
G7. 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 deicing, anti-icing, and snow removal practices; snow disposal areas; material (e.g., salt, sand, or other chemical) storage areas; all-season BMPs to reduce road and parking lot debris and other pollutants from entering 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 CWU 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 stormwater compliance staff to review and record practices and provide technical assistance.	CWU currently performs parking lot and street sweeping during the winter and spring on an as needed basis. Areas typically swept following sanding and de-icing activities. Collected materials stock-piled at Brooklane area and utilized for pipe bedding material. Snow removal and ice control activities employed with snow piled at several locations on campus in undeveloped areas. Covered storage provided for sand/deicer materials (Jongeward Complex). Will need to review existing and additional practices required to ensure WQ is protected.	Sweeping Program: \$45,000	Y Base program cost \$78,000 Cost increase \$23,000 Additional activities \$15,000	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 Departments/Divisions.	\$116,000
G8. Continue to conduct all vehicle and equipment washing and maintenance in a self-contained building or in designated wash and/or maintenance areas.	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.	Washing and maintenance of fleet is done within a self-contained covered building, but not for lawn mowers, street sweeper, concrete trucks, or refueling.	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
G9. Continue phasing-in and implementing pollution prevention and good housekeeping practices established in the O&M Plan for external building maintenance activities at all University-owned buildings.	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.	Measures implemented to ensure wash effluent is captured during restoration jobs that are contracted out, but not for window washing.	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
G10. Continue phasing-in and implementing pollution prevention and good housekeeping practices established in the O&M Plan at all University-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.	Measures implemented to ensure fertilizer, etc. applied according to good practices/law, but sediment and erosion control not considered.	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.	\$1,500
G12. Finish developing and begin implementing Stormwater Pollution Prevention Plans (SWPPPs) to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas not covered by a statewide NPDES Industrial Stormwater 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/facility. Assume that level of effort drops in Years 4-5 because training materials, training program, and procedures have already been established.	None	None	Y	Complete SWPPPs to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas; conduct training; and implement SWPPPs.	\$8,000
G13. Continue phasing-in and implementing proper pollution prevention practices (source control and good housekeeping BMPs) for other University facilities and/or activities 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.	None	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.	\$2,000

H. Compliance with Total Maximum Daily Load Allocations						
H1. Participate in the development of TMDLs.	Assume this is required to know and control liability. Assume that this involves staff time to review materials, attend meetings, prepare and submit correspondence.	None	None	Y	Participation in TMDL development may be desirable.	\$500
H2. Comply with applicable TMDL provisions (could involve education and outreach activities coordinated with local agencies, enhanced source control efforts, retrofitting treatment into existing storm drains, outfall monitoring, etc.).	Compliance with the Permit is the only requirement CWU presently needs to fulfill to be in compliance with applicable TMDLs. However, assume minimal estimate to allow for minor compliance activities.	None	None	N	None presently; however, may be desirable to coordinate with City's TMDL implementation activities.	\$500
H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on local receiving waters.	Assume record keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of Annual Report to Ecology.	None	None	Y	Track status of TMDL implementation and keep records.	\$500
I. Monitoring and Program Evaluation Requirements						
I1. Recommend that CWU participate in local water-quality monitoring program(s) aimed at assessing baseline conditions and/or to evaluate effectiveness of City/CWU stormwater management programs or TMDL implementation activities. Includes monitoring of outfall quality to receiving waters. Provide a description of any stormwater monitoring or other studies conducted by, on behalf of, or reported to CWU during the reporting period and include in the annual report to Ecology.	Recommended activity for CWU to consider. Specific water quality sampling and testing not required during the effective term of the Permit, unless required as part of applicable TMDL or required for characterizing illicit discharges. Assume some participation by CWU with City and/or local agencies (KCCD, KRD, others) conducting routine or special water/stormwater quality monitoring studies.	None	None	Y	Continue to participate in local water/stormwater quality monitoring studies. Submit description of studies with annual report.	\$1,000
J. Reporting and Record Keeping Requirements						
J1. Update written Stormwater Management Program (SWMP) for submittal with annual report.	Assume this update occurs in the 4th quarter 2010 with the updated plan submitted with annual report by March 31, 2011 of the following year.	None	None	Y	Update SWMP according to Ecology format. Assume effort by multiple staff and review/approval by designated individual(s).	\$8,000
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 collected to be used for the preparation of annual reports consistent with reporting requirements outlined in Permit.	Assume that this involves reviewing and modifying the process developed as needed.	None	None	Y	Enact record keeping forms/protocols; work with directors/managers/staff to implement. Fair effort by staff at multiple levels.	\$5,000
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	None	Y	Review/update evaluation approach, conduct evaluation, prepare narrative of process and results for inclusion in annual report to Ecology.	\$2,000
J4. Prepare and submit Year 3 annual report and updated SWMP to Ecology. Update prior year annual report and address same considerations as described under 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 one-third time from January 1 to March 31 to prepare the report - including gathering all of the records, meeting with department/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.	\$13,000

K. NPDES Equipment Funds						
K1. Illicit Discharge Detection and Elimination Equipment Fund.	Assume that funds needed for the purchase and replacement of equipment needed to execute the IDDE Program. Assume that a formal funding request is made for necessary equipment during 2009/2011 biennium. Typical equipment needed includes vehicle rental, field testing equipment, flow monitoring equipment, field computer, digital camera, survey and GPS equipment, safety equipment, etc.	None	None	Y	Request additional funding to support purchase and replacement of needed IDDE Program equipment.	\$50,000
K2. Good Housekeeping Equipment Fund.	Assume that funds needed to allow for the purchase and R&R of O&M related equipment needed to execute pollution prevention and good housekeeping activities. Assume that formal funding request made for necessary equipment during 2009/2011 biennium. Assume that purchasing and R&R of most major equipment will be shared between various Departments/Divisions sharing use or benefit of the equipment.	CWU currently has one Elgin sweeper truck with snorkel vacuum hose, one sewer jetter, one backhoe, and various tractors with front-end loaders. Additional equipment needs include a new high-efficiency street/parking lot sweeper (\$150K). Assume unforeseen equipment needed (\$50K).	None	Y Identified Equip: \$150,000 Additional Equip: \$50,000	Request additional funding to support purchase and replacement of needed O&M and related equipment. Funds to contribute to Departments/Divisions responsible for bulk of pollution prevention and good housekeeping activities and costs.	\$200,000
L. NPDES Capital Project Funds						
L1. Known or planned stormwater project needs.	Assume that funds needed for known or planned drainage/flooding/water quality projects to cover costs associated with engineering design, permitting, PS&E, and construction. Assume that a formal funding request is made for known or planned CIPs during 2009/2011 biennium. Assume funds to be contributed to Department/Division responsible for the bulk of CIP costs. Staff have identified the need for a properly designed (including stormwater treatment) washout station at the Jongeward Complex. Total project cost estimated at \$250K.	CWU currently does not have a prioritized list of drainage/flooding CIPs. Stormwater treatment typically included with major capital or facility projects on campus (e.g., Dean Hall renovation, Student Village S. resident halls).	None	Y Equip Washout Station \$250,000	Request additional funding to support planning, design, and construction of known or planned drainage/flooding CIPs. Funds to contribute to Department/Division responsible for bulk of CIP costs.	\$250,000
L2. Fund to cover needs of projects discovered as SWM Program is implemented.	Assume that funds needed for projects that will inevitably be discovered during SWM Program implementation that must be addressed. Assume that a formal funding request made for unforeseen projects during 2009/2011 biennium. 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 program budget in future bienniums.	None	None	Y	Request additional funding to support discovered CIP needs.	\$50,000
					SUM =	\$842,000
					Equipment	\$250,000
					Capital	\$300,000
					Staff, Fees, Overhead, Services	\$292,000
						\$842,000

YEAR 5

Summary of Regulatory Requirements	Notes & Assumptions	Summary of Existing University Activities Aiding Compliance	Current Average Annual Expenditures	New Funding Needed?	Assessment of New Activities Needed for Compliance	Estimated Annual Cost to Comply
NPDES						
A. General NPDES Requirements						
A2. Pay Annual Permit Fee.	CWU - \$4,500	None	None	Y	Pay Fee.	\$4,500
B. Public Education and Outreach: Students, staff, etc.						
B1. Continue distributing educational information to students and staff on the impact of stormwater discharges on receiving waters, and steps that can be taken to reduce pollutants in stormwater runoff. Different combinations of topics shall be addressed each year.	Assume that educational information developed distributed in the form of stormwater brochures. Topics to be covered included in Years 3 & 4. Assume some key staff time to review and update public education and outreach activities and/or strategy employed to date.	None	None	Y	Review and update public education and outreach activities and/or strategy as needed. Continue to develop and distribute educational information to students and staff.	\$5,500
B2. Continue labeling storm drain inlets owned and operated by CWU. Storm drain inlets located in maintenance yards, parking lots, along sidewalks, and at pedestrian access points shall be clearly and permanently labeled with the message "Dump No Waste" or similar saying and indicating the point of discharge as a stream, lake, or ground water.	Inlets must be re-labeled within 90 days if they are no longer clearly visible or easily readable. Assume some staff time during Year 5 to periodically inspect labeled inlets and re-label as necessary. Assume 5% of labeled inlets need to be re-labeled on an annual basis.	None	None	Y	Periodically inspect labeled storm drain inlets and re-label as necessary. Maintain records of the location and number of inlets re-labeled annually.	\$500
C. Public Involvement and Participation: Solicit public review of stormwater management program via public notification, website posting, etc.						
C1. Publish a public notice in the local newspaper and solicit public review of the SWMP.	Assume 1 week of supervisor time to write public notice for release to local newspaper and to respond to any phone calls and/or complaints received from the public. Due 180 days prior to expiration date of Permit (by Aug 2011).	None	None	Y	Publish a public notice for distribution in local newspaper. Respond to public input received.	\$3,000
C2. Make the latest updated version of the SWMP available to the public via the CWU website.	Assume costs for coordination and posting of updated SWMP on website. Due 180 days prior to expiration date of Permit (by Aug 2011).	None	None	Y	Coordinate with appropriate CWU Dept to post 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. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern non-stormwater discharges.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted (see E1 and F1) since CWU will be required to follow requirements (or equivalent). Assume that City has adopted discrete ordinances to comply with NPDES requirements and is fully implementing and enforcing.	Currently comply with existing City Code.	None	Y	Continue to comply with all relevant ordinances, rules, and regulations that pertain to stormwater. Update written policy, as necessary.	\$1,000
D3. Review and update written IDDE Program Plan as needed.	Assume limited staff time to review, evaluate, and update written IDDE Program Plan. Assume training course for staff involved in IDDE Program is continued from Year 4 with costs covered under staff education (D4).	None	None	Y	Review, evaluate, and update written IDDE Program Plan as needed. Includes review and update of Enforcement Plan and current Spill Response Plan. Provide continued training for relevant staff.	\$1,000
D4. Continue implementation of IDDE Program and enforcement mechanism. CWU staff to conduct field inspections and visually inspect for illicit discharges at 1/3 of all known outfalls that discharge to surface waters.	Field assessments include visual inspection of outfalls during dry weather and documentation of observations and findings consistent with IDDE Program Plan. 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 consistent with enforcement plan.	None	None	Y	Conduct field assessments at 1/3 of all known outfalls and conduct necessary follow-up activities to ensure termination of illicit discharges identified. Keep records of inspections and follow-up activities.	\$10,000

D5. Provide continued staff training or coordinate with existing training efforts to educate relevant staff on proper BMPs for preventing spills and illicit discharges.	Assume that existing trained staff continue to receive annual refresher courses. Training of additional staff must be conducted no later than 180 days prior to expiration date of Permit (by Aug 2011). However, assume that some training of additional staff begins in Year 2 in order to conduct activities related to IDDE Program, including illicit discharge detection, field assessments, tracing methods, spill response, enforcement activities, etc.	Ron Munson and Pam Coppersmith are trained. They each receive HAZWOPER training with refreshers of 8 hours per year per person. They also participate in a campus-wide lab safety program.	\$2,000	Y	Continue to provide staff training through annual refresher courses for those currently trained. Provide annual refresher for additional staff trained. Evaluate need for training update.	\$5,000
D6. Update completed map of CWU MS4, including new and removed connections, updates to system characteristic data and information, location of previously unknown outfalls and connections, etc.	Assume that CWU has completed MS4 mapping and field survey work by end of Year 2. Assume minimal work needed for annual updates to map by permit compliance staff.	Map is approximately 2/3 complete in AutoCAD as of Jan 1, 2008. Map to be completed by end of Year 2. Existing mapping may need to be reviewed, updated, and field checked.	None	Y	Annually update MS4 mapping.	\$1,000
D7. Review and update Spill Response Plan as needed. Continue to implement plan.	Note that minimum requirements do not require that Spill Response Plan be completed until Year 5 (by Aug 2011). However, response plan necessary for staff to address spill response and containment, hazard assessment, coordination with qualified local spill responder, etc. Assume costs for incident response and related activities covered under implementation of IDDE Program (D3). Assume some time for plan to be reviewed by permit compliance staff and updated as needed (e.g., updates of contact personnel information and phone numbers, etc.).	SPCC Plan developed in 1999 by Ron Munson (EH&S) and Consultant (GN Northern Inc.). Plan needs to be reviewed and updated.	None	Y	Review revised plan and update as necessary. Include updated version in IDDE Program Plan and redistribute current version to various CWU Depts., City, emergency response, fire department, and other involved parties.	\$500
E. Construction Site Stormwater Runoff Control: Conduct activities and coordinate with local jurisdiction to reduce pollutants in runoff to the MS4 from construction sites one or more acres in size.						
E1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted since CWU will be required to follow requirements (or equivalent). Assume that City has adopted discrete ordinances to comply with NPDES requirements and is fully implementing and enforcing. Cost to review and update included in D1.	Currently comply with existing City Code.	None	Y	Continue to comply with all relevant ordinances, rules, and regulations that pertain to stormwater. Update written policy, as necessary.	\$0
E2. For all construction projects under the control of CWU which require a construction stormwater permit, CWU shall obtain coverage under the statewide NPDES General Permit for Stormwater Discharges Associated with Construction Activities, or an alternative NPDES permit prior to discharging construction related stormwater.	Assume that NPDES Construction SW permits will be sought for University projects, as needed, and that appropriate construction and post-construction controls will be employed. Cost of seeking (submitting NOIs, public notification requirements, etc.) and compliance with the permit itself will be borne by the Department/Division executing the project and/or the project contractor. Assume some form of written internal procedures necessary to ensure permit coverage obtained.	CWU does not currently seek coverage under the NPDES Construction Stormwater General Permit.	None	Y	Update internal procedures written for FMD-level NPDES application. Need money and staff resources to create and maintain records of seeking and complying with construction stormwater permits for University projects.	\$2,000
E3. Continue to coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern construction-phase stormwater pollution prevention measures.	Assume that the formal agreement developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction-related activities, and to address post-construction stormwater management for new development and redevelopment projects (see F2), is annually reviewed and updated as necessary. Assume minimal estimate for some coordination efforts.	CWU currently coordinates with the City and others; however, the coordination needs to be formalized and improved upon.	None	Y	Review and update written MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-const SW management. Continue to coordinate.	\$1,000
E4. Continue to provide training to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.	Assume that a formal ongoing training program for relevant staff is needed. Existing training opportunities provided through IET Construction Management may be adequate for permit compliance but needs to be reviewed and updated/enhanced if IET willing to provide staff training. May also consider coordination of training with the City of Ellensburg. Assume level of effort drops because most training materials and procedures have been established.	Staff currently not trained.	None	Y	Continue to provide in-house training or send relevant staff to external training on proper ESC BMPs, SWPPP requirements, and other related requirements.	\$3,000
E5. Continue to coordinate as requested with Ecology or the City of Ellensburg to provide access for inspection of construction sites or other land disturbances, which are under the control of CWU during the active grading and/or construction period.	Assumed that coordination for access is a necessary compliance activity associated with Construction SW permits and the City's Construction Stormwater Management ordinance which will include procedures for site plan review, review of SWPPPs, site inspection, and enforcement of construction phase stormwater pollution prevention measures.	CWU currently coordinates with the City and/or Ecology as requested.	None	N	Continue to provide access for inspection of construction sites as requested.	\$500

F. Post Construction Stormwater Management: Coordinate with local jurisdiction to address post construction stormwater runoff to the MS4 from sites one or more acres in size.							
F1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern post-construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted since CWU will be required to follow requirements (or equivalent). Assume that City has adopted discrete ordinances to comply with NPDES requirements and is fully implementing and enforcing. Cost to review and update included in D1.	Currently comply with existing City Code.	None	Y	Continue to comply with all relevant ordinances, rules, and regulations that pertain to stormwater. Update written policy, as necessary.	\$0	
F2. Continue to coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern post-construction stormwater pollution prevention measures.	Assume that the formal agreement developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction-related activities (see E3), and to address post-construction stormwater management for new development and redevelopment projects, is annually reviewed and updated as necessary. Cost to review and update included in E3. Assume minimal estimate for some coordination efforts.	CWU currently coordinates with the City and others; however, the coordination needs to be formalized and improved upon.	None	Y	Review and update written MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-const SW management. Continue to coordinate.	\$500	
G. Pollution Prevention and Good Housekeeping for University Operations: Develop and implement an ongoing O&M program, including a staff training program, aimed at preventing or reducing pollutant runoff from University operations.							
G2. Update good housekeeping training of staff groups as needed.	Assume training is provided to approximately 4 groups, including Plant O&M, Facilities Planning/Construction, Facilities Services/Administration, and Custodial/Grounds/Motor Pool. This is assumed to be a large effort, including a formal day of training in-house and a full day in the field. Assume training is lead by stormwater compliance staff and is a direct stormwater program cost. Costs to send staff to training is borne by Department/Division that staff represent.	Development of training program initiated but no training currently provided.	None	Y	Evaluate need for training update. Update and repeat good housekeeping training program for various affected Departments/Divisions and associated staff.	\$6,000	
G3. Fully implement enhanced storm system maintenance activities in accordance with appropriate schedules outlined in the O&M Plan. Includes inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection, runoff treatment and flow control facility (BMP) maintenance, and 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 - consider regional facility shared with City). Assume that most necessary heavy equipment is available, however some specialized equipment may need to be purchased or rented as needed. Costs here are for phasing-in full stormwater system maintenance and oversight by stormwater compliance staff who review and record practices and provide technical assistance.	CWU currently performs very limited storm system maintenance. Activities limited to catch basin cleaning and system line flushing (vacuum out basins and jet outfalls to creeks). No formal documentation or record keeping.	Storm System Inspect/Maint: \$10,000	Y	Existing costs \$10,000 Additional activities \$70,000	Estimated costs for enhanced maintenance program with stormwater compliance staff to provide oversight and technical assistance during implementation of new/changed practices, assure record as kept. Work closely with responsible Departments/Divisions.	\$80,000
G4. Continue to inspect stormwater treatment and flow control facilities owned or operated by the University, making notes of conditions, maintenance needs, or other related concerns. Track all new systems coming into University ownership as development/redevelopment occurs.	University owned and operated stormwater treatment and control facilities must be regularly inspected and maintained. Assume facilities inspected on a 2-year cycle. 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. Assume that costs split in Years 4-5 since all facilities re-inspected by end of Year 5.	Map is approximately 2/3 complete in AutoCAD as of January 1, 2008. University-owned SW treatment and flow control facilities to be added to existing maps. Location of facilities may be known since some inspections/cleaning occur on a limited basis.	None	Y	Inspect all remaining SW treatment and flow control facilities. Identify repair or maintenance needs, resolve concerns, and maintain records.	\$2,500	
G5. Continue to conduct spot checks at stormwater treatment and flow control facilities after major rainfall events (greater than a 10-year, 24-hour 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 stormwater treatment and flow control facilities after major rainfall events. Identify repair or maintenance needs, resolve concerns, and maintain records.	\$1,500	

G6. As soon as practicable, execute any repair and/or maintenance projects needed based on observations made during regular inspections or spot checks of University owned and 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 University owned and operated stormwater treatment and flow control facilities after major storm events. Keep records of repairs and costs.	\$3,000
G7. Fully implement enhanced pollution prevention and good housekeeping practices established in the O&M plan for roads, highways, parking lots. Need to address deicing, anti-icing, and snow removal practices; snow disposal areas; material (e.g., salt, sand, or other chemical) storage areas; all-season BMPs to reduce road and parking lot debris and other pollutants from entering 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 CWU 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 stormwater compliance staff to review and record practices and provide technical assistance.	CWU currently performs parking lot and street sweeping during the winter and spring on an as needed basis. Areas typically swept following sanding and de-icing activities. Collected materials stock-piled at Brooklane area and utilized for pipe bedding material. Snow removal and ice control activities employed with snow piled at several locations on campus in undeveloped areas. Covered storage provided for sand/deicer materials (Jongeward Complex). Will need to review existing and additional practices required to ensure WQ is protected.	Sweeping Program: \$45,000	Y Base program cost \$101,000 Cost increase \$30,000 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 Departments/Divisions.	\$151,000
G8. Fully implement all vehicle and equipment washing and maintenance in in a self-contained building or in designated wash and/or maintenance areas.	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.	Washing and maintenance of fleet is done within a self-contained covered building, but not for lawn mowers, street sweeper, concrete trucks, or refueling.	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
G9. Fully implement pollution prevention and good housekeeping practices established in the O&M Plan for external building maintenance activities at all University-owned buildings.	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.	Measures implemented to ensure wash effluent is captured during restoration jobs that are contracted out, but not for window washing.	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
G10. Fully implement pollution prevention and good housekeeping practices established in the O&M Plan at all University-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.	Measures implemented to ensure fertilizer, etc. applied according to good practices/law, but sediment and erosion control not considered.	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.	\$1,500
G12. Fully implement Stormwater Pollution Prevention Plans (SWPPPs) to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas not covered by a statewide NPDES Industrial Stormwater 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/facility. Assume that level of effort drops in years 4-5 because training materials, training program, and procedures have already been established.	None	None	Y	Implement SWPPPs to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas; conduct training; and continue to implement SWPPPs.	\$6,000
G13. Fully implement proper pollution prevention practices (source control and good housekeeping BMPs) for other University facilities and/or activities 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.	None	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.	\$1,000

H. Compliance with Total Maximum Daily Load Allocations						
H1. Participate in the development of TMDLs.	Assume this is required to know and control liability. Assume that this involves staff time to review materials, attend meetings, prepare and submit correspondence.	None	None	Y	Participation in TMDL development may be desirable.	\$500
H2. Comply with applicable TMDL provisions (could involve education and outreach activities coordinated with local agencies, enhanced source control efforts, retrofitting treatment into existing storm drains, outfall monitoring, etc.).	Compliance with the Permit is the only requirement CWU presently needs to fulfill to be in compliance with applicable TMDLs. However, assume minimal estimate to allow for minor compliance activities.	None	None	N	None presently; however, may be desirable to coordinate with City's TMDL implementation activities.	\$500
H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on local receiving waters.	Assume record keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of annual report to Ecology.	None	None	Y	Track status of TMDL implementation and keep records.	\$500
I. Monitoring and Program Evaluation Requirements						
I1. Recommend that CWU participate in local water-quality monitoring program(s) aimed at assessing baseline conditions and/or to evaluate effectiveness of City/CWU stormwater management programs or TMDL implementation activities. Includes monitoring of outfall quality to receiving waters. Provide a description of any stormwater monitoring or other studies conducted by, on behalf of, or reported to CWU during the reporting period and include in the annual report to Ecology.	Recommended activity for CWU to consider. Specific water quality sampling and testing not required during the effective term of the Permit, unless required as part of applicable TMDL or required for characterizing illicit discharges. Assume some participation by CWU with City and/or local agencies (KCCD, KRD, others) conducting routine or special water/stormwater quality monitoring studies.	None	None	Y	Continue to participate in local water/stormwater quality monitoring studies. Submit description of studies with annual report.	\$1,000
J. Reporting and Record Keeping Requirements						
J1. Update written Stormwater Management Program (SWMP) for submittal with annual report.	Assume this update occurs in the 4th quarter 2011 with the updated plan submitted with annual report by March 31, 2012 of the following year.	None	None	Y	Update SWMP according to Ecology format. Assume effort by multiple staff and review/approval by designated individual(s).	\$8,000
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 collected to be used for the preparation of annual reports consistent with reporting requirements outlined in Permit.	Assume that this involves reviewing and modifying the process developed as needed.	None	None	Y	Enact record keeping forms/protocols; work with directors/managers/staff to implement. Fair effort by staff at multiple levels.	\$5,000
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	None	Y	Review/update evaluation approach, conduct evaluation, prepare narrative of process and results for inclusion in annual report to Ecology.	\$2,000
J4. Prepare and submit Year 4 annual report and updated SWMP to Ecology. Update prior year annual report and address same considerations as described under 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 one-third time from January 1 to March 31 to prepare the report - including gathering all of the records, meeting with department/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.	\$13,000

K. NPDES Equipment Funds							
K1. Illicit Discharge Detection and Elimination Equipment Fund.	Assume that funds needed for the purchase and replacement of equipment needed to execute the IDDE Program. Assume that a formal funding request is made for necessary equipment during 2009/2011 biennium. Typical equipment needed includes vehicle rental, field testing equipment, flow monitoring equipment, field computer, digital camera, survey and GPS equipment, safety equipment, etc.	None	None	Y	Additional funding requested to support purchase and replacement of needed IDDE Program equipment.	\$0	
K2. Good Housekeeping Equipment Fund.	Assume that funds needed to allow for the purchase and R&R of O&M related equipment needed to execute pollution prevention and good housekeeping activities. Assume that formal funding request made for necessary equipment during 2009/2011 biennium. Assume that purchasing and R&R of most major equipment will be shared between various Departments/Divisions sharing use or benefit of the equipment.	CWU currently has one Elgin sweeper truck with snorkel vacuum hose, one sewer jetter, one backhoe, and various tractors with front-end loaders. Additional equipment needs include a new high-efficiency street/parking lot sweeper (\$150K). Assume unforeseen equipment needed (\$50K).	None	Y Identified Equip: \$150,000 Additional Equip: \$50,000	Additional funding requested to support purchase and replacement of needed O&M and related equipment. Funds to contribute to Departments/Divisions responsible for bulk of pollution prevention and good housekeeping activities and costs.	\$0	
L. NPDES Capital Project Funds							
L1. Known or planned stormwater project needs.	Assume that funds needed for known or planned drainage/flooding/water quality projects to cover costs associated with engineering design, permitting, PS&E, and construction. Assume that a formal funding request is made for known or planned CIPs during 2009/2011 biennium. Assume funds to be contributed to Department/Division responsible for the bulk of CIP costs. Staff have identified the need for a properly designed (including stormwater treatment) washout station at the Jongeward Complex. Total project cost estimated at \$250K.	CWU currently does not have a prioritized list of drainage/flooding CIPs. Stormwater treatment typically included with major capital or facility projects on campus (e.g., Dean Hall renovation, Student Village S. resident halls).	None	Y Equip Washout Station \$250,000	Additional funding requested to support planning, design, and construction of known or planned drainage/flooding CIPs. Funds to contribute to Department/Division responsible for bulk of CIP costs.	\$0	
L2. Fund to cover needs of projects discovered as SWM Program is implemented.	Assume that funds needed for projects that will inevitably be discovered during SWM Program implementation that must be addressed. Assume that a formal funding request made for unforeseen projects during 2009/2011 biennium. 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 program budget in future bienniums.	None	None	Y	Additional funding requested to support discovered CIP needs.	\$0	
SUM =						\$325,500	
						Equipment	\$0
						Capital	\$0
						Staff, Fees, Overhead, Services	\$325,500
							\$325,500

Appendix C—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).	CWU prepared and submitted NOI on October 11, 2007.	NOI prepared and submitted.	
A2. Pay Annual Permit Fee.	CWU - \$2,700	Pay fee.	
YEAR 2			
A2. Pay Annual Permit Fee.	CWU - \$2,700	Pay fee.	
YEAR 3			
A2. Pay Annual Permit Fee.	CWU - \$3,500	Pay Fee.	
YEAR 4			
A2. Pay Annual Permit Fee.	CWU - \$4,000	Pay Fee.	
YEAR 5			
A2. Pay Annual Permit Fee.	CWU - \$4,500	Pay Fee.	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List √
NPDES			
B. Public Education and Outreach: Students, staff, etc.			
YEAR 1			
	Note that minimum requirements do not begin until Year 3.		
YEAR 2			
	Note that minimum requirements do not begin until Year 3.		
YEAR 3			
B1. Begin to develop and distribute educational information to students and staff on the impacts of stormwater discharges on receiving waters, and steps that can be taken to reduce pollutants in stormwater runoff. Different combinations of topics shall be addressed each year.	Assume that educational information developed distributed in the form of stormwater brochures. Topics to be covered include: 1) how stormwater runoff affects local waterbodies; 2) proper use and application of pesticides and fertilizers; 3) benefits of using well-adapted vegetation; 4) alternative equip. washing practices that minimize pollutants in stormwater; 5) benefits of proper vehicle maintenance and alternative transportation choices, proper handling and disposal of wastes, including location of hazardous waste collection facilities; 6) hazards associated with illicit connections; and 7) benefits of litter control and proper disposal of pet waste.	Develop and distribute educational information to students and staff with different topic(s) addressed each year.	
B2. Begin labeling storm drain inlets owned and operated by CWU. Storm drain inlets located in maintenance yards, parking lots, along sidewalks, and at pedestrian access points shall be clearly and permanently labeled with the message "Dump No Waste" or similar saying and indicating the point of discharge as a stream, lake, or ground water.	Assume 50% of all storm drain inlets labeled by end of Year 3 and remainder no later than 180 days prior to expiration date of Permit (by Aug 2011). Must also re-label inlets that are no longer clearly visible or easily readable within 90 days. Assume that work to label inlets starts in Year 3 due to relatively few inlets on university property (approx. 235 storm drain inlets).	Label 50% of all storm drain inlets on university property. Maintain records of the location and number of inlets labeled annually.	
YEAR 4			
B1. Continue to develop and distribute educational information to students and staff on the impacts of stormwater discharges on receiving waters, and steps that can be taken to reduce pollutants in stormwater runoff. Different combinations of topics shall be addressed each year.	Assume that educational information developed distributed in the form of stormwater brochures. Topics to be covered include: 1) how stormwater runoff affects local waterbodies; 2) proper use and application of pesticides and fertilizers; 3) benefits of using well-adapted vegetation; 4) alternative equip. washing practices that minimize pollutants in stormwater; 5) benefits of proper vehicle maintenance and alternative transportation choices, proper handling and disposal of wastes, including location of hazardous waste collection facilities; 6) hazards associated with illicit connections; and 7) benefits of litter control and proper disposal of pet waste.	Continue to develop and distribute educational information to students and staff.	
B2. Continue labeling storm drain inlets owned and operated by CWU. Storm drain inlets located in maintenance yards, parking lots, along sidewalks, and at pedestrian access points shall be clearly and permanently labeled with the message "Dump No Waste" or similar saying and indicating the point of discharge as a stream, lake, or ground water.	Assume 50% of all storm drain inlets labeled by end of Year 3 and remainder no later than 180 days prior to expiration date of Permit (by Aug 2011). Must also re-label inlets that are no longer clearly visible or easily readable within 90 days. Assume that work to label inlets starts in Year 3 due to relatively few inlets on university property (approx. 235 storm drain inlets).	Label remaining 50% of storm drain inlets on university property. Maintain records of the location and number of inlets labeled annually.	
YEAR 5			
B1. Continue distributing educational information to students and staff on the impact of stormwater discharges on receiving waters, and steps that can be taken to reduce pollutants in stormwater runoff. Different combinations of topics shall be addressed each year.	Assume that educational information developed distributed in the form of stormwater brochures. Topics to be covered included in Years 3 & 4. Assume some key staff time to review and update public education and outreach activities and/or strategy employed to date.	Review and update public education and outreach activities and/or strategy as needed. Continue to develop and distribute educational information to students and staff.	
B2. Continue labeling storm drain inlets owned and operated by CWU. Storm drain inlets located in maintenance yards, parking lots, along sidewalks, and at pedestrian access points shall be clearly and permanently labeled with the message "Dump No Waste" or similar saying and indicating the point of discharge as a stream, lake, or ground water.	Inlets must be re-labeled within 90 days if they are no longer clearly visible or easily readable. Assume some staff time during Year 5 to periodically inspect labeled inlets and re-label as necessary. Assume 5% of labeled inlets need to be re-labeled on an annual basis.	Periodically inspect labeled storm drain inlets and re-label as necessary. Maintain records of the location and number of inlets re-labeled annually.	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List √
NPDES			
C. Public Involvement and Participation: Solicit public review of stormwater management program via public notification, website posting, etc.			
YEAR 1			
	Note that minimum requirements do not begin until early in Year 5.		
YEAR 2			
	Note that minimum requirements do not begin until early in Year 5.		
YEAR 3			
	Note that minimum requirements do not begin until early in Year 5.		
YEAR 4			
	Note that minimum requirements do not begin until early in Year 5.		
YEAR 5			
C1. Publish a public notice in the local newspaper and solicit public review of the SWMP.	Assume 1 week of supervisor time to write public notice for release to local newspaper and to respond to any phone calls and/or complaints received from the public. Due 180 days prior to expiration date of Permit (by Aug 2011).	Publish a public notice for distribution in local newspaper. Respond to public input received.	
C2. Make the latest updated version of the SWMP available to the public via the CWU website.	Assume costs for coordination and posting of updated SWMP on website. Due 180 days prior to expiration date of Permit (by Aug 2011).	Coordinate with appropriate CWU Dept to post 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			
D1. From the date of permit coverage, comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern non-stormwater discharges.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses existing and relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Utilize the Minimum Technical Requirements in Appendix 1 of the Permit as a basis for the development of the written policy (see E1 and F1 below) since CWU will be required to follow requirements (or equivalent) when the City develops and adopts discrete ordinances to comply with NPDES requirements, which is assumed to occur during Year 2. Costs shown here are for overall policy that addresses both IDDE and activities identified under E1 and F1.	Create a written policy and formally adopt existing and relevant City ordinances, rules, and regulations. Incorporate Minimum Technical Requirements included in Appendix 1 of the Permit into written policy (see E1 and F1).	
D2. Develop and adopt appropriate policies prohibiting illicit discharges and illegal dumping; Identify possible enforcement mechanisms for use in the development of an Enforcement Plan.	The policies shall address, at a minimum: illicit connections; non-stormwater discharges as defined in the Phase II Permit; and spilling, dumping, or otherwise improperly disposing of hazardous materials, pet waste, and litter. Policy must be developed and adopted by Board of Trustees by end of Year 1. Assume some time by staff to investigate and identify possible enforcement mechanisms by the end of Year 1; consider those currently employed by the University for other purposes. Enforcement plan to be developed in Year 2 (by May 2009) and included as part of written IDDE Program Plan.	Create an internal policy for adoption by Board of Trustees. Consider adopting City's or other similar IDDE policy.	
D5. Provide continued staff training or coordinate with existing training efforts to educate relevant staff on proper BMPs for preventing spills and illicit discharges.	Assume that existing trained staff continue to receive annual refresher courses. Training of additional staff must be conducted no later than 180 days prior to expiration date of Permit (by Aug 2011). However, assume that some training of additional staff begins in Year 2 in order to conduct activities related to IDDE Program, including illicit discharge detection, field assessments, tracing methods, spill response, enforcement activities, etc.	Continue to provide staff training through annual refresher courses for those currently trained. Identify additional staff to be trained starting in Year 2.	
YEAR 2			
D1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern non-stormwater discharges.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses existing and relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted (see E1 and F1) since CWU will be required to follow requirements (or equivalent) when the City develops and adopts discrete ordinances to comply with NPDES requirements, which is assumed to occur during Year 2.	Continue to comply with all existing and relevant ordinances, rules, and regulations that pertain to stormwater. Track status of City's efforts to develop and adopt discrete stormwater-related ordinances. Update written policy, as necessary.	
D2. Develop an Enforcement Plan using the enforcement mechanisms identified during Year 1 to ensure compliance with illicit discharge policies. Enforcement activities to begin in Year 2.	Assume that development of enforcement plan will require staff time, internal coordination, possible consultant assistance, and legal review. Enforcement plan to be developed and implement in Year 2 (by May 2009) and included as part of written IDDE Program Plan.	Develop an enforcement plan consistent with the selected enforcement mechanism(s).	
D3. Begin developing written IDDE Program Plan that addresses enforcement; staff training needs; field assessments; on-campus complaint handling; discharge characterization methods, hazard assessment, and spill response and containment; tracing methods; sampling and analysis techniques; termination/removal methods; interface with local agencies; and program evaluation methods.	Assume that once appropriate policies prohibiting illicit discharges and illegal dumping are approved, enforcement and other related activities are phased-in starting in Year 2. Assume that written guidance is needed for orderly implementation. Assume preparation involves various Departments and requires a fair amount of staff time to prepare plan. Funding estimate is only for lead compliance staff. Assume some initial training course is needed for staff involved in IDDE Program with costs covered under staff education (D4).	Develop IDDE Program Plan using guidance documents from Center for Watershed Protection, Ecology, or others as an aid. Enforcement Plan and existing Spill Response Plan to be included with IDDE Plan. Involve multiple staff as needed. Provide initial training for relevant staff.	
D4. Begin implementation of IDDE Program and enforcement mechanism. CWU staff to conduct field inspections and visually inspect for illicit discharges at 1/3 of all known outfalls that discharge to surface waters.	Field assessments include visual inspection of outfalls during dry weather and documentation of observations and findings consistent with IDDE Program Plan. 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 consistent with enforcement plan.	Conduct field assessments at 1/3 of all known outfalls and conduct necessary follow-up activities to ensure termination of illicit discharges identified. Keep records of inspections and follow-up activities.	
D5. Provide continued staff training or coordinate with existing training efforts to educate relevant staff on proper BMPs for preventing spills and illicit discharges.	Assume that existing trained staff continue to receive annual refresher courses. Training of additional staff must be conducted no later than 180 days prior to expiration date of Permit (by Aug 2011). However, assume that some training of additional staff begins in Year 2 in order to conduct activities related to IDDE Program, including illicit discharge detection, field assessments, tracing methods, spill response, enforcement activities, etc.	Continue to provide staff training through annual refresher courses for those currently trained. Identify additional staff to be trained and provide appropriate training.	
D6. CWU to complete remaining mapping of storm sewer system (MS4), showing locations of all known storm drain outfalls, labeling receiving waters, and delineating the areas (catchment areas) contributing runoff to each outfall. Include field surveys to verify locations of outfalls and identify previously unknown outfalls.	Note that minimum requirements do not require mapping to be completed until Year 5. However, map of MS4 necessary for staff to conduct visual inspections for illicit discharges during Year 2 as part of field assessment work required under IDDE Program. Assume that CWU has completed approximately 2/3 of required MS4 mapping and some field survey work. Assume that remaining mapping activities and additional field-related activities will be carried out under direction of permit compliance staff during Year 2.	Complete mapping of storm sewer system (MS4).	
YEAR 3			
D1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern non-stormwater discharges.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses existing and relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted (see E1 and F1) since CWU will be required to follow requirements (or equivalent). Assume that City has adopted discrete ordinances to comply with NPDES requirements and will begin to implement and enforce.	Continue to comply with all relevant ordinances, rules, and regulations that pertain to stormwater. Update written policy, as necessary.	
D3. Complete written IDDE Program Plan started in Year 2 that addresses enforcement; staff training needs; field assessments; on-campus complaint handling; discharge characterization methods, hazard assessment, and spill response and containment; tracing methods; sampling and analysis techniques; termination/removal methods; interface with local agencies; and program evaluation methods.	Assume that once appropriate policies prohibiting illicit discharges and illegal dumping are approved, enforcement and other related activities are phased-in starting in Year 2. Assume that written guidance is needed for orderly implementation. Assume training course for staff involved in IDDE Program is continued from Year 2 with costs covered under staff education (D4).	Complete IDDE Program Plan using guidance documents. Enforcement Plan and existing Spill Response Plan to be included with IDDE Plan. Provide continued training for relevant staff.	
D4. Continue implementation of IDDE Program and enforcement mechanism. CWU staff to conduct field inspections and visually inspect for illicit discharges at 1/3 of all known outfalls that discharge to surface waters.	Field assessments include visual inspection of outfalls during dry weather and documentation of observations and findings consistent with IDDE Program Plan. 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 consistent with enforcement plan.	Conduct field assessments at 1/3 of all known outfalls and conduct necessary follow-up activities to ensure termination of illicit discharges identified. Keep records of inspections and follow-up activities.	
D5. Provide continued staff training or coordinate with existing training efforts to educate relevant staff on proper BMPs for preventing spills and illicit discharges.	Assume that existing trained staff continue to receive annual refresher courses. Training of additional staff must be conducted no later than 180 days prior to expiration date of Permit (by Aug 2011). However, assume that some training of additional staff begins in Year 2 in order to conduct activities related to IDDE Program, including illicit discharge detection, field assessments, tracing methods, spill response, enforcement activities, etc.	Continue to provide staff training through annual refresher courses for those currently trained. Provide annual refresher for additional staff trained.	
D6. Update completed map of CWU MS4, including new and removed connections, updates to system characteristic data and information, location of previously unknown outfalls and connections, etc.	Assume that CWU has completed MS4 mapping and field survey work by end of Year 2. Assume minimal work needed for annual updates to map by permit compliance staff.	Annually update MS4 mapping.	

YEAR 4			
D1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern non-stormwater discharges.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted (see E1 and F1) since CWU will be required to follow requirements (or equivalent). Assume that City has adopted discrete ordinances to comply with NPDES requirements and is fully implementing and enforcing.	Continue to comply with all relevant ordinances, rules, and regulations that pertain to stormwater. Update written policy, as necessary.	
D3. Review and update written IDDE Program Plan as needed.	Assume limited staff time to review, evaluate, and update written IDDE Program Plan. Assume training course for staff involved in IDDE Program is continued from Year 3 with costs covered under staff education (D4).	Review, evaluate, and update written IDDE Program Plan as needed. Includes review and update of Enforcement Plan and existing Spill Response Plan. Provide continued training for relevant staff.	
D4. Continue implementation of IDDE Program and enforcement mechanism. CWU staff to conduct field inspections and visually inspect for illicit discharges at 1/3 of all known outfalls that discharge to surface waters.	Field assessments include visual inspection of outfalls during dry weather and documentation of observations and findings consistent with IDDE Program Plan. 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 consistent with enforcement plan.	Conduct field assessments at 1/3 of all known outfalls and conduct necessary follow-up activities to ensure termination of illicit discharges identified. Keep records of inspections and follow-up activities.	
D5. Provide continued staff training or coordinate with existing training efforts to educate relevant staff on proper BMPs for preventing spills and illicit discharges.	Assume that existing trained staff continue to receive annual refresher courses. Training of additional staff must be conducted no later than 180 days prior to expiration date of Permit (by Aug 2011). However, assume that some training of additional staff begins in Year 2 in order to conduct activities related to IDDE Program, including illicit discharge detection, field assessments, tracing methods, spill response, enforcement activities, etc.	Continue to provide staff training through annual refresher courses for those currently trained. Provide annual refresher for additional staff trained.	
D6. Update completed map of CWU MS4, including new and removed connections, updates to system characteristic data and information, location of previously unknown outfalls and connections, etc.	Assume that CWU has completed MS4 mapping and field survey work by end of Year 2. Assume minimal work needed for annual updates to map by permit compliance staff.	Annually update MS4 mapping.	
D7. Develop and implement a Spill Response Plan that includes coordination with a qualified spill responder.	Note that minimum requirements do not require that Spill Response Plan be completed until Year 5 (by Aug 2011). However, response plan necessary for staff to address spill response and containment, hazard assessment, coordination with qualified local spill responder, etc. Assume costs for incident response and related activities covered under implementation of IDDE Program (D3). Assume that existing Spill Prevention Control and Countermeasure (SPCC) Plan developed for CWU Main Campus addresses spill response and is included in IDDE Program Plan. However, existing plan likely need to be reviewed by permit compliance staff and updated in Year 4.	Review and update existing plan, including the collection of necessary information and coordination with qualified spill responder. Update IDDE Program Plan when completed. Incorporate into future staff training as appropriate. Distribute updated spill response plan with various CWU Depts., City, emergency response, fire department, and other involved parties.	
YEAR 5			
D1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern non-stormwater discharges.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted (see E1 and F1) since CWU will be required to follow requirements (or equivalent). Assume that City has adopted discrete ordinances to comply with NPDES requirements and is fully implementing and enforcing.	Continue to comply with all relevant ordinances, rules, and regulations that pertain to stormwater. Update written policy, as necessary.	
D3. Review and update written IDDE Program Plan as needed.	Assume limited staff time to review, evaluate, and update written IDDE Program Plan. Assume training course for staff involved in IDDE Program is continued from Year 4 with costs covered under staff education (D4).	Review, evaluate, and update written IDDE Program Plan as needed. Includes review and update of Enforcement Plan and current Spill Response Plan. Provide continued training for relevant staff.	
D4. Continue implementation of IDDE Program and enforcement mechanism. CWU staff to conduct field inspections and visually inspect for illicit discharges at 1/3 of all known outfalls that discharge to surface waters.	Field assessments include visual inspection of outfalls during dry weather and documentation of observations and findings consistent with IDDE Program Plan. 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 consistent with enforcement plan.	Conduct field assessments at 1/3 of all known outfalls and conduct necessary follow-up activities to ensure termination of illicit discharges identified. Keep records of inspections and follow-up activities.	
D5. Provide continued staff training or coordinate with existing training efforts to educate relevant staff on proper BMPs for preventing spills and illicit discharges.	Assume that existing trained staff continue to receive annual refresher courses. Training of additional staff must be conducted no later than 180 days prior to expiration date of Permit (by Aug 2011). However, assume that some training of additional staff begins in Year 2 in order to conduct activities related to IDDE Program, including illicit discharge detection, field assessments, tracing methods, spill response, enforcement activities, etc.	Continue to provide staff training through annual refresher courses for those currently trained. Provide annual refresher for additional staff trained. Evaluate need for training update.	
D6. Update completed map of CWU MS4, including new and removed connections, updates to system characteristic data and information, location of previously unknown outfalls and connections, etc.	Assume that CWU has completed MS4 mapping and field survey work by end of Year 2. Assume minimal work needed for annual updates to map by permit compliance staff.	Annually update MS4 mapping.	
D7. Review and update Spill Response Plan as needed. Continue to implement plan.	Note that minimum requirements do not require that Spill Response Plan be completed until Year 5 (by Aug 2011). However, response plan necessary for staff to address spill response and containment, hazard assessment, coordination with qualified local spill responder, etc. Assume costs for incident response and related activities covered under implementation of IDDE Program (D3). Assume some time for plan to be reviewed by permit compliance staff and updated as needed (e.g., updates of contact personnel information and phone numbers, etc.).	Review revised plan and update as necessary. Include updated version in IDDE Program Plan and redistribute current version to various CWU Depts., City, emergency response, fire department, and other involved parties.	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List √
NPDES			
E. Construction Site Stormwater Runoff Control: Conduct activities and coordinate with local jurisdiction to reduce pollutants in runoff to the MS4 from construction sites one or more acres in size.			
YEAR 1			
E1. Comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses existing and relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Utilize the Minimum Technical Requirements in Appendix 1 of the Permit as a basis for the development of the written policy since CWU will be required to follow requirements (or equivalent) when the City develops and adopts discrete ordinances to comply with NPDES requirements (i.e., Construction and Post-Construction ordinances), which is assumed to occur during Year 2. Costs included under D1.	Create a written policy and formally adopt existing and relevant City ordinances, rules, and regulations. Incorporate Minimum Technical Requirements included in Appendix 1 of the Permit into written policy.	
E2. For all construction projects under the control of CWU which require a construction stormwater permit, CWU shall obtain coverage under the statewide NPDES General Permit for Stormwater Discharges Associated with Construction Activities, or an alternative NPDES permit prior to discharging construction related stormwater.	Assume that NPDES Construction SW permits will be sought for University projects, as needed, and that appropriate construction and post-construction controls will be employed. Cost of seeking (submitting NOIs, public notification requirements, etc.) and compliance with the permit itself will be borne by the Department/Division executing the project and/or the project contractor. Assume some form of written internal procedures necessary to ensure permit coverage obtained.	Write up internal procedures for FMD-level NPDES application. Need money and staff resources to create and maintain records of seeking and complying with construction stormwater permits for University projects.	
E3. Coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern construction-phase stormwater pollution prevention measures.	Assume that a formal agreement needs to be developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction related activities. Agreement to also address post-construction stormwater management for new development and redevelopment projects (see F2).	Write up a MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-construction SW management.	
E4. Provide training or coordinate with existing training efforts to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.	Assume that a formal ongoing training program for relevant staff needs to be established and documented. Existing training opportunities provided through IET Construction Management (standard curriculum) may be adequate for permit compliance but needs to be reviewed and updated/enhanced if IET willing to provide staff training. May also consider coordination of training with the City of Ellensburg.	Develop training materials and provide in-house training or send relevant staff to external training on proper ESC BMPs, SWPPP requirements, and other related requirements.	
E5. Coordinate as requested with Ecology or the City of Ellensburg to provide access for inspection of construction sites or other land disturbances, which are under the control of CWU during the active grading and/or construction period.	Assumed that coordination for access is a necessary compliance activity associated with Construction SW permits and the City's Construction Stormwater Management ordinance which will include procedures for site plan review, review of SWPPPs, site inspection, and enforcement of construction phase stormwater pollution prevention measures.	Continue to provide access for inspection of construction sites as requested.	
YEAR 2			
E1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses existing and relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted since CWU will be required to follow requirements (or equivalent) when the City develops and adopts discrete ordinances to comply with NPDES requirements (i.e., Construction and Post-Construction ordinances), which is assumed to occur during Year 2. Cost to review and update included in D1.	Continue to comply with all existing and relevant ordinances, rules, and regulations that pertain to stormwater. Track status of City's efforts to develop and adopt discrete stormwater-related ordinances. Update written policy, as necessary.	
E2. For all construction projects under the control of CWU which require a construction stormwater permit, CWU shall obtain coverage under the statewide NPDES General Permit for Stormwater Discharges Associated with Construction Activities, or an alternative NPDES permit prior to discharging construction related stormwater.	Assume that NPDES Construction SW permits will be sought for University projects, as needed, and that appropriate construction and post-construction controls will be employed. Cost of seeking (submitting NOIs, public notification requirements, etc.) and compliance with the permit itself will be borne by the Department/Division executing the project and/or the project contractor. Assume some form of written internal procedures necessary to ensure permit coverage obtained.	Update internal procedures written for FMD-level NPDES application. Need money and staff resources to create and maintain records of seeking and complying with construction stormwater permits for University projects.	
E3. Continue to coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern construction-phase stormwater pollution prevention measures.	Assume that the formal agreement developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction-related activities, and to address post-construction stormwater management for new development and redevelopment projects (see F2), is annually reviewed and updated as necessary. Assume minimal estimate for some coordination efforts.	Review and update written MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-const SW management. Continue to coordinate.	
E4. Continue to provide training to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.	Assume that a formal ongoing training program for relevant staff is needed. Existing training opportunities provided through IET Construction Management may be adequate for permit compliance but needs to be reviewed and updated/enhanced if IET willing to provide staff training. May also consider coordination of training with the City of Ellensburg. Assume level of effort drops because most training materials and procedures have been established.	Continue to provide in-house training or send relevant staff to external training on proper ESC BMPs, SWPPP requirements, and other related requirements.	
E5. Continue to coordinate as requested with Ecology or the City of Ellensburg to provide access for inspection of construction sites or other land disturbances, which are under the control of CWU during the active grading and/or construction period.	Assumed that coordination for access is a necessary compliance activity associated with Construction SW permits and the City's Construction Stormwater Management ordinance which will include procedures for site plan review, review of SWPPPs, site inspection, and enforcement of construction phase stormwater pollution prevention measures.	Continue to provide access for inspection of construction sites as requested.	
YEAR 3			
E1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses existing and relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted since CWU will be required to follow requirements (or equivalent). Assume that City has adopted discrete ordinances to comply with NPDES requirements and will begin to implement and enforce. Cost to review and update included in D1.	Continue to comply with all relevant ordinances, rules, and regulations that pertain to stormwater. Update written policy, as necessary.	
E2. For all construction projects under the control of CWU which require a construction stormwater permit, CWU shall obtain coverage under the statewide NPDES General Permit for Stormwater Discharges Associated with Construction Activities, or an alternative NPDES permit prior to discharging construction related stormwater.	Assume that NPDES Construction SW permits will be sought for University projects, as needed, and that appropriate construction and post-construction controls will be employed. Cost of seeking (submitting NOIs, public notification requirements, etc.) and compliance with the permit itself will be borne by the Department/Division executing the project and/or the project contractor. Assume some form of written internal procedures necessary to ensure permit coverage obtained.	Update internal procedures written for FMD-level NPDES application. Need money and staff resources to create and maintain records of seeking and complying with construction stormwater permits for University projects.	
E3. Continue to coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern construction-phase stormwater pollution prevention measures.	Assume that the formal agreement developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction-related activities, and to address post-construction stormwater management for new development and redevelopment projects (see F2), is annually reviewed and updated as necessary. Assume minimal estimate for some coordination efforts.	Review and update written MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-const SW management. Continue to coordinate.	
E4. Continue to provide training to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.	Assume that a formal on-going training program for relevant staff is needed. Existing training opportunities provided through IET Construction Management may be adequate for permit compliance but needs to be reviewed and updated/enhanced if IET willing to provide staff training. May also consider coordination of training with the City of Ellensburg. Assume level of effort drops because most training materials and procedures have been established.	Continue to provide in-house training or send relevant staff to external training on proper ESC BMPs, SWPPP requirements, and other related requirements.	
E5. Continue to coordinate as requested with Ecology or the City of Ellensburg to provide access for inspection of construction sites or other land disturbances, which are under the control of CWU during the active grading and/or construction period.	Assumed that coordination for access is a necessary compliance activity associated with Construction SW permits and the City's Construction Stormwater Management ordinance which will include procedures for site plan review, review of SWPPPs, site inspection, and enforcement of construction phase stormwater pollution prevention measures.	Continue to provide access for inspection of construction sites as requested.	

YEAR 4			
E1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted since CWU will be required to follow requirements (or equivalent). Assume that City has adopted discrete ordinances to comply with NPDES requirements and is fully implementing and enforcing. Cost to review and update included in D1.	Continue to comply with all relevant ordinances, rules, and regulations that pertain to stormwater. Update written policy, as necessary.	
E2. For all construction projects under the control of CWU which require a construction stormwater permit, CWU shall obtain coverage under the statewide NPDES General Permit for Stormwater Discharges Associated with Construction Activities, or an alternative NPDES permit prior to discharging construction related stormwater.	Assume that NPDES Construction SW permits will be sought for University projects, as needed, and that appropriate construction and post-construction controls will be employed. Cost of seeking (submitting NOIs, public notification requirements, etc.) and compliance with the permit itself will be borne by the Department/Division executing the project and/or the project contractor. Assume some form of written internal procedures necessary to ensure permit coverage obtained.	Update internal procedures written for FMD-level NPDES application. Need money and staff resources to create and maintain records of seeking and complying with construction stormwater permits for University projects.	
E3. Continue to coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern construction-phase stormwater pollution prevention measures.	Assume that the formal agreement developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction-related activities, and to address post-construction stormwater management for new development and redevelopment projects (see F2), is annually reviewed and updated as necessary. Assume minimal estimate for some coordination efforts.	Review and update written MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-const SW management. Continue to coordinate.	
E4. Continue to provide training to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.	Assume that a formal on-going training program for relevant staff is needed. Existing training opportunities provided through IET Construction Management may be adequate for permit compliance but needs to be reviewed and updated/enhanced if IET willing to provide staff training. May also consider coordination of training with the City of Ellensburg. Assume level of effort drops because most training materials and procedures have been established.	Continue to provide in-house training or send relevant staff to external training on proper ESC BMPs, SWPPP requirements, and other related requirements.	
E5. Continue to coordinate as requested with Ecology or the City of Ellensburg to provide access for inspection of construction sites or other land disturbances, which are under the control of CWU during the active grading and/or construction period.	Assumed that coordination for access is a necessary compliance activity associated with Construction SW permits and the City's Construction Stormwater Management ordinance which will include procedures for site plan review, review of SWPPPs, site inspection, and enforcement of construction phase stormwater pollution prevention measures.	Continue to provide access for inspection of construction sites as requested.	
YEAR 5			
E1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted since CWU will be required to follow requirements (or equivalent). Assume that City has adopted discrete ordinances to comply with NPDES requirements and is fully implementing and enforcing. Cost to review and update included in D1.	Continue to comply with all relevant ordinances, rules, and regulations that pertain to stormwater. Update written policy, as necessary.	
E2. For all construction projects under the control of CWU which require a construction stormwater permit, CWU shall obtain coverage under the statewide NPDES General Permit for Stormwater Discharges Associated with Construction Activities, or an alternative NPDES permit prior to discharging construction related stormwater.	Assume that NPDES Construction SW permits will be sought for University projects, as needed, and that appropriate construction and post-construction controls will be employed. Cost of seeking (submitting NOIs, public notification requirements, etc.) and compliance with the permit itself will be borne by the Department/Division executing the project and/or the project contractor. Assume some form of written internal procedures necessary to ensure permit coverage obtained.	Update internal procedures written for FMD-level NPDES application. Need money and staff resources to create and maintain records of seeking and complying with construction stormwater permits for University projects.	
E3. Continue to coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern construction-phase stormwater pollution prevention measures.	Assume that the formal agreement developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction-related activities, and to address post-construction stormwater management for new development and redevelopment projects (see F2), is annually reviewed and updated as necessary. Assume minimal estimate for some coordination efforts.	Review and update written MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-const SW management. Continue to coordinate.	
E4. Continue to provide training to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.	Assume that a formal ongoing training program for relevant staff is needed. Existing training opportunities provided through IET Construction Management may be adequate for permit compliance but needs to be reviewed and updated/enhanced if IET willing to provide staff training. May also consider coordination of training with the City of Ellensburg. Assume level of effort drops because most training materials and procedures have been established.	Continue to provide in-house training or send relevant staff to external training on proper ESC BMPs, SWPPP requirements, and other related requirements.	
E5. Continue to coordinate as requested with Ecology or the City of Ellensburg to provide access for inspection of construction sites or other land disturbances, which are under the control of CWU during the active grading and/or construction period.	Assumed that coordination for access is a necessary compliance activity associated with Construction SW permits and the City's Construction Stormwater Management ordinance which will include procedures for site plan review, review of SWPPPs, site inspection, and enforcement of construction phase stormwater pollution prevention measures.	Continue to provide access for inspection of construction sites as requested.	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List √
NPDES			
F. Post Construction Stormwater Management: Coordinate with local jurisdiction to address post construction stormwater runoff to the MS4 from sites one or more acres in size.			
YEAR 1			
F1. Comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern post-construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses existing and relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Utilize the Minimum Technical Requirements in Appendix 1 of the Permit as a basis for the development of the written policy since CWU will be required to follow requirements (or equivalent) when the City develops and adopts discrete ordinances to comply with NPDES requirements (i.e., Construction and Post-Construction ordinances), which is assumed to occur during Year 2. Costs included under D1.	Create a written policy and formally adopt existing and relevant City ordinances, rules, and regulations. Incorporate Minimum Technical Requirements included in Appendix 1 of the Permit into written policy.	
F2. Coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern post-construction stormwater pollution prevention measures.	Assume that a formal agreement needs to be developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction related activities (see E3). Agreement to also address post-construction stormwater management for new development and redevelopment projects. Costs to develop agreement included in E3.	Write up a MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-construction SW management.	
YEAR 2			
F1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern post-construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses existing and relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted since CWU will be required to follow requirements (or equivalent) when the City develops and adopts discrete ordinances to comply with NPDES requirements (i.e., Construction and Post-Construction ordinances), which is assumed to occur during Year 2. Cost to review and update include in D1.	Continue to comply with all existing and relevant ordinances, rules, and regulations that pertain to stormwater. Track status of City's efforts to develop and adopt discrete stormwater-related ordinances. Update written policy, as necessary.	
F2. Continue to coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern post-construction stormwater pollution prevention measures.	Assume that the formal agreement developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction-related activities (see E3), and to address post-construction stormwater management for new development and redevelopment projects, is annually reviewed and updated as necessary. Cost to review and update included in E3. Assume minimal estimate for some coordination efforts.	Review and update written MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-construction SW management. Continue to coordinate.	
YEAR 3			
F1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern post-construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses existing and relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted since CWU will be required to follow requirements (or equivalent). Assume that City has adopted discrete ordinances to comply with NPDES requirements and will begin to implement and enforce. Cost to review and update included in D1.	Continue to comply with all relevant ordinances, rules, and regulations that pertain to stormwater. Update written policy, as necessary.	
F2. Continue to coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern post-construction stormwater pollution prevention measures.	Assume that the formal agreement developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction-related activities (see E3), and to address post-construction stormwater management for new development and redevelopment projects, is annually reviewed and updated as necessary. Cost to review and update included in E3. Assume minimal estimate for some coordination efforts.	Review and update written MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-construction SW management. Continue to coordinate.	
YEAR 4			
F1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern post-construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted since CWU will be required to follow requirements (or equivalent). Assume that City has adopted discrete ordinances to comply with NPDES requirements and is fully implementing and enforcing. Cost to review and update included in D1.	Continue to comply with all relevant ordinances, rules, and regulations that pertain to stormwater. Update written policy, as necessary.	
F2. Continue to coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern post-construction stormwater pollution prevention measures.	Assume that the formal agreement developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction-related activities (see E3), and to address post-construction stormwater management for new development and redevelopment projects, is annually reviewed and updated as necessary. Cost to review and update included in E3. Assume minimal estimate for some coordination efforts.	Review and update written MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-construction SW management. Continue to coordinate.	
YEAR 5			
F1. Continue to comply with all relevant ordinances, rules, and regulations of the City of Ellensburg that govern post-construction phase stormwater pollution prevention measures.	CWU to have something in writing and adopted by Board of Trustees. Assume that written policy addresses relevant City ordinance, rules, and regulations related to non-stormwater (illicit) discharges; construction-phase SW pollution prevention measures; and post-construction SW pollution prevention measures. Assume that Minimum Technical Requirements in Appendix 1 of the Permit addressed in the written policy adopted since CWU will be required to follow requirements (or equivalent). Assume that City has adopted discrete ordinances to comply with NPDES requirements and is fully implementing and enforcing. Cost to review and update included in D1.	Continue to comply with all relevant ordinances, rules, and regulations that pertain to stormwater. Update written policy, as necessary.	
F2. Continue to coordinate with the City of Ellensburg regarding projects owned and operated by other entities which discharge into CWU's MS4, to assist the City of Ellensburg with achieving compliance with all relevant ordinances, rules, and regulations that govern post-construction stormwater pollution prevention measures.	Assume that the formal agreement developed for notification and continued coordination between CWU and other entities (City, Ellensburg Water Co., WSDOT, others) for construction-related activities (see E3), and to address post-construction stormwater management for new development and redevelopment projects, is annually reviewed and updated as necessary. Cost to review and update included in E3. Assume minimal estimate for some coordination efforts.	Review and update written MOU or similar agreement with the City, EWC, and WSDOT for formalized documentation and notification of construction-related activities and post-construction SW management. Continue to coordinate.	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List √
NPDES			
G. Pollution Prevention and Good Housekeeping for University Operations: Develop and implement an ongoing O&M program, including a staff training program, aimed at preventing or reducing pollutant runoff from University operations.			
YEAR 1			
G3. CWU to continue performing existing storm system maintenance activities. Includes, where applicable, ongoing inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection, runoff treatment and flow control facility (BMP) maintenance, and proper disposal of waste.	Costs for existing storm system maintenance activities will continue to be funded. Costs for phasing-in full stormwater system maintenance, enhanced/changed practices, and oversight by stormwater compliance staff who review and record practices and provide technical assistance will be included in Years 3-5.	CWU to continue existing storm system inspection and maintenance activities.	
G7. CWU to continue existing street sweeping program and other all season BMPs to reduce pollution into the MS4.	Costs for existing street sweeping program will continue to be funded. 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.	CWU to continue existing parking lot and street sweeping program and other all season BMPs to reduce pollution into the MS4.	
G11. From the date of permit coverage, have reviewed all University "industrial" facilities/sites and sought coverage under the statewide NPDES General Permit for Stormwater Discharges Associated with Industrial Activities for facilities/sites meeting criteria for coverage.	Assume that some work still needs to be accomplished to assess University facilities/sites for possible coverage and is conducted in Year 1. Cost will be for permit compliance staff to review criteria and facilities, and to recommend facilities seek coverage if meet criteria. 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, and to create and maintain records of assessment process, and if necessary, seeking and complying with industrial stormwater permits for University facilities/sites.	
YEAR 2			
G1. Begin developing a schedule of municipal operation and maintenance activities (O&M Plan) to minimize stormwater pollution from activities conducted by the University. The O&M Plan must include appropriate pollution prevention and good housekeeping procedures for the following operations, activities, and/or types of facilities present within the University's boundaries: stormwater collection and conveyance system O&M; road, highway, and parking lot O&M; vehicle fleet storage, washing, and maintenance; building cleaning, washing, painting and other O&M activities; park and open space O&M activities; material and equipment storage areas and maintenance areas; and all other facilities that can reasonably be expected to discharge contaminated runoff. Maintenance standards must be established that are as protective or more protective of facility function than those specified in relevant chapters of the E. WA SW Manual. The O&M Plan must include a schedule of inspections and include requirements for proper doc. and record keeping. Must be developed & implemented no later than 3 years from date of coverage (Nov 2010).	Assume that it takes two years to fully develop the O&M Plan and that appropriate staff from various Departments/Divisions are involved.	Begin developing an O&M Plan that includes appropriate pollution prevention and good housekeeping procedures for various University operations, activities, and/or facilities aimed at preventing and reducing water quality impacts. Must include schedule for inspections and activities and address methods of proper documentation and record keeping.	
G3. CWU to continue performing existing storm system maintenance activities. Includes, where applicable, ongoing inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection, runoff treatment and flow control facility (BMP) maintenance, and proper disposal of waste.	Costs for existing storm system maintenance activities will continue to be funded. Costs for phasing-in full stormwater system maintenance, enhanced/changed practices, and oversight by stormwater compliance staff who review and record practices and provide technical assistance will be included in Years 3-5.	CWU to continue existing storm system inspection and maintenance activities.	
G7. CWU to continue existing street sweeping program and other all season BMPs to reduce pollution into the MS4.	Costs for existing street sweeping program will continue to be funded. 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. Assume base program cost increases 30% per year due to escalating fuel/maintenance costs.	CWU to continue existing parking lot and street sweeping program and other all season BMPs to reduce pollution into the MS4.	
YEAR 3			
G1. Complete development and begin implementation of 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 O&M Plan. Assume that some costs to carry out the new procedures is borne by the Department/Division responsible for a given activity.	Complete development of O&M Plan that includes appropriate pollution prevention and good housekeeping procedures for various University operations, activities and/or facilities, including schedule for inspections and activities and methods for proper documentation and record keeping. Begin implementation of the plan working with affected Depts/Divisions.	
G2. Begin developing a pollution prevention and 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 one 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 direct stormwater program cost.	Develop good housekeeping training materials and program, involve various affected Departments/Divisions and associated staff.	
G3. Begin implementing storm system maintenance activities in accordance with appropriate schedules outlined in the O&M Plan. Includes inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection, runoff treatment and flow control facilities (BMP) maintenance, and 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 - consider regional facility shared with City). Assume that most necessary heavy equipment is available, however some specialized equipment may need to be purchased or rented as needed. Costs here are for phasing-in full stormwater system maintenance and oversight by stormwater 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 new/changed practices, assure record as kept. Work closely with responsible Departments/Divisions.	
G4. Locate and map all stormwater treatment and flow control facilities owned or operated by the University. Inspect each facility, making notes of conditions, maintenance needs, or other related concerns. Track all new systems coming into University ownership as development/redevelopment occurs.	Assume that locating and mapping these systems begins in the year that inspections have to be performed and that required mapping overlaps with IDDE Program (D6). University owned and operated stormwater treatment and control facilities must be regularly inspected and maintained. Assume facilities inspected on a 2-year cycle and that all facilities inspected during Year 3. 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.	Verify location and map all stormwater treatment and flow control facilities owned or operated by the University. Inspect stormwater treatment and flow control facilities. Identify repair or maintenance needs, resolve concerns, and maintain records.	
G5. Begin conducting spot checks of stormwater treatment and flow control facilities after major rainfall events (greater than a 10-year, 24-hour 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 stormwater treatment and flow control facilities after major rainfall events. Identify repair or maintenance needs, resolve concerns, and maintain records.	
G6. As soon as practicable, execute any repair and/or maintenance projects needed based on observations made during regular inspections or spot checks of University owned and 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 University owned and operated stormwater treatment and flow control facilities after major storm events. Keep records of repairs and costs.	
G7. Begin implementing enhanced pollution prevention and good housekeeping practices established in the O&M plan for roads, highways, and parking lots. Need to address deicing, anti-icing, and snow removal practices; snow disposal areas; material (e.g., salt, sand, or other chemical) storage areas; all-season BMPs to reduce road and parking lot debris and other pollutants from entering 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 CWU 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 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 Departments/Divisions.	
G8. Begin conducting all vehicle and equipment washing and maintenance in a self-contained building or in designated wash and/or maintenance areas.	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.	

G9. Begin implementing pollution prevention and good housekeeping practices established in the O&M Plan for external building maintenance activities at all University-owned buildings. The O&M Plan shall address building exterior cleaning and maintenance, including cleaning, washing, painting, and other maintenance activities.	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.	
G10. Begin implementing pollution prevention and good housekeeping practices established in the O&M Plan at all University-owned parks and open spaces. The O&M Plan shall address proper application of fertilizer, pesticides, and herbicides; sediment and erosion control; BMPs for landscape maintenance and vegetation disposal; and trash management.	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 provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible Department/Division.	
G12. Begin developing Stormwater Pollution Prevention Plans (SWPPPs) to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas not covered by a statewide NPDES Industrial Stormwater General Permit.	Assume that it takes at least one 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/facility.	Develop SWPPPs 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.	
G13. Begin implementing proper pollution prevention practices (source control and good housekeeping BMPs) for other University facilities and/or activities that would reasonably be expected to discharge contaminated runoff.	Assume that it takes at least one year to identify all other University 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.	Stormwater compliance staff provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible Department/Division.	
YEAR 4			
G2. Finish developing and execute a 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 various Departments/Divisions are involved. Assume training is provided to approximately 4 groups, including Plant O&M, Facilities Planning/Construction, Facilities Services/Administration, and Custodial/Grounds/Motor Pool. This is assumed to be a large effort, including a formal day of training in-house and a full day in the field. Assume training is lead by stormwater compliance staff and is a direct stormwater program cost. Costs to send staff to training is borne by Department/Division that staff represent.	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 outlined in the O&M Plan. Includes inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection, runoff treatment and flow control facilities (BMP) maintenance, and 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 - consider regional facility shared with City). Assume that most necessary heavy equipment is available, however some specialized equipment may need to be purchased or rented as needed. Costs here are for phasing-in full stormwater system maintenance and oversight by stormwater 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 new/changed practices, assure record as kept. Work closely with responsible Departments/Divisions.	
G4. Continue to inspect stormwater treatment and flow control facilities owned or operated by the University, making notes of conditions, maintenance needs, or other related concerns. Track all new systems coming into University ownership as development/redevelopment occurs.	University owned and operated stormwater treatment and control facilities must be regularly inspected and maintained. Assume facilities inspected on a 2-year cycle. 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. Assume that costs split in Years 4-5 since all facilities re-inspected by end of Year 5.	Inspect SW treatment and flow control facilities. Identify repair or maintenance needs, resolve concerns, and maintain records.	
G5. Continue to conduct spot checks at stormwater treatment and flow control facilities after major rainfall events (greater than a 10-year, 24-hour 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 stormwater treatment and flow control facilities after major rainfall events. Identify repair or maintenance needs, resolve concerns, and maintain records.	
G6. As soon as practicable, execute any repair and/or maintenance projects needed based on observations made during regular inspections or spot checks of University owned and 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 University owned and operated stormwater treatment and flow control facilities after major storm events. Keep records of repairs and costs.	
G7. 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 deicing, anti-icing, and snow removal practices; snow disposal areas; material (e.g., salt, sand, or other chemical) storage areas; all-season BMPs to reduce road and parking lot debris and other pollutants from entering 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 CWU 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 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 Departments/Divisions.	
G8. Continue to conduct all vehicle and equipment washing and maintenance in a self-contained building or in designated wash and/or maintenance areas.	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.	
G9. Continue phasing-in and implementing pollution prevention and good housekeeping practices established in the O&M Plan for external building maintenance activities at all University-owned buildings.	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.	
G10. Continue phasing-in and implementing pollution prevention and good housekeeping practices established in the O&M Plan at all University-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.	Stormwater compliance staff provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible Department/Division.	
G12. Finish developing and begin implementing Stormwater Pollution Prevention Plans (SWPPPs) to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas not covered by a statewide NPDES Industrial Stormwater 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/facility. Assume that level of effort drops in Years 4-5 because training materials, training program, and procedures have already been established.	Complete SWPPPs to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas; conduct training; and implement SWPPPs.	
G13. Continue phasing-in and implementing proper pollution prevention practices (source control and good housekeeping BMPs) for other University facilities and/or activities 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.	Stormwater compliance staff provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible Department/Division.	

YEAR 5

<p>G2. Update good housekeeping training of staff groups as needed.</p>	<p>Assume training is provided to approximately 4 groups, including Plant O&M, Facilities Planning/Construction, Facilities Services/Administration, and Custodial/Grounds/Motor Pool. This is assumed to be a large effort, including a formal day of training in-house and a full day in the field. Assume training is lead by stormwater compliance staff and is a direct stormwater program cost. Costs to send staff to training is borne by Department/Division that staff represent.</p>	<p>Evaluate need for training update. Update and repeat good housekeeping training program for various affected Departments/Divisions and associated staff.</p>	
<p>G3. Fully implement enhanced storm system maintenance activities in accordance with appropriate schedules outlined in the O&M Plan. Includes inspection of system components, catch basin and culvert cleaning, open channel cleaning and trash removal, structural BMP inspection, runoff treatment and flow control facility (BMP) maintenance, and proper waste disposal.</p>	<p>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 - consider regional facility shared with City). Assume that most necessary heavy equipment is available, however some specialized equipment may need to be purchased or rented as needed. Costs here are for phasing-in full stormwater system maintenance and oversight by stormwater compliance staff who review and record practices and provide technical assistance.</p>	<p>Estimated costs for enhanced maintenance program with stormwater compliance staff to provide oversight and technical assistance during implementation of new/changed practices, assure record as kept. Work closely with responsible Departments/Divisions.</p>	
<p>G4. Continue to inspect stormwater treatment and flow control facilities owned or operated by the University, making notes of conditions, maintenance needs, or other related concerns. Track all new systems coming into University ownership as development/redevelopment occurs.</p>	<p>University owned and operated stormwater treatment and control facilities must be regularly inspected and maintained. Assume facilities inspected on a 2-year cycle. 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. Assume that costs split in Years 4-5 since all facilities re-inspected by end of Year 5.</p>	<p>Inspect all remaining SW treatment and flow control facilities. Identify repair or maintenance needs, resolve concerns, and maintain records.</p>	
<p>G5. Continue to conduct spot checks at stormwater treatment and flow control facilities after major rainfall events (greater than a 10-year, 24-hour recurrence interval).</p>	<p>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.</p>	<p>Conduct spot checks of stormwater treatment and flow control facilities after major rainfall events. Identify repair or maintenance needs, resolve concerns, and maintain records.</p>	
<p>G6. As soon as practicable, execute any repair and/or maintenance projects needed based on observations made during regular inspections or spot checks of University owned and operated stormwater treatment and flow control facilities.</p>	<p>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).</p>	<p>Fix or repair observed problems at University owned and operated stormwater treatment and flow control facilities after major storm events. Keep records of repairs and costs.</p>	
<p>G7. Fully implement enhanced pollution prevention and good housekeeping practices established in the O&M plan for roads, highways, parking lots. Need to address deicing, anti-icing, and snow removal practices; snow disposal areas; material (e.g., salt, sand, or other chemical) storage areas; all-season BMPs to reduce road and parking lot debris and other pollutants from entering the MS4.</p>	<p>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 CWU 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 stormwater compliance staff to review and record practices and provide technical assistance.</p>	<p>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 Departments/Divisions.</p>	
<p>G8. Fully implement all vehicle and equipment washing and maintenance in in a self-contained building or in designated wash and/or maintenance areas.</p>	<p>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.</p>	<p>Stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible Department/Division.</p>	
<p>G9. Fully implement pollution prevention and good housekeeping practices established in the O&M Plan for external building maintenance activities at all University-owned buildings.</p>	<p>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.</p>	<p>Stormwater compliance staff to provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible Department/Division.</p>	
<p>G10. Fully implement pollution prevention and good housekeeping practices established in the O&M Plan at all University-owned parks and open spaces.</p>	<p>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.</p>	<p>Stormwater compliance staff provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible Department/Division.</p>	
<p>G12. Fully implement Stormwater Pollution Prevention Plans (SWPPPs) to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas not covered by a statewide NPDES Industrial Stormwater General Permit. Update training materials and execute training as needed.</p>	<p>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/facility. Assume that level of effort drops in years 4-5 because training materials, training program, and procedures have already been established.</p>	<p>Implement SWPPPs to protect water quality at material storage areas, heavy equipment storage areas, and maintenance areas; conduct training; and continue to implement SWPPPs.</p>	
<p>G13. Fully implement proper pollution prevention practices (source control and good housekeeping BMPs) for other University facilities and/or activities that would reasonably be expected to discharge contaminated runoff.</p>	<p>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.</p>	<p>Stormwater compliance staff provide oversight and technical assistance during implementation of changed practices, assure records are kept. Work closely with responsible Department/Division.</p>	

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 Sub-Basin, Upper Yakima River			
YEAR 1			
H1. Participate in the development of TMDLs.	Assume this is required to know and control liability. Assume that this involves staff time to review materials, attend meetings, prepare and submit correspondence.	Participation in TMDL development may be desirable. Upper Yakima River Temperature TMDL ongoing.	
H2. Comply with applicable TMDL provisions (could involve education and outreach activities coordinated with local agencies, enhanced source control efforts, retrofitting treatment into existing storm drains, outfall monitoring, etc.).	Compliance with the Permit is the only requirement CWU presently needs to fulfill to be in compliance with applicable TMDLs. However, assume minimal estimate to allow for minor compliance activities.	None presently; however, may be desirable to coordinate with City's TMDL implementation activities.	
H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on local receiving waters.	Assume record keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of annual report to Ecology.	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 liability. Assume that this involves staff time to review materials, attend meetings, prepare and submit correspondence.	Participation in TMDL development may be desirable. Upper Yakima River Temperature TMDL ongoing.	
H2. Comply with applicable TMDL provisions (could involve education and outreach activities coordinated with local agencies, enhanced source control efforts, retrofitting treatment into existing storm drains, outfall monitoring, etc.).	Compliance with the Permit is the only requirement CWU presently needs to fulfill to be in compliance with applicable TMDLs. However, assume minimal estimate to allow for minor compliance activities.	None presently; however, may be desirable to coordinate with City's TMDL implementation activities.	
H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on local receiving waters.	Assume record keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of Annual Report to Ecology.	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 liability. Assume that this involves staff time to review materials, attend meetings, prepare and submit correspondence.	Participation in TMDL development may be desirable.	
H2. Comply with applicable TMDL provisions (could involve education and outreach activities coordinated with local agencies, enhanced source control efforts, retrofitting treatment into existing storm drains, outfall monitoring, etc.).	Compliance with the Permit is the only requirement CWU presently needs to fulfill to be in compliance with applicable TMDLs. However, assume minimal estimate to allow for minor compliance activities.	None presently; however, may be desirable to coordinate with City's TMDL implementation activities.	
H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on local receiving waters.	Assume record keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of Annual Report to Ecology.	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 liability. Assume that this involves staff time to review materials, attend meetings, prepare and submit correspondence.	Participation in TMDL development may be desirable.	
H2. Comply with applicable TMDL provisions (could involve education and outreach activities coordinated with local agencies, enhanced source control efforts, retrofitting treatment into existing storm drains, outfall monitoring, etc.).	Compliance with the Permit is the only requirement CWU presently needs to fulfill to be in compliance with applicable TMDLs. However, assume minimal estimate to allow for minor compliance activities.	None presently; however, may be desirable to coordinate with City's TMDL implementation activities.	
H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on local receiving waters.	Assume record keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of Annual Report to Ecology.	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 liability. Assume that this involves staff time to review materials, attend meetings, prepare and submit correspondence.	Participation in TMDL development may be desirable.	
H2. Comply with applicable TMDL provisions (could involve education and outreach activities coordinated with local agencies, enhanced source control efforts, retrofitting treatment into existing storm drains, outfall monitoring, etc.).	Compliance with the Permit is the only requirement CWU presently needs to fulfill to be in compliance with applicable TMDLs. However, assume minimal estimate to allow for minor compliance activities.	None presently; however, may be desirable to coordinate with City's TMDL implementation activities.	
H3. Track status of TMDL implementation progress. Track and record stormwater efforts aimed at addressing TMDLs on local receiving waters.	Assume record keeping and tracking status of TMDL implementation minimal. Status of TMDL implementation included as part of annual report to Ecology.	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 CWU participate in local water-quality monitoring program(s) aimed at assessing baseline conditions and/or to evaluate effectiveness of City/CWU stormwater management programs or TMDL implementation activities. Includes monitoring of outfall quality to receiving waters. Provide a description of any stormwater monitoring or other studies conducted by, on behalf of, or reported to CWU during the reporting period and include in the annual report to Ecology.	Recommended activity for CWU to consider. Specific water quality sampling and testing not required during the effective term of the Permit, unless required as part of applicable TMDL or required for characterizing illicit discharges. Assume some participation by CWU with City and/or local agencies (KCCD, KRD, others) conducting routine or special water/stormwater quality monitoring studies.	Participate in local water/stormwater quality monitoring studies. Submit description of studies with annual report.	
YEAR 2			
I1. Recommend that CWU participate in local water-quality monitoring program(s) aimed at assessing baseline conditions and/or to evaluate effectiveness of City/CWU stormwater management programs or TMDL implementation activities. Includes monitoring of outfall quality to receiving waters. Provide a description of any stormwater monitoring or other studies conducted by, on behalf of, or reported to CWU during the reporting period and include in the annual report to Ecology.	Recommended activity for CWU to consider. Specific water quality sampling and testing not required during the effective term of the Permit, unless required as part of applicable TMDL or required for characterizing illicit discharges. Assume some participation by CWU with City and/or local agencies (KCCD, KRD, others) conducting routine or special water/stormwater quality monitoring studies.	Continue to participate in local water/stormwater quality monitoring studies. Submit description of studies with annual report.	
YEAR 3			
I1. Recommend that CWU participate in local water-quality monitoring program(s) aimed at assessing baseline conditions and/or to evaluate effectiveness of City/CWU stormwater management programs or TMDL implementation activities. Includes monitoring of outfall quality to receiving waters. Provide a description of any stormwater monitoring or other studies conducted by, on behalf of, or reported to CWU during the reporting period and include in the annual report to Ecology.	Recommended activity for CWU to consider. Specific water quality sampling and testing not required during the effective term of the Permit, unless required as part of applicable TMDL or required for characterizing illicit discharges. Assume some participation by CWU with City and/or local agencies (KCCD, KRD, others) conducting routine or special water/stormwater quality monitoring studies.	Continue to participate in local water/stormwater quality monitoring studies. Submit description of studies with annual report.	
YEAR 4			
I1. Recommend that CWU participate in local water-quality monitoring program(s) aimed at assessing baseline conditions and/or to evaluate effectiveness of City/CWU stormwater management programs or TMDL implementation activities. Includes monitoring of outfall quality to receiving waters. Provide a description of any stormwater monitoring or other studies conducted by, on behalf of, or reported to CWU during the reporting period and include in the annual report to Ecology.	Recommended activity for CWU to consider. Specific water quality sampling and testing not required during the effective term of the Permit, unless required as part of applicable TMDL or required for characterizing illicit discharges. Assume some participation by CWU with City and/or local agencies (KCCD, KRD, others) conducting routine or special water/stormwater quality monitoring studies.	Continue to participate in local water/stormwater quality monitoring studies. Submit description of studies with annual report.	
YEAR 5			
I1. Recommend that CWU participate in local water-quality monitoring program(s) aimed at assessing baseline conditions and/or to evaluate effectiveness of City/CWU stormwater management programs or TMDL implementation activities. Includes monitoring of outfall quality to receiving waters. Provide a description of any stormwater monitoring or other studies conducted by, on behalf of, or reported to CWU during the reporting period and include in the annual report to Ecology.	Recommended activity for CWU to consider. Specific water quality sampling and testing not required during the effective term of the Permit, unless required as part of applicable TMDL or required for characterizing illicit discharges. Assume some participation by CWU with City and/or local agencies (KCCD, KRD, others) conducting routine or special water/stormwater quality monitoring studies.	Continue to participate in local water/stormwater quality monitoring studies. Submit description of studies with annual report.	

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 with annual report, follow program component format established by Ecology.	Must submit a copy of SWMP to Ecology with the annual report no later than March 31, 2008. Assume that development of the SWMP begins during Permit Year 1.	Prepare SWMP according to Ecology format. Assume effort by multiple staff and review/approval by designated individual(s).	
J2. Recommend that CWU 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 collected to be used for the preparation of annual reports consistent with reporting requirements outlined in the Permit.	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; and (5) 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 with annual report.	Assume this update occurs in the 4th quarter 2008 with the updated plan submitted with annual report by March 31, 2009 of the following year.	Update SWMP according to Ecology format. Assume effort by multiple staff and review/approval by designated individual(s).	
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 collected to be used for the preparation of annual reports consistent with reporting requirements outlined in Permit.	Assume that this involves reviewing and modifying the process developed as needed.	Complete development of and 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 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, 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 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. 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; and (3) summary of SWMP evaluation (including eval of effectiveness of SWMP and appropriateness of BMPs selected); (4) notice if relying upon another entity (City) for implementation of any BMPs or other permit obligations; (5) any updated/new information since the last reporting period, and (6) notification of any jurisdictional boundary changes that increase/decrease Permit coverage area and SWMP implications.	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 one-third time from January 1 to March 31 to prepare the report - including gathering all of the records, meeting with department/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 with annual report.	Assume this update occurs in the 4th quarter 2009 with the updated plan submitted with annual report by March 31, 2010 of the following year.	Update SWMP according to Ecology format. Assume effort by multiple staff and review/approval by designated individual(s).	
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 collected to be used for the preparation of annual reports consistent with reporting requirements outlined in Permit.	Assume that this involves reviewing and modifying the process developed 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 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.	Review/update evaluation approach, conduct evaluation, prepare narrative of process and results for inclusion in annual report to Ecology.	
J4. Prepare and submit Year 2 annual report and updated SWMP to Ecology. Update prior year annual report and address same considerations as described under 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 one-third time from January 1 to March 31 to prepare the report - including gathering all of the records, meeting with department/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 with annual report.	Assume this update occurs in the 4th quarter 2010 with the updated plan submitted with annual report by March 31, 2011 of the following year.	Update SWMP according to Ecology format. Assume effort by multiple staff and review/approval by designated individual(s).	
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 collected to be used for the preparation of annual reports consistent with reporting requirements outlined in Permit.	Assume that this involves reviewing and modifying the process developed 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 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.	Review/update evaluation approach, conduct evaluation, prepare narrative of process and results for inclusion in annual report to Ecology.	
J4. Prepare and submit Year 3 annual report and updated SWMP to Ecology. Update prior year annual report and address same considerations as described under 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 one-third time from January 1 to March 31 to prepare the report - including gathering all of the records, meeting with department/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 with annual report.	Assume this update occurs in the 4th quarter 2011 with the updated plan submitted with annual report by March 31, 2012 of the following year.	Update SWMP according to Ecology format. Assume effort by multiple staff and review/approval by designated individual(s).	
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 collected to be used for the preparation of annual reports consistent with reporting requirements outlined in Permit.	Assume that this involves reviewing and modifying the process developed 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 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.	Review/update evaluation approach, conduct evaluation, prepare narrative of process and results for inclusion in annual report to Ecology.	
J4. Prepare and submit Year 4 annual report and updated SWMP to Ecology. Update prior year annual report and address same considerations as described under 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 one-third time from January 1 to March 31 to prepare the report - including gathering all of the records, meeting with department/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			
	NPDES equipment funds to be requested for 09/11 biennium.		
YEAR 2			
	NPDES equipment funds to be requested for 09/11 biennium.		
YEAR 3			
	NPDES equipment funds to be requested for 09/11 biennium.		
YEAR 4			
K1. Illicit Discharge Detection and Elimination Equipment Fund.	Assume that funds needed for the purchase and replacement of equipment needed to execute the IDDE Program. Assume that a formal funding request is made for necessary equipment during 2009/2011 biennium. Typical equipment needed includes vehicle rental, field testing equipment, flow monitoring equipment, field computer, digital camera, survey and GPS equipment, safety equipment, etc.	Request additional funding to support purchase and replacement of needed IDDE Program equipment.	
K2. Good Housekeeping Equipment Fund.	Assume that funds needed to allow for the purchase and R&R of O&M related equipment needed to execute pollution prevention and good housekeeping activities. Assume that formal funding request made for necessary equipment during 2009/2011 biennium. Assume that purchasing and R&R of most major equipment will be shared between various Departments/Divisions sharing use or benefit of the equipment.	Request additional funding to support purchase and replacement of needed O&M and related equipment. Funds to contribute to Departments/Divisions responsible for bulk of pollution prevention and good housekeeping activities and costs.	
YEAR 5			
K1. Illicit Discharge Detection and Elimination Equipment Fund.	Assume that funds needed for the purchase and replacement of equipment needed to execute the IDDE Program. Assume that a formal funding request is made for necessary equipment during 2009/2011 biennium. Typical equipment needed includes vehicle rental, field testing equipment, flow monitoring equipment, field computer, digital camera, survey and GPS equipment, safety equipment, etc.	Additional funding requested to support purchase and replacement of needed IDDE Program equipment.	
K2. Good Housekeeping Equipment Fund.	Assume that funds needed to allow for the purchase and R&R of O&M related equipment needed to execute pollution prevention and good housekeeping activities. Assume that formal funding request made for necessary equipment during 2009/2011 biennium. Assume that purchasing and R&R of most major equipment will be shared between various Departments/Divisions sharing use or benefit of the equipment.	Additional funding requested to support purchase and replacement of needed O&M and related equipment. Funds to contribute to Departments/Divisions responsible for bulk of pollution prevention and good housekeeping activities and costs.	

Summary of Regulatory Requirements	Notes & Assumptions	Assessment of New Activities Needed for Compliance	Status Check List √
NPDES			
L. NPDES Capital Project Funds			
YEAR 1			
	NPDES capital project funds to be requested for 09/11 biennium.		
YEAR 2			
	NPDES capital project funds to be requested for 09/11 biennium.		
YEAR 3			
	NPDES capital project funds to be requested for 09/11 biennium.		
YEAR 4			
L1. Known or planned stormwater project needs.	Assume that funds needed for known or planned drainage/flooding/water quality projects to cover costs associated with engineering design, permitting, PS&E, and construction. Assume that a formal funding request is made for known or planned CIPs during 2009/2011 biennium. Assume funds to be contributed to Department/Division responsible for the bulk of CIP costs. Staff have identified the need for a properly designed (including stormwater treatment) washout station at the Jongeward Complex. Total project cost estimated at \$250K.	Request additional funding to support planning, design, and construction of known or planned drainage/flooding CIPs. Funds to contribute to Department/Division responsible for bulk of CIP costs.	
L2. Fund to cover needs of projects discovered as SWM Program is implemented.	Assume that funds needed for projects that will inevitably be discovered during SWM Program implementation that must be addressed. Assume that a formal funding request made for unforeseen projects during 2009/2011 biennium. 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 program budget in future bienniums.	Request additional funding to support discovered CIP needs.	
YEAR 5			
L1. Known or planned stormwater project needs.	Assume that funds needed for known or planned drainage/flooding/water quality projects to cover costs associated with engineering design, permitting, PS&E, and construction. Assume that a formal funding request is made for known or planned CIPs during 2009/2011 biennium. Assume funds to be contributed to Department/Division responsible for the bulk of CIP costs. Staff have identified the need for a properly designed (including stormwater treatment) washout station at the Jongeward Complex. Total project cost estimated at \$250K.	Additional funding requested to support planning, design, and construction of known or planned drainage/flooding CIPs. Funds to contribute to Department/Division responsible for bulk of CIP costs.	
L2. Fund to cover needs of projects discovered as SWM Program is implemented.	Assume that funds needed for projects that will inevitably be discovered during SWM Program implementation that must be addressed. Assume that a formal funding request made for unforeseen projects during 2009/2011 biennium. 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 program budget in future bienniums.	Additional funding requested to support discovered CIP needs.	