CITY OF PULLMAN

Public Works and Planning Departments

325 S.E. Paradise Street, Pullman, WA 99163
(509) 338-3220 or (509) 338-3213 Fax (509) 338-3282
www.pullman-wa.gov

March 19, 2013

Department of Ecology
Water Quality Program
Municipal Stormwater Permits
P.O. Box 47696
Olympia, WA 98504-7696

To Whom It May Concern:

Please find enclosed two hard copies of the City of Pullman's Annual Report for 2012. An electronic copy was submitted via email to PH2_EAnnRpt@ecy.wa.gov and also to Permit Manager, Dave Duncan. Submission of the enclosed documents satisfies Pullman's annual reporting requirement under the NPDES Phase II Municipal Stormwater Permit for Eastern Washington.

Please feel free to contact me with any questions or comments.

Sincerely,

Rob Buchert
Stormwater Services Program Manager
City of Pullman
325 SE Paradise Street
Pullman, WA 99163-2631
(509) 338-3314
rob.buchert@pullman-wa.gov

I. Permittee Information

Permittee Name City of Pullman	**Permittee Coverage Number** WAR04-6504
Contact Name Rob Buchert	**Phone Number** 509-338-3314
Mailing Address 325 SE Paradise Street	
City Pullman	**State** WA / **Zip + 4** 99163-2631
Email Adddress rob.buchert@pullman-wa.gov	

II. Regulated Small MS4 Location

Jurisdiction City of Pullman	***Entity Type: Put an X in the box that applies***		
	County	**City/Town**	**Other**
		X	
Major Receiving Water(s) South Fork Palouse River			

III. Relying on another Governmental Entity

If you are relying on another governmental entity to satisfy one or more of the permit obligations, list the entity and briefly describe the permit obligation(s) they are implementing on your behalf below. ***Attach a copy of your agreement with the other entity to provide additional detail (unless previously submitted).***

Name of Entity:	**Permit Obligation(s):**
Washington State University	Construction (S5.B.4.)
(Agreement provided to Ecology 3/30/12)	Post-Construction (S5.B.5.)

IV. Certification

All annual reports must be signed and certified by the responsible official(s) of permittee or co-permittees. Please print and sign this page of the reporting form and mail it (with an original signature) to Ecology at the address noted below. An electronic signature will not suffice.

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that Qualified Personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for willful violations.

Name	Kevin [illegible]	Title	Public Works Director	Date	3/18/13
Name		Title		Date	
Name		Title		Date	
Name		Title		Date	
Name		Title		Date	

VI. Status Report Covering Calendar Year 2012

Jurisdiction: City of Pullman

PLEASE label information in any attachments with corresponding question numbers.
PLEASE fill out your jurisdiction name in line 1 above.
PLEASE refer to the INSTRUCTIONS tab for assistance filling out this table.
For additional clarification on how to answer questions, put cursor over cell with red flagged corners.
PLEASE review your work for completeness and accuracy. Save this worksheet as you go!

	Question	Y/N/ NA	Comments (50 word limit)	Name of Attachment & Page Number, if applicable
1	**Attached** annual written update of Permittee's Stormwater Management Program (SWMP), including applicable requirements under S5.A.3 and S9.	Y	The updated SWMP is located on the city's website at www.pullman-wa.gov under "Departments" - "Public Works" - "Stormwater Services".	**Updated SWMP (Attachment 1)**
2	**Attached** a copy of any annexations, incorporations or boundary changes resulting in an increase or decrease in the Permittee's geographic area of permit coverage during the reporting period, and implications for the SWMP as per S9.E.3.	N/A	No Annexations in 2012.	
3	Tracked or estimated the cost of development and implementation of the SWMP. (S5.A.4.a.ii)	Y	A stormwater utility and corresponding enterprise fund were created in 2009 to fund SWMP development and implementation. This provides a permanent tracking and estimating mechanism as part of the city's budget development process. The FY2012 Budget for Stormwater Services was adopted by City Council on December 6, 2011.	
4	Implemented a public education and outreach strategy designed to reach all of the identified target audiences. (S5.B.1.b)	Y		
4a	**Attached** a description of the number and type of public education and involvement activities (S5.B.1.b)	Y		(Attachment 2)

Question		Y/N/ NA	Comments (50 word limit)	Name of Attachment & Page Number, if applicable
5	Made the most current version of the SWMP available to the public. If posted on website, list address in *Comments* field. (S5.B.2.b)	Y	Most current version of SWMP is available on the city's website at www.pullman-wa.gov .	
6	Completed the map of your MS4. (*Required no later than February 15, 2012,* S5.B.3.a)	Y		
6a	**Attached** a sumary of the status of the mapping and updated storm drainage infrastructure information; do not include the map. (S5.B.3.a)	Y	Estimate 95% of MS4 mapped in AutoCAD. Completed GPS inventory of all known catch basins and manholes in 2010 and outfalls and detention ponds in 2012. Acquired updated aerial photos. Will continue with GPS inventory of remaining facilities.	
7	Implemented an ongoing program to detect and address non-stormwater discharges to the MS4, including spills and illicit connections. (S5.B.3.c.i through iv)	Y		
8	Field assessed at least one high priority water body or other priority area to verify outfall locations and detect illicit discharges. (S5.B.3.c.ii)	Y	City staff worked with a private consultant to assess the N Stadium Way drainage basin in 2012. City staff also assessed Dry Fork Creek on September 26, 2012. All outfalls were verified and added to the GPS inventory.	
8a	**Attached** a summary of outfalls and illicit discharges discovered, and actions taken to eliminate the illicit discharges. (S5.B.3.c.ii)	Y	No illicit discharges discovered during 2012 outfall inventory.	(Attachment 3)
9a	Publicized a hotline or other local telephone number for public reporting of illicit discharges, including spills. (S5.B.3.d.ii)	Y		
9b	**Attached** summary of hotline reports received and follow-up actions taken during the reporting period (S5.B.3.d.ii)	N/A	No IDDE calls received from the public in 2012.	

Question		Y/N/ NA	Comments (50 word limit)	Name of Attachment & Page Number, if applicable
10	Provided adequate training to all staff responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges and illicit connections. (S5.B.3.f)	Y		
11	Provided training to all municipal field staff that as part of their normal job resonsibilities might come into contact with or otherwise observe an illicit discahrge or illicit connection to the MS4, including office personnel who might receive reports of illicit discharges. (S5.B.3.g)	Y		
12	Implemented procedures for the IDDE program. (S5.B.3.e)	Y		
12a	**Attached** summary of numbers and types of illicit discharges identified; inspections made; and any feedback received from public education efforts. (S5.B.3.e)	Y	2/7/12 - Qualifying SSO (Fairmount). 2/27/12 - Qualifying SSO (N Grand, YCC). 5/6/12 - Qualifying SSO (McKenzie). 7/5/12 - Qualifying SSO (N Grand). 3 illicit connections found & eliminated. No public feedback.	
13	Implemented procedures for construction site plan review. (S5.B.4.b)	Y		
14	Reviewed *Stormwater Site Plans* including construction SWPPPs for new development and redevelopment projects.	Y		
14a	Number of site plans reviewed during the reporting period:	Y	22 (14 City, 8 WSU)	
14b	Number of SWPPPs reviewed during the reporting period:	Y	22 (14 City, 8 WSU)	
14c	Number of site plans approved during the reporting period:	Y	18 (10 City, 8 WSU)	

Question		Y/N/ NA	Comments (50 word limit)	Name of Attachment & Page Number, if applicable
15	Implemented procedures for site inspection and enforcement of construction stormwater pollution control measures. (S5.B.4.c)	Y		
16	Provided adequate training for all staff involved in permitting, plan review, field inspection and enforcement for construction site runoff control. (S5.B.4.b.i and S5.B.4.c.ii)	Y		
17	Inspected construction-phase stormwater controls at new development and redevelopment projects. (S5.B.4.c.iii)	Y		
17a	Number of sites inspected during the reporting period:	Y	8 (5 City, 3 WSU)	
18	Provided information to construction site operators about training available on how to comply with requirements in Appendix I and the BMPs in the *Stormwater Management Manual for Eastern Washington,* or an equivalent document. (S5.B.4.d and S5.B.5.e)	Y		
19	Implemented procedures for post-construction site plan review. (S5.B.5.b)	Y		
20	Implemented procedures for post-construction site inspection and enforcement of post-construction stormwater control measures. (S5.B.5.c)	Y		
21	Inspected post-construction stormwater controls, including structural BMPs, at new development and redevelopment projects. (S5.B.5.c)	Y		

Question		Y/N/ NA	Comments (50 word limit)	Name of Attachment & Page Number, if applicable
21a	Number of sites inspected during the reporting period:	Y	6 (5 City, 1 WSU)	
22b	Number of structural BMPs inspected at new development and redevelopment sites during the reporting period:	Y	5 (4 City, 1 WSU)	
23	Inspected structural BMPs at least once during installation. (S5.B.5.c.ii)	Y		
23a	Number of structural BMPs inspected during installation during the reporting period:	Y	5 (4 City, 1 WSU)	
24	Provided adequate training for all staff involved in permitting, planning, review, inspection and enforcement for post-construction stormwater control. (S5.B.5.d)	Y		
25	Implemented the Operation and Maintenance plan for municipal operations. (S5.B.6.a)	Y		
26	Inspected 20% of stormwater treatment and flow control facilities owned or operated by the Permittee. (S5.B.6.a.i)	Y		
26a	Number of known facilities:	Y	45 (44 detention ponds, 1 Vortech vault)	
26b	Number of facilities inspected during the reporting period:	Y	45 (44 detention ponds, 1 Vortech vault)	

Question		Y/N/ NA	Comments (50 word limit)	Name of Attachment & Page Number, if applicable
27	Have NPDES permit coverage for stormwater discharges for all applicable construction projects and industrial facilities. (S5.B.6.a.i)	Y		
28	Conducted spot checks of stormwater facilities after major storms. (S5.B.6.a.ii)	Y		
29	Provided adequate training for staff with primary construction, operations, or maintenance job functions that are likely to impact stormwater quality. (S5.B.6.b)	Y		
30	Notified Ecology of the failure to comply with the permit terms and conditions within 30 days of becoming aware of the non-compliance. (G20)	N/A		
31	Notified Ecology immediately in cases where the Permittee becomes aware of a discharge into or from the Permittee's MS4 which could constitute a threat to human health, welfare, or the environment? (G3)	N/A		
32	Took appropriate action to correct or minimize discharges into or from the MS4 which could constitute a threat to human health, welfare, or the environment. (G3.A)	N/A		
33	**Attached** a summary of the status of implementation of any actions taken pursuant to S4.F and the results of monitoring, assessment, and evaluation efforts conducted during the reporting period. (S4.F.3.d)]	N/A		

Question	Y/N/ NA	Comments (50 word limit)	Name of Attachment & Page Number, if applicable

REMINDER: Save your work as you go. Did you answer each question, provide necessary background information in the *Comments* field, and attach and/or note the filename and page number of all required documentation in the *Attachment* field? Proceed to the **Info Collection (Monitoring)** tab next.

Information Collection, S8.B.1 Description of Monitoring Studies

If applicable, you are required to provide information to fulfill permit requirement S8.B.1 in each annual report. You must describe any stormwater monitoring or studies conducted by you during the reporting period. If stormwater monitoring was conducted on your behalf, or if studies or investigations conducted by other entities were reported to you, you must briefly describe the type of information gathered or received during the reporting period.

Please note in row #1 of the table below if you have no information to report.

NOTE: Please limit your entries to 255 characters per cell. You may include additional information in your Supplemental Documentation attachment and reference it below with the page number.

Information Collection

	Briefly describe any stormwater monitoring, studies, or type of information collected and analyzed during the reporting period. (S8.B.1)	Who/how to contact for additional information?
1.	Stadium Way Fecal Coliform Bacteria Pilot Study - TMDL Implementation	Rob Buchert, Stormwater Services Program Manager - rob.buchert@pullman-wa.gov
2.	PCB Reconnaissance	Kevin Gardes, Public Works Director - kevin.gardes@pullman-wa.gov
3.		
4.		
5.		
6.		

VII. Information Collection, BMP Evaluation, and Monitoring

Complete Part B for all annual reports.

B. SWMP Evaluation

You are required to assess the appropriateness of the BMPs you have selected to implement your SWMP. This evaluation is necessary to evaluate whether the MEP standard set by the permit is protective of water quality in your receiving water bodies. This assessment may be entirely qualitative. Answer **NA** if you are not yet implementing BMPs for a component of the SWMP. (S8.B.2 and S9)

	Question	Y/N/NA	Comments (50 word limit)
1.	Are the BMPs selected and implemented for Public Outreach appropriate to minimize pollutants in the MS4 to the MEP?	Y	
2.	Are the BMPs selected and implemented for Public Involvement appropriate to minimize pollutants in the MS4 to the MEP?	Y	
3.	Are the BMPs selected and implemented for Illicit Discharge Detection and Elimination appropriate to minimize pollutants in the MS4 to the MEP?	Y	
4.	Are the BMPs selected and implemented for Construction Stormwater Pollution Prevention appropriate to minimize pollutants in the MS4 to the MEP?	Y	
5.	Are the BMPs selected and implemented for Post-Construction Runoff Management appropriate to minimize pollutants in the MS4 to the MEP?	Y	
6.	Are the BMPs selected and implemented for Good Housekeeping for Municipal Operations appropriate to minimize pollutants in the MS4 to the MEP?	Y	

VII. Information Collection, BMP Evaluation, and Monitoring

Complete Part C for all annual reports.

C. Changes in BMPs or objectives (S8.B)

If any of the BMPs or objectives is being changed, list the old BMP and objective, the new BMP and objective, and a justification for the change below. (S8.B.2., and S9)

NOTE: You may choose to attach additional documentation justifying Changes in BMPs or objectives. Note such attachments in the *Justification for change* field.

	Old BMP	Old Objective	New BMP	New Objective	Justification for Change
1	N/A				
2					
3					
4					
5					
6					
7					

REMINDER: Provide necessary background information. This is the final tab of the Annual Report worksheet. Please review the entire worksheet for completeness and accuracy and save this document. Email this Annual Report file PLUS any identified attachments to: **PH2_EAnnRpt@ecy.wa.gov** no later than March 31, 2013. Mail two hard copies of the entire

ATTACHMENT 1

City of Pullman
Stormwater Management Program (SWMP)

Last Updated 03/15/13

Related to Question #1 in Annual Report (Section VI)

Stormwater Management Program
(SWMP)

Last Updated: March 15, 2013

Prepared By:

Public Works Department
Stormwater Services Division

Background

In 1987, Congress amended the federal Clean Water Act to include stormwater discharges in the National Pollutant Discharge Elimination System (NPDES) permit program. The Environmental Protection Agency (EPA) developed rules to implement the new stormwater requirements in two phases called Phase I and Phase II. The Washington State Department of Ecology (Ecology) implements these stormwater rules through municipal stormwater permits. The Phase I permit, which went into effect in 1990, covers large jurisdictions such as cities and counties serving more than 100,000 people. In 1999, EPA issued the Phase II stormwater permit regulations to cover stormwater discharges in urbanized areas that serve smaller populations (Ecology, 2006).

There are two separate Phase II municipal stormwater permits in the State of Washington, one for western Washington and one for eastern Washington. Ecology issued the NPDES Eastern Washington Phase II Municipal Stormwater Permit (Permit) in January 2007. The city of Pullman (City) was granted coverage under the Permit soon after. Eighteen other cities and six counties in eastern Washington are also covered under the Permit. The original Permit became effective February 16, 2007 and has since been modified, extended and re-issued unchanged with a new expiration date of July 31, 2014. This is the Permit the city is currently operating under. An updated Permit with additional modifications has also been issued with an effective date of August 1, 2014.

The first Permit was designed to give jurisdictions an opportunity to develop their stormwater management programs and prepare for the next permit cycle (now beginning August 1, 2014) which will require additional actions and an increased level of management and oversight. The City has spent the past six years developing its stormwater management program in accordance with the requirements of the Permit, including adoption of new ordinances, changing policies and procedures, purchasing new equipment and training staff.

The current Permit, as well as information related to the next Permit, can be viewed in its entirety on Ecology's website below.

http://www.ecy.wa.gov/programs/wq/stormwater/municipal/phaseiiEwa/ewph2permit.html

Hatley Creek Storm Drainage Basin Study

In 2000, responding to citizen concerns and recognizing that stormwater runoff was a growing problem, the City hired consulting firm Gray & Osborne to conduct a study of the Hatley Creek drainage basin. Hatley basin is located in the southwest quadrant of town and drains approximately 760 acres (both city & county) which have been experiencing a high rate of development. The purpose of the study was to recommend a level of stormwater quantity control that seeks to decrease the existing peak rate of stormwater runoff in the basin, as well as provide water quality benefits. As a result of

the study, the City requires enhanced stormwater detention design standards for all new and re-development within the Hatley basin (Gray & Osborne, 2000).

The Water Quality Problem

Pullman's network of storm drains is classified as a municipal separate storm sewer system (MS4). The storm drain system is separate from and therefore does not convey stormwater to the City's wastewater treatment plant. Stormwater runoff has been identified by Ecology as "the number one water pollution problem in the urban areas of our state" (Ecology, 2007). Pollutants commonly found in stormwater include fertilizers, pesticides, vehicle fluids, trash, sediment and pet waste. Stormwater can also contribute to problems associated with flooding.

Most storm drains within Pullman empty directly into the South Fork Palouse River (SFPR) or one of its main tributaries that flow through town. According to Ecology, the SFPR is on the State's list of impaired water bodies for not meeting water quality criteria for temperature, dissolved oxygen, pH and fecal coliform bacteria. Ecology has completed a Water Clean-up Plan or Total Maximum Daily Load (TMDL) for fecal coliform bacteria and is in the process of developing TMDLs for the remaining parameters. Water quality sampling related to the TMDLs has shown that Pullman's stormwater quality is similar to other urban areas across the nation, indicating a need for enhanced stormwater management.

Stormwater Management Program (SWMP)

The city of Pullman has been managing its stormwater for a long time. However, to be more effective and successfully meet permit compliance requirements, enhanced coordination between the various staff and departments that deal with stormwater issues is essential. The Permit requires the city of Pullman to develop and implement a comprehensive Stormwater Management Program (SWMP). An updated SWMP documenting the actions the City plans to implement to satisfy State requirements and protect water quality is required to be made available to Ecology by March 31st and to the public by May 31st of each year. The SWMP and other related documents are available on the City's Stormwater Services website.

Early in 2007, the City hired consulting firm Otak, Inc. to assist with development of Pullman's SWMP. Otak worked closely with City staff and in September 2007 produced the *Final Stormwater Program Implementation Plan* (**Attachment A**). The Implementation Plan contains the following Sections:

- Background
- Stormwater Program Definition Process
- Regulatory Gap Analysis - Process & Results
- Detailed Annual Stormwater Program Implementation Matrices
- Resources Needed for Pullman's Updated Stormwater Program
  - Estimated Annual Program Revenue Needs & Sources

- NPDES Equipment & Funding Needs
- Capital Improvement Plan

As required by the Permit, the Implementation Plan addresses the following elements:

- Public Education and Outreach
- Public Involvement & Participation
- Illicit Discharge Detection & Elimination
- Construction Site Stormwater Runoff Control
- Post-Construction Stormwater Management for New Development and Redevelopment
- Pollution Prevention & Good Housekeeping for Municipal Operations
- Compliance with Total Maximum Daily Load (TMDL) Allocations
- Monitoring & Program Evaluation
- Reporting & Recordkeeping

In 2008 the City chose to create a new Stormwater Services Division within the Public Works Department and hired a program manager to coordinate all the activities identified in the Implementation Plan.

In January 2009, Otak, Inc. produced the *Stormwater Program Funding Alternatives and Financial Plan (FAFP)*. The FAFP includes the latest program and projected budget needs. The FAFP is attached to the Draft SWMP as **Addendum 1** and serves as an update to the Implementation Plan.

Among other things, the Permit required the City to adopt ordinances addressing illicit discharge detection and elimination (IDDE), construction runoff and post-construction stormwater management. The City adopted an IDDE ordinance in August 2009 which added a new Chapter 10.31 to Pullman City Code (PCC). The City also adopted a combined Construction and Post-Construction stormwater ordinance in January 2011 which added a new Chapter 10.32 to PCC.

A stormwater field technician/inspector was hired in January 2010 to implement and enforce the provisions in these program areas. Also, in accordance with the Implementation Plan, budget has been allocated to the Maintenance & Operations Division to ramp up maintenance activities related to the City's stormwater system. An operations and maintenance plan (O&M Plan) that prescribes regularly scheduled maintenance activities on the stormwater system has been developed. In 2011, the City purchased a jet-vactor truck and other specialized equipment to begin implementing the O&M Plan. Recently, budget was also allocated to assist the Parks Department with litter control and pet waste management.

Stormwater Utility

Much like water supply and sanitary sewer systems, maintaining and replacing an aging storm drain infrastructure and providing other stormwater management services is very

costly. In February 2009, the Pullman City Council created a storm drainage and surface water management utility to fund the stormwater program. The utility currently only charges fees for developed properties with impervious surfaces. In 2011, an

Advisory Committee was formed to provide the City Council with a recommendation on whether or not undeveloped properties should also be charged a stormwater utility fee. After a six month process, the Advisory Committee recommended to not charge undeveloped properties.

Using newly acquired aerial photography and ArcGIS mapping software, city staff and stormwater consultant URS, Inc. are working on an update to the stormwater utility customer database. The update will include new impervious surface measurements and resulting fee adjustments and will be completed in Spring 2013.

The codified stormwater utility ordinance is located in Chapter 10.30 of PCC and can be viewed on the City's website below.

http://www.pullman-wa.gov/

Recent Activities

2012 saw continued development and implementation of the City's SWMP resulting in continued Permit compliance. Notable activities included:

General Program Administration

- Continued management of and compliance with the City's NPDES Phase II Municipal Stormwater Permit.
- Successfully completed and closed 1 Washington Department of Ecology grant totaling $50,000. The grant was used toward the purchase of the new jet-vactor truck for performing maintenance on the City's storm drain system.
- Continued participation in the Eastern Washington NPDES Coordinators Forum.
- Hired a part-time Stormwater Aide to assist with volunteer coordination and field activities.

Public Education & Outreach

- Continued education and outreach efforts via website, news media, direct mailings and personal interaction with the public.
- Partnered with the Palouse-Clearwater Environmental Institute (PCEI), Pullman School District and private schools to integrate stormwater related information into the 5th, 8th and 10th grade science curriculum.
- Sponsored five WSU & UI student interns including a Masters in Communications, a Masters in Public Administration, 2 Masters in Engineering and one Bachelor in Wildlife Ecology.
- Continued promotion of car wash kit and storm drain stenciling programs.

Public Involvement

- Partnered with the Palouse-Clearwater Environmental Institute (PCEI) to sponsor the 8th Annual Pullman Stream Clean-up event in April. 140 volunteers spent 350+ hours cleaning Pullman's streams by removing an estimated 10 yards of trash and recyclables.
- Continued development of Pullman Adopt-a-Stream Program.
- Conducted a survey of Pullman dog owners (550 responses).

Illicit Discharge Detection & Elimination (IDDE)

- Completed GPS inventory and inspection of 381 stormwater outfalls.
- Completed GPS inventory of 44 public detention ponds.
- Identified and eliminated 2 private and 1 public illicit sanitary connections to storm.
- Responded to and investigated stormwater/illicit discharge related complaints.
- Continued development of a pet waste management program, including manufacture and installation of 43 new pet waste stations in and along Pullman's parks and trails.
- Completed the Stadium Way Basin Fecal Coliform Bacteria Investigation Study.

Construction Site Runoff Control

- Reviewed Site Plans and Stormwater Pollution Prevention Plans (SWPPPs) for large grading and new construction projects.
- Reviewed Erosion and Sediment Control (ESC) plans for projects of Tri-plex size or smaller (mostly single family residential homes).
- Conducted 120 documented construction related erosion control inspections.
- Developed and implemented a local Stormwater Permit for construction activities disturbing 5,000 ft^2 or greater.

Post-Construction Stormwater Management

- Reviewed drainage reports and civil drawings of post-construction stormwater BMPs included in plans for newly proposed development.
- Actively participated on Low Impact Development Stakeholder Advisory Group (LID-SAG) for development of the Eastern Washington LID Guidance Manual.

Pollution Prevention & Good Housekeeping – Municipal Operations

- Continued management of the City's NPDES Industrial Stormwater Permit for the Pullman Transit facility, including updating the SWPPP, reporting, inspections, water sampling and staff training.
- Revised and distributed an updated Operations and Management (O&M) Plan for controlling pollution originating from all City facilities.
- Provided stormwater awareness training to staff from all city departments.

2013 promises to be even busier with the following activities already underway or planned:

West Crestview Illicit Connection Study
City staff and water quality consultant Worldthree, LLC. will attempt to identify sources of fecal coliform bacteria and other indicators associated with illicit sanitary connections within the West Crestview Street drainage basin that empties into Dry Fork Creek (DFC).

As part of the TMDL process, Ecology identified this section of DFC as needing a reduction in fecal coliform. In addition to traditional grab sample methods, the study is using multiple ultra-sensitive temperature probes deployed throughout the drainage basin to identify potential illicit connections. The drainage basin is primarily residential in nature with some light commercial at the confluence with DFC.

Stormwater in the Classroom
The City will continue partnering with PCEI, the Pullman School District and private schools to challenge students with water quality and stormwater related exercises that compliment the science curriculum. New in 2013, will be a stormwater field day for all Pullman 5th graders.

Construction
Stormwater Services will be hosting an Erosion and Sediment Control field workshop for local engineers, developers and construction contractors to view proper installation of best management practices (BMPs).

Also, Stormwater Services continued to coordinate with the Engineering Division to update existing and/or add new Standard Drawings for erosion and sediment control BMPs. Planned adoption in 2013.

Annual Pullman Stream Clean-up
The City will partner again with PCEI to sponsor the 9th Annual Stream Clean-up event on Saturday April 6th.

Pullman Adopt-a-Stream Program
The City will continue to partner with PCEI to implement a program modeled after the adopt-a-highway program, where community groups and/or businesses can "adopt" a segment of stream in town and then be responsible for keeping it clean. As of January 1, 2013, 10 of the 13 identified segments of stream have been adopted.

Stadium Way Storm Line Repair
As part of its capital improvement program, the City plans to repair approximately 1,000 ft of aging and failing stormwater main on Stadium Way from Grand Avenue to "B" St.

Post-Construction Stormwater Management

The City plans to continue inspecting both public and private stormwater management facilities as part of the annual certification process prescribed in PCC 10.32.

Stormwater Utility Update

The original stormwater utility was established by measuring impervious surfaces using aerial photographs from April 2006. Using updated photographs from 2012, the City will review and if necessary amend existing customer accounts. New accounts will also be added as needed. New ArcGIS maps of the impervious surface within Pullman will be created as part of this process.

Contacts

Questions about Pullman's Stormwater Management Program can be directed to:

Rob Buchert
Stormwater Services Program Manager
City of Pullman
325 SE Paradise St.
Pullman, WA 99163
(509) 338-3314
rob.buchert@pullman-wa.gov

Questions about the Eastern Washington Phase II Municipal Stormwater Permit can be directed to:

David Duncan
Municipal Stormwater Permit Manager
WA Dept. of Ecology
4601 North Monroe Street
Spokane, WA 99205
(509) 329-3554
ddun461@ecy.wa.gov

References

Gray & Osborne, Inc. 2000. *Hatley Creek Storm Drainage Basin Study*.

Washington State Department of Ecology. 2006. *Frequently Asked Questions about Municipal Stormwater Permits*. Publication No. 06-10-005 (revised).

Washington State Department of Ecology. 2007. *Protecting Washington's Waters From Stormwater Pollution*. Publication No. 07-10-058.

ATTACHMENT A

City of Pullman
Final Stormwater Program Implementation Plan
September 10, 2007
Otak, Inc.

ADDENDUM 1

City of Pullman
Final Stormwater Program
Funding Alternatives and Financial Plan
January 13, 2009
Otak, Inc.

ATTACHMENT 2

Q4a: Public Education & Involvement Activities

Eastern Washington Phase II Municipal Stormwater Permit - ATTACHMENT 2

Q4a: Public Education & Involvement Activities

Public Education & Outreach

- Continued education and outreach efforts via website, news media and personal interaction with the public, including 256 radio ads targeting pet owners and a full page ad in the 2012 Summer Survival Guide promoting the new pet waste stations.
- Partnered with the Palouse-Clearwater Environmental Institute (PCEI), Pullman School District and private schools to integrate stormwater related information into the 5th, 8th and 10th grade science curriculum. The stormwater information was delivered in 35 classes totaling 623 students.
- Sponsored five WSU & UI graduate student interns including a Masters in Communications, a Masters in Public Administration, 2 Masters in Engineering and one Bachelor in Wildlife Ecology. The students primarily worked on updating our detention pond and outfall inventories and public involvement activities such as the Stream Clean-up, the Adopt-a-Stream and pet waste management programs.

Public Involvement

- Partnered with the Palouse-Clearwater Environmental Institute (PCEI) to sponsor the 8th Annual Pullman Stream Clean-up event in April. 140 volunteers spent 350+ hours cleaning Pullman's streams by removing an estimated 10 yards of trash and recyclables. Litter was removed from 4.4 miles of stream plus an additional 1.75 miles of the Grand Avenue Greenway and other off-stream public areas.
- Continued development of the Pullman Adopt-a-Stream Program. Ten out of thirteen available segments were adopted by "Stream Stewards" who conducted clean-up activities throughout the year. Signs were installed at each segment (20 total) identifying the program and recognizing the Stewards.
- Continued development of a pet waste management program, including conducting a survey of Pullman dog owners (550 responses). The number one reason cited for not picking up pet waste was lack of convenient/available bags. This resulted in the manufacture and installation of 43 new pet waste stations in and along Pullman's parks and trails.

ATTACHMENT 3

Outfall Summary
(GPS Inventory)

Related to Question #8a in Annual Report (Section VI)

Stormwater Outfalls

records from ArcMap, exported 10/22/2012

OBJECTID	AssetID	PipeType	PipeSize	Submerged	OutfallPipe	Flowing?
1		CMP	24""	N	24""	Y
2	210	CONC	18""	N	18""	Y
3	200	CONC	18""	N	18""	Y
4	190	CONC	18""	Y	18""	Y
6	grand and stadium	DI	4""	N	4""	Y
7	170(2)	PVC	8""	N	8""	Y
8	170	CMP	36""+	N	36""+	Y
9	stadium 160	CONC	12""	N	12""	Y
10	145	CONC	16""	Y	16""	Y
11	130	DI	8""	N	8""	N
12	grand 130(2)	DI	6""	N	6""	N
13	new	CONC	24""	N	24""	N
14	grand 120	CONC	18""	N	18""	N
15	110	CMP	12""	N	12""	N
16	100	Other	24""	N	24""	N
17	103	PVC	8""	N	8""	N
18	90	PVC	12""	N	12""	N
19	new	PVC	8""	N	8""	N
20	80	CMP	18""	N	18""	Y
21	70	CONC	10""	N	10""	Y
22	140	CONC	24""	N	24""	Y
23	60	PVC	8""	Y	8""	Y
24	new (by 60)	PVC	8""	N	8""	N
25	50	PVC	8""	N	8""	N
26	40	PVC	8""	N	8""	N
27	25	CMP	12""	N	12""	N
28	20	PVC	6""		6""	N
29	10	CMP	8""	N	8""	N
30	30	CMP	8""	N	8""	N
32	E30	DI	6""	N	6""	N
33	E40	DI	8""	N	8""	N
34	E50	DI	8""	N	8""	N
35	E20	PVC	8""	N	8""	Y
36	E22	CMP	14""	N	14""	N
37	E60	DI	6""	N	6""	N
38	E70	DI	10""	Y	10""	Y
39	E80	CMP	8""	N	8""	Y
40	new	DI	4""	N	4""	Y
41	E110	PVC	6""	N	6""	Y
42	E100	CONC	20""	Y	20""	Y
43	E120	CMP	6""	N	6""	Y
44	E130	DI	36""+	N	36""+	Y
45	E140	PVC	8""	Y	8""	Y
46	E115b	CMP	10""	N	10""	N
47	E125	Other	10""	N	10""	N
48	E160	Other	8""	N	8""	N
49	E165-1	Other	8""	N	8""	N

OUTFALL PIPE TYPE CODES

CONC = Concrete
CMP = CMP
PVC = PVC
DI = Ductile Iron
CLAY = Clay
OTHER = Other

OBJECTID	AssetID	PipeType	PipeSize	Submerged?	OutfallPipe	Flowing?
50	220	CONC	36""+	Y		Y
51	new	DI	18""	N	18""	Y
52	E10	DI	6""	N	6""	Y
53	E170	CMP	36""+	Y	36""+	Y
54	E200	CONC	12""	N	12""	Y
55	E210	PVC	10""	N	10""	Y
56	E230	CMP	24""	N	24""	Y
57	E240	CONC	24""	Y	24""	Y
58	E254	PVC	8""	N	8""	N
59	E267	PVC	8""	Y	8""	N
60	E270	CONC	20""	N	20""	Y
61	E250	CONC	20""	N	20""	Y
62	150	CONC	18""	N	18""	Y
63	180	CMP	12""	N	12""	N
64	new	CMP	10""	N	10""	N
65	E280	PVC	8""	N	8""	N
66	E300	PVC	8""	N	8""	N
67	E310	PVC	8""	N	8""	Y
68	E320	CMP	8""	N	8""	Y
69	E330	CMP	18""	N	18""	Y
70	E340	CMP	32""	Y	32""	Y
71	100	CMP	36""+	N	36""+	Y
72	120BB	CMP	12""	N	12""	N
73	120BD	DI	8""	N	8""	N
74	new	PVC	6""	N	6""	Y
75	new	Other	6""	Y	6""	Y
76	new	PVC	10""	N	10""	N
77	380H	CMP	36""+	N	36""+	Y
78	420	CONC	18""	Y	18""	Y
79	235	PVC	24""	N	24""	Y
80	250	CMP	36""+	N	36""+	Y
81	300	CMP	12""	N	12""	Y
82	270	PVC	8""	N	8""	N
83	265	CMP	12""	N	12""	N
84	280	PVC	10""	N	10""	Y
85	new	PVC	4""	N	4""	Y
86	260	CONC	18""	Y	18""	Y
87	W120H	CMP	24""	N	24""	Y
88	w120(2)	Other	4""	N	4""	Y
89	W70	PVC	8""	N	8""	Y
90	40	CONC	36""+	N	36""+	Y
91	10B	PVC	8""	N	8""	N
92	10	CONC	18""	N	18""	N
93	20	Other	12""	N	12""	N
94	10F	PVC	8""	N	8""	N
95	30	CMP	18""	N	18""	N
96	30B	PVC	8""	N	8""	N
97	40	CONC	18""	N	18""	N
98	new	CONC	8""	N	8""	N
99	W20B	CONC	8""	N	8""	N
100	40	PVC	8""	N	8""	N

OUTFALL PIPE TYPE CODES

OBJECTID	AssetID	PipeType	PipeSize	Submerged	OutfallPipe	Flowing?
101	50	CMP	24""	N	24""	N
102	30	PVC	10""	N	10""	Y
103	60	PVC	8""	N	8""	N
104	65	CMP	18""	N	18""	N
105	70	PVC	6""	N	6""	N
106	80	PVC	24""	N	24""	Y
108	100	CMP	28""	N	28""	Y
109	110	PVC	16""	N	16""	Y
110	112	PVC	12""	N	12""	N
111	120	PVC	24""	Y	24""	Y
112	10BB	PVC	18""	N	18""	Y
114	100BD	PVC	24""	N	24""	Y
115	160	CMP	36""+	N	36""+	N
116	20	PVC	8""	N	8""	N
118	10	CONC	24""	Y	24""	Y
119	10F	CMP	24""	Y	24""	Y
120	10L	PVC	8""	N	8""	N
121	368	CMP	24""	N	24""	Y
122	370	CMP	24""	N	24""	Y
123	357	CONC	16""	N	16""	N
124	350	CMP	18""	N	18""	Y
125	353	CMP	18""	N	18""	Y
126	330	CONC	18""	N	18""	N
127	320	CMP	14""	Y	14""	Y
128	170	CMP	8""	N	8""	N
129	50J	PVC	14""	Y	14""	Y
130	50H	PVC	18""	N	18""	Y
131	50I	PVC	16""	N	16""	Y
132	50F	PVC	12""	N	12""	Y
133	50F(2)	PVC	14""	N	14""	Y
134	50	Other	8""	N	8""	N
135	30	PVC	8""	N	8""	Y
136	20	CMP	18""	N	18""	Y
137	10	PVC	8""	N	8""	Y
138	E240JL	PVC	8""	N	8""	Y
139	50A	PVC	8""	N	8""	N
140	W20D	PVC	8""	N	8""	N
141	W30	CONC	12""	N	12""	N
142	W20	CLAY	12""	N	12""	N
143	W50	CMP	8""	N	8""	N
144	W60	PVC	10""	N	10""	N
237	100F	Other	12""	Y	12""	Y
238	E170-2	CMP	16""	N	16""	N
239	100H	Other	18""	N	18""	N
240	100L	Other	16""	N	16""	N
241	100MM	DI	12""	N	12""	N
242	100N	DI	8""	Y	8""	Y
243	100O	DI	8""	N	8""	N
244	100P	DI	12""	N	12""	N
245	100Q	DI	8""	N	8""	N
246	80BD	PVC	18""	N	18""	Y

OUTFALL PIPE TYPE CODES

OBJECTID	AssetID	PipeType	PipeSize	Submerged	OutfallPipe	Flowing?
247	290DHB	PVC	18""	N	18""	Y
248	290DH	PVC	12""	N	12""	N
249	100RB	Other	8""	N	8""	N
250	100RD	DI	8""	N	8""	N
251	100RF	DI	8""	N	8""	Y
252	100RH	DI	8""	N	8""	N
253	100RJ	Other	8""	N	8""	N
254	100RL	Other	8""	N	8""	N
255	100TB	Other	8""	N	8""	N
256	100TD	Other	8""	N	8""	N
257	100TF	Other	8""	N	8""	N
258	100TH	Other	8""	N	8""	N
259	100IA	PVC	18""	N	18""	Y
260	100IA	PVC	16""	N	16""	Y
261	350B	PVC	8""	Y	8""	N
262	420B	CMP	24""	N	24""	N
263	370FED	Other	16""	N	16""	N
264	370FED	Other	16""	N	16""	Y
265	370FF	PVC	8""	N	8""	N
266		PVC	8""	N	8""	N
267	370FD	PVC	8""	N	8""	N
268	90E	DI	6""	N	6""	N
269	130A	PVC	8""	N	8""	Y
270	new	PVC	6""	N	6""	N
271	170DNB	PVC	10""	Y	10""	Y
272	170DNH	CMP	12""	N	12""	Y
273	310B	PVC	12""	N	12""	Y
162	90	PVC	28""	N	28""	Y
167	100BB	PVC	18""	N	18""	Y
168	100BF	PVC	24""	N	24""	Y
172	10D	CONC	18""	N	18""	Y
200	40	PVC	6""	N	6""	N
201	W100	CMP	24""	N	24""	N
202	W120	CMP	36""+	N	36""+	Y
203	W70DB	Other	12""	N	12""	N
204	W100a	Other	24""	N	24""	N
205	100B	CONC	36""+	N	36""+	Y
206	100SG	Other	8""	N	8""	N
207	100SH	Other	8""	N	8""	N
208	New	PVC	8""	N	8""	Y
209	170DNL-5	DI	8""	N	8""	N
210	170DNL-4	DI	8""	N	8""	N
211	170DNL-3	DI	8""	N	8""	N
212	170DNL-2	DI	8""	N	8""	N
213	170DNN	PVC	14""	N	14""	N
214	170DNL-1	CMP	18""	N	18""	Y
215	170DNH	CONC	28""	Y	28""	Y
216	170DNJ-2	PVC	12""	N	12""	N
217	170DNJ-1	PVC	12""	N	12""	Y
218	100TL	DI	8""	N	8""	N
219	100TJ	DI	8""	N	8""	N

OUTFALL PIPE TYPE CODES

OBJECTID	AssetID	PipeType	PipeSize	Submerged	OutfallPipe	Flowing?
220	170DNHFH	PVC	8""	N	8""	N
221	170DNHFF	PVC	8""	N	8""	N
222	170DNHFB	PVC	8""	N	8""	N
223	170DNFB	CMP	36""+	N	36""+	Y
224	170DNH	CMP	36""+	N	36""+	Y
225	170DNJ-3	PVC	12""	N	12""	N
226	250D	PVC	8""	N	8""	Y
227	250B	CONC	28""	N	28""	N
228	new	Other	18""	N	18""	Y
229	50H	PVC	8""	N	8""	Y
230	50HD	PVC	6""	N	6""	Y
231	100BA	DI	18""	N	18""	Y
232	100C	PVC	8""	N	8""	N
233	100D	Other	8""	N	8""	N
234	100DA	Other	8""	N		N
235	100E	Other	12""	N	12""	N
236	100G	Other	12""	N	12""	N
274	340B	PVC	8""	N	8""	N
275	340D	PVC	8""	N	8""	N
276	100J	DI	8""	N	8""	N
277	E90	DI	8""	Y	8""	Y
278	E122	CONC	10""	N	10""	N
279	E122	CONC	12""	N	12""	N
280	E150	CONC	10""	N	10""	N
281	E157-3	Other	8""	N	8""	N
282	E240JJ	PVC	8""	Y	8""	Y
283	40B	PVC	8""	N	8""	N
284	W20H	PVC	8""	N	8""	N
285	W20F	PVC	8""	N	8""	N
286	10DB	DI	12""	N	12""	N
287	170DNFHD	PVC	8""	N	8""	N
288	170DNHD	PVC	12""	Y	12""	Y
289	193	CMP	8""	N	8""	N
290	100BC	DI	8""	N	8""	N
291	380F	CMP	12""	N	12""	N
292	380D	CMP	8""	N	8""	N
293	E180	CONC	12""	N	12""	N
294	W40	CONC	12""	N	12""	N
295	A	CLAY	8""	N	8""	N
296	40-20-10	Other	12""		12""	Y
297	U	DI	4""			Y
298	A	CONC	4""		4""	
299	U	DI	4""			
300	X	PVC	6""		6""	
301	A	CLAY	4""			
302	X	PVC	4""		4""	N
303	U	CLAY	4""			N
304	U	CLAY	4""		4""	N
305	A	PVC	4""		4""	N
306	A	CONC	4""		4""	N
307	40-30-1	PVC	6""		6""	Y

OUTFALL PIPE TYPE CODES

OBJECTID	AssetID	PipeType	PipeSize	Submerged	OutfallPipe	Flowing?
308		Other	4""			N
309	U	CONC	4""		4""	N
310	U	CLAY	8""		8""	N
311	40-40	PVC	6""			Y
312	40-42	PVC	8""		8""	N
313	A	Other	4""			
314	A	DI	6""			N
315	X	PVC	6""		6""	N
316	A	CONC	4""		4""	N
317	A	CONC	4""			N
318	X	DI	4""		4""	N
319	U	DI	4""		4""	N
320	40-50	CONC	6""		6""	N
321	X	DI	4""		4""	N
322	U	DI	4""		4""	N
323	U	DI	4""			N
324	X	PVC	4""		4""	N
325	U	CONC	4""			N
326	40-55	CONC	6""		6""	N
327	40-60	PVC	8""		8""	Y
328	40-65	CONC	8""			N
329	A	DI	8""		8""	N
330	X	Other	4""			N
331	40-70	PVC	6""		6""	N
332	A	CLAY	8""		8""	N
333	40-80	PVC	8""		8""	N
334	X	PVC	4""			N
335	U	DI	4""			N
336	U	DI	4""		4""	N
337	X	PVC	4""		4""	N
338	X	Other	8""			N
339	40-90	PVC	8""		8""	N
340	U	DI	4""		4""	N
341	X	PVC	6""		6""	N
342	X	DI	4""		4""	N
343	X	PVC	6""		6""	N
344	X	CLAY	8""		8""	N
345	U	PVC	6""		6""	N
346	40-110	PVC	10""		10""	N
347	A	PVC	6""		6""	N
348	A	DI	4""		4""	N
349	U	DI	4""			N
350	U	DI	4""		4""	N
351	U	DI	4""		4""	N
352	A	DI	4""		4""	N
353	A	CLAY	6""		6""	N
354	40-120	PVC	6""		6""	N
355	A	DI	4""		4""	
356	U	DI	4""		4""	N
357	U	CLAY	4""		4""	N
358	A	DI	4""		4""	N

OUTFALL PIPE TYPE CODES

OBJECTID	AssetID	PipeType	PipeSize	Submerged	OutfallPipe	Flowing?
359	40-130	CONC	8""		8""	N
360	X	CONC	8""		8""	N
361	40-140	CONC	12""		12""	N
362	40-145	CONC	12""		12""	N
363	U	CLAY	8""		8""	N
364	A	CLAY	4""		4""	N
365	A	CLAY	4""		4""	N
366	U	CLAY	4""		4""	N
367	U	DI	4""		4""	N
368	A	DI	4""		4""	N
369	U	Other	4""			N
370	X	DI	4""		4""	N
371	U	DI	4""		4""	N
372	A	CLAY	4""		4""	N
373	U	CLAY	4""		4""	N
374	A	CLAY	4""		4""	N
375	A	CLAY	6""		8""	N
376	U	DI	4""		4""	N
377	A	CLAY	4""			N
378	A	CONC	4""		4""	N
379	X	CONC	6""			Y
380	A	CLAY	4""			N
381	X	CONC	6""		6""	N
382	X	CLAY	4""		4""	N
383	X	CLAY	4""		4""	N
384	X	CLAY	4""		4""	N
385	X	CLAY	4""		4""	N
386	U	CLAY	4""			N
387	A	CLAY	4""		4""	N
388	U	CLAY	4""		4""	N
389	U	DI	4""			N
390	U	CLAY	4""			N
391	CATCH BASIN	CONC	12""		12""	
392	U	CLAY	4""			N
393	U	CLAY	4""		4""	N
394	U	CLAY	4""		4""	N
395		CLAY	6""			N
396	U	CLAY	4""			N
397	U	CLAY	4""			N
398	U	Other	12""			N
399	X	DI	4""			N
400	U	CLAY	8""		8""	N
401	40-150	CONC	24""			N
402	X	CONC	4""			N
403	U	CONC	10""			
404	MANHOLE	CONC	10""			N
405	U	Other	4""			N
406	X	CMP	6""			Y
407	40-180	CMP	12""		12""	N
408	cb	PVC	8""			N
409	40-190	CONC	18""		18""	Y

OUTFALL PIPE TYPE CODES

OBJECTID	AssetID	PipeType	PipeSize	SubmergerOutfallPipe	Flowing?
410	cb	PVC	8""	8""	N
411	X	PVC	4""		N
412	A	CONC	4""		N
413	40-200	PVC	8""	8""	N
414	U	CLAY	4""		N
415	X	CMP	24""		N
416	40-210	CONC	10""	10""	N
417	A	CONC	8""	8""	N
418	40-219	CMP	8""	8""	N
419	40-220	CMP	8""	8""	N
420	private cb	PVC	8""		N
421	U	PVC	8""	8""	
422	40-230	CMP	18""		Y
423	40-240	CONC	16""		Y
424	X	CMP	16""		Y
425	U	CONC	14""		
426	40-238	CMP	8""	8""	N
427	40-260	CMP	18""		Y
428	40-270	CMP	12""	12""	N
429	40-280	CMP	8""	8""	
430	40-290	CONC	18""		Y
431	CB	CONC	8""	8""	
432	U	DI	4""	4""	
433	40-300	CONC	24""	24""	Y
434	40-305	CONC	8""	8""	
435	U	CONC	8""	8""	
436	40-315	PVC	8""		
437	40-310	CMP	12""	12""	

381 = TOTAL OUTFALLS

OUTFALL PIPE TYPE CODES