

2011 Stormwater Management Report

Western Washington University

March 2012





2011 Report Sections

Permittee Information

Certification

Status Report Covering Calendar Year 2011

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

Problem Report Log – 2011

Stormwater Management Program Definitions & Acronyms

Attachments:

1. Att-1 SWMP Program Overview
2. Att-2 SWMP Timeline
3. Att-3 SWMP Program Activities
4. Att-4 Notice of Intent (NOI)
5. Att-5 Western seeks feedback
6. Att-5A Western Today
7. Att-6 Stormwater Spill Response Plan
8. Att-7 Stormwater Employee Training
9. Att-8 Stormwater Management Program – Facilities Management
10. Att-9 SWMP Maps Catch Basin Locations
11. Att-10 Stormwater Management for ALL
12. Att-11 Stormwater Management for Aramark
13. Att-12 Stormwater Management for EcoReps
14. Att-13 Stormwater Management for EHS
15. Att-14 Stormwater Management for Grounds
16. Att-15 Stormwater Management for Parking Office
17. Att-16 Excavation Stormwater Permit
18. Att-17 RE: Oil Spill in WWU Facilities Management Yard
19. Att-18 RE: WWU Oil Spill follow up
20. Att-20 ERTS 623082 Turbid discharge
21. Att-21 ERTS 624742 Unknown substance dumped
22. Att-22 ERTS 626146 Fountain overflow
23. Att-23 ERTS 627328 Pipeline breakage at Fairhaven College
24. Att-24 Gas cans and secondary containment



MEMO

Facilities Management

Bellingham, Washington 98225-9114

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To: Department Of Ecology
From: David Sherwood, Facilities & Utilities Maintenance Manager; Stormwater Management Program, Program Manager
Date: Monday March 26, 2011
Subject: Western Washington University Annual Stormwater Management Report for 2011

Please find attached the 2 hard copies required to be submitted to the Department of Ecology for Western Washington University's, Western Washington Phase II Municipal Stormwater Permit # WAR 04-5701, annual report.

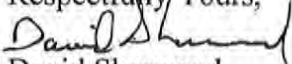
The certification page has been changed to reflect a new responsible individual for this reporting year. John Furman is the new Director of Facilities Management

There are additional attachments this year because of new milestone completions within the Permit to be completed each calendar year. Included are the Stormwater Spill Plan Response plan as well as other informational documents and attachments.

Additional training and campus awareness continues. In conjunction with the campus Environmental Health and Safety office (EHS), Facilities Management (FM) and the Parking Services (PS) Department within the University Police Department (UPD), are the departments with the most exposure for Stormwater Management control. This working group has gone back to re-evaluate the Stormwater Management Program (SWMP). These departments meet on a regular schedule to discuss stormwater concerns and plan work improving stormwater management across campus. This committee routinely requests stormwater improvement projects through the campus capital budget office.

We continue with our intent to resolve any shortcomings and improve our program to the best of our abilities. With local assistance from the Department of Ecology Bellingham office and the City of Bellingham (CoB) Public works Department, WWU has focused more to become better stewards of our local campus and community with stormwater concerns. Additionally we intend to collaborate more with the Environmental Colleges on campus to share information and management practices.

We look forward to working with the Department of Ecology on improving our management of this very important resource.

Respectfully, Yours,

David Sherwood

Month/Date	Problem	Corrective Action
Friday, January 28, 2011	Unknown substance dumped in the storm drain behind the Chemistry building. Person ran away when maintenance personnel called after them.	ERTS # 624742 Caller reports someone dumped an orange substance into the surface water drain behind the chemistry building. Although they tried to stop the person, they ran. They could see the orange substance in the drain, so used a sump pump on the catch basin, removing approx. 2-1/2 gallons. They diluted the material - it diluted easily - and pulled out approx. 5 gallons total. They tested it three times. The PH was 6; it had no smell, and was not flammable. They saved the material as well as the absorbent they used on the surface.
Wednesday, February 02, 2011	Linech Creek Transportation Center (LCTC) has turbid water running from the parking lot into South Street and is bleeding that water out into the roadway.	ERTS # 624901 Refer to G-20 letter to DoE, Christina Maginnis, Feb 28-2011
Sunday, April 03, 2011	Fine Foundation was overflowing and dumping chlorinated water into the storm system. This is also causing WWSB to have a chlorine problem.	ERTS # 626172 REPORTING A DISCHARGE OF PRESSURE WASHING WATER TO THE STORM SYSTEM. UNKNOWN AMOUNT RELEASED. ESTIMATED THAT 3 HOURS OF DISCHARGE FROM POWER WASHING ENTERED THE STORM SYSTEM. INCIDENT OCCURRED 4/2/11.
Wednesday, April 13, 2011	Pressure washing @ Miller Fall construction site. Water & waste being drained into storm sewer system and not contained or filtered. Probable chlorine water cannot go into storm drain and must be treated first. Also turbid water is not allowed.	ERTS # 626721 FM crews put down oil absorbent kitty litter, plugged off storm drains with drains dams, put up absorbent booms, put down absorbent pads and did as much clean up as possible. Sand was layered over some of the oil sheen in the gravel areas to prevent the rapid spread with the heavy rains. Booms and pads are going around these areas. We will get the pads and kitty litter cleaned up today. Our plan is to keep down the pads at least overnight and will re-evaluate tomorrow morning. Hello Christina and Bill, haven't seen the ERTS yet for this incident but need to get you updated to our course of action. This incident leaked 2 1/2 quarts of oil over a length 721 feet of gravel and asphalt surface.
Wednesday, May 11, 2011	Motor oil spill in the main WWU Maintenance Yard @ 315 26 th street. A freshly serviced PUH vehicle developed an oil leak at the oil filter. Less than 2 - 1/1 quarts of fluid was lost from the vehicle as it was driven from our Maintenance Garage to an inside of the compound parking spot. Since the oil had just been changed we know that the quantity was less than 2-1/2 quarts. Because of where the vehicle traveled and was parked and because of the heavy rainfall some bit of the oil most certainly went into both Connelly and Taylor Creek drainages. The vehicle was driven from the building and was driven out across the gravel lot to a asphalt parking spot.	As of last Friday May 13th @ 4:30 pm: <ul style="list-style-type: none"> - Most absorbent materials had been picked up (booms, pads, kitty litter etc) - The maintenance yard around the storm drains were cleaned up using our sweeper machine. Some booms were left in place in case there was any residual oil sheen. That "wax" has been collected and put under cover along with the initial cleanup on the date of the spill. We built a containment under one of our maintenance sheds to let the water evaporate from the cleanup materials and what little oil that was on the surface As of Monday May 16th @ 4:30pm: <ul style="list-style-type: none"> - All storm drain covers were removed once the areas around them had dried up enough to use our sweeper - Again the maintenance yard around the storm drains were cleaned up using our sweeper machine - Next week we will take that materials out to be disposed of at RDC. - We have implemented a review of the materials we feel are necessary to have better spill response capabilities. Our existing maintenance staging areas (2) will be increased with more spill response materials. These will most likely end up being larger rolling kits that we can load into a pickup to move directly to a spill. - We are still restoring all motorized equipment, especially our hydraulic driven ones that will have a small response kit on them. All of our Outdoor Maintenance vehicles will carry a spill response kit some need to be determined - The Field Maintenance Shop, Oil Bomber will be labelled to inspect the filter gaskets before installing a new oil filter. Our Paint Shop will be making that and installing that (Saw) tagged logs in place to prevent turbid discharge to street storm water drains. Diverted water to grassy areas where possible. Small Public Works project worked in lot 12R over summer. Results were worse than before the work was completed.
April to June 2011	Numerous calls from COB listing the "C" (Computer) lots and Fairhaven 12 A parking lot for turbid water discharge. Not always a citation, but remains a violation. These have not resulted in citations, but each time we get a call we have to attempt to solve the problem.	ERTS # 627327 & ERTS # 627328 When our people walked the site Monday morning it appeared that the carry over turbid materials of bark and soil didn't leave "the Outback" portion of the Fairhaven Commons stormwater system. It also didn't appear that water had escaped that drainage. This system has no direct connection into the storm system, but when we have large storm events that spill over does eventually go into the storm system at the newly constructed Buchanan Towers additional building storm drains. ERTS # 627327 would indicate otherwise.
Sunday, June 12, 2011	Broken 8" water line @ Fairhaven Commons/Administration facility. Water flooded all the way down from WWU outback @ Fairhaven, through BTA construction site, out Taylor Creek, to Padden creek and into Bellingham Bay. This flow triggered a call into COB Stormwater Hotline for the high level of turbid water in Padden Creek.	ERTS # 627327 The catch basin had a drain sock. The sock was partially clogged. Fluid was sucked out, sock removed, fluid sucked out from the catch basin bottom, the gravel/silt in the bottom of the catch basin was removed and the sock replaced. All fluid dumped in the catch basin was removed since the fluid level did not reach the overflow. Weather was dry at the time. It appears no fluid went down the piping system which connects to the south campus detention vault.
Friday, June 24, 2011	Around 11:15 am a window washing crew inappropriately dumped approximately 2 to 3 gallons of a diluted biodegradable window washing solution down the parking lot catch nearest the east entry to Western's Communication Facility. This was noticed by a Western Environmental Health & Safety staff member around 11:30 am and the crew agreed to proper dispose of the solution in the future. The solution is Glass Clean and was mixed at a ratio of 1/4 oz per gallon.	ERTS # 627327 The catch basin had a drain sock. The sock was partially clogged. Fluid was sucked out, sock removed, fluid sucked out from the catch basin bottom, the gravel/silt in the bottom of the catch basin was removed and the sock replaced. All fluid dumped in the catch basin was removed since the fluid level did not reach the overflow. Weather was dry at the time. It appears no fluid went down the piping system which connects to the south campus detention vault.
Early 2011 & Sept 2011	Two students were caught in the beginning process of dumping kitchen grease into the storm drain @ Fairhaven Commons loading dock.	Dining Services (Sodexho) personnel and managers were reminded that they cannot dump into storm drains. Drains are clearly marked. Additional training will occur through EHS. In Aug 2011 WWU has new Dining Services contractor, Aramark. New training was provided by EHS.
Wednesday, September 14, 2011	Temporary Custodian dumped wax stripping water into a storm drain behind the Chemistry facility.	ERTS # 629215 Temporary Facilities Management (FM) Custodial employee emptied a mop bucket containing a water soluble wax stripper into a catch basin in back of the Chemistry building. Other temporary FM employees from another work crew noted this and called their supervisor who responded along with WWU Environmental Health & Safety (EHS) personnel. A MSDS sheet was on site in minutes to determine the materials being used in the wax stripping on the floor. Both wax and stripper were water soluble materials. The catch basin was dry and the wet materials that were dumped in were removed within 10 minutes. No materials reached the stormwater system outflow piping. The catch basin drain was plugged to avoid any materials going into the outfall during cleanup of the catch basin sump. The dry catch basin materials now containing the wet wax stripping water and wax was removed from the catch basin (swept up into dry plastic bags) and the materials collected were put into plastic bags for disposal. The affected area was washed down and wash water was collected with the absorbent materials in the sump. The drain plug material was removed and put into plastic bag for disposal. Additional training has been scheduled for the Custodial Maintenance Team because of this event.
Tuesday, September 27, 2011	Students dumped a dirty oil rags container after washing with "Clean Green" and the chlorinated wash water down a storm drain @ the Ross Engineering Technologies facility.	Storm system was dry. Cleaner was bio degradable. Cleaned up wet residue and evacuated the catch basin. Was not reported to Doe or CoB.
Year 2011	LCTC catch basin layout has prompted many inquiries from COB because of turbid water. These have not been written up but we receive them by phone.	ERTS # 624901 Refer to G-20 letter to DoE, Christina Maginnis, Feb 28-2011. They know we are searching for a final resolution and funding.
15-Sep-2011 & 21-Sep-2011	Two separate dates had vendor changing diesel fuel filters on rental lifts and spilled diesel on ground. Did not get close to any storm drain system. Was not reported to DOE or COB.	Diesel spill on the east side of Fine Arts by Birch Equipment employee while repairing a rental lift used by our window washers. Our window washers contained the spill before it went down the surface water drain. I understand that they took the lead and did a great job of cleaning it up.
Thursday, September 22, 2011	Hydraulic leak on JLG lift. Did not get close to any storm drain system. Was not reported to DOE or COB.	Leak was in vegetated area. Evacuated small amount of soil. Cleaned up with dry absorb. Not near any storm drains.
Sept to Dec 2011	Hydraulic leak on JLG lift. Did not get close to any storm drain system. Was not reported to DOE or COB.	Leak was in vegetated area. Evacuated small amount of soil. Cleaned up with dry absorb. Not near any storm drains.

I. Permittee Information	
Permittee Name Western Washington University	Permittee Coverage Number WAR04-5701
Contact Name David Sherwood	Date of Permit Coverage
Mailing Address 526 High Street	Phone number 360-650-3727
City Bellingham	State Zip + 4 WA 98225-9121
Email Address david.sherwood@wwu.edu	

II. Regulated Small MS4 Location							
Municipal Entity Western Washington	Entity Type: Mark X in the box that applies						
	<table border="1"> <tr> <th>County</th> <th>City/Town</th> <th>Other</th> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	County	City/Town	Other			
County	City/Town	Other					
Major Receiving Water(s) Bellingham Bay (via CoB), Taylor Creek, and Connelly Creek							

III. Relying on another Governmental Entity	
<p>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. <i>Attach a copy of your agreement with the other entity to provide additional detail (unless previously submitted).</i></p>	
Name of Entity:	Permit Obligation(s):

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 <u>David Sherwood</u>	Title <u>Facilities and Utilities Maintenance Manager</u>	Date <u>March 26, 2012</u>
Name <u>John Furman</u>	Title <u>Director of Facilities Management</u>	Date <u>March 27, 2012</u>
Name <u>Rich Van Den Hul</u>	Title <u>Vice President for Business & Financial Affairs</u>	Date <u>3-29-2012</u>
Name _____	Title _____	Date _____
Name _____	Title _____	Date _____

PLEASE label reporting year and your entity name, above.

PLEASE refer to the INSTRUCTIONS tab for assistance filling out this table.

NOTE: For clarification on how to answer questions, place cursor over cell with red flag in corner.

NOTE: Items that have future compliance dates must still be answered to indicate status.

PLEASE label information in any attachments with corresponding question numbers.

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
S6.D Stormwater Management Program				
1 Attached a copy of the Permittee's Stormwater Management Program document (SWMP) as per S6.A.5. (Required annually)	Y		See attachments provided	Att-1: SWMP Overview Att-2: SWMP Timeline
2 Attached a notification of any jurisdictional boundary changes resulting in an increase or decrease in the Permittee's geographic area of coverage during the reporting period, and implications for the SWMP. (Required annually, S9.F.2)	NA			
S.6.D.1 Public Education and Outreach				
3 Labeled at least 50% of all storm drain inlets owned or operated by the Permittee that are located in maintenance yards, in parking lots, along sidewalks, and at pedestrian access points. (Required by 3 years from date of permit coverage or date established by Ecology, S6.D.1.a)	Y		WWU Outdoor Maintenance personnel in 2009 labeled 100 of the university's approximately 175 storm drain inlets with the same placard that is in use by the City of Bellingham. The remaining inlets were labeled during 2010. See 5 below for 2010 completion.	
3a Number of inlets labeled:		100	As reported in 2010 report	
4 (Public ports, colleges and universities only) Distributed educational information to tenants and residents about the impact of stormwater discharges on receiving waters and steps that can be taken to reduce pollutants in stormwater runoff. (Required by 3 years from date of permit coverage, S6.D.1.b)	Y			Att-3: 2011 Program Activities

Question	Y/N/NA	#	Comments (50 word limit)	Name of Attachment & Page Number, if applicable
5 Labeled all storm drain inlets owned or operated by the Permittee that are located in maintenance yards, in parking lots, along sidewalks, and at pedestrian access points. (Required by August 15, 2011 or date established by Ecology, S6.D.1.a.ii)	Y		WVU completed labeling of all campus storm drains prior to December 31, 2010 deadline. This included replacement of damaged and missing labels. WVU's labels are modeled after CoB. Total campus labels number 358.	
5a Number of inlets labeled:		258	As reported in 2010 report	
6 Re-labeled all storm drain inlets with labels when no longer clearly visible and/or easily readable within 90 days. (Required after all inlets labeled, S6.D.1.a.iii)	Y		Approximately 150 labels were either damaged, stolen or were otherwise missing. WVU's labels are modeled after City of Bellingham (COB). Total campus labels number 358.	
6a Number of inlets labeled:		150	Replacement of is ongoing throughout the year. Re-labels as they are found. Catch basin inspection/cleaning find most of these problems.	
S6.D.2 Public Involvement and Participation				
7 Published a public notice and solicited public review of the SWMP. (Required by August 15, 2011 or date established by Ecology, S6.D.2.a)	Y		WVU used the option to advertise on the campus website prior to the Aug 15, 2011 deadline	Att-4 NOI mailed Att-5 Western Today website Att-5A Western Today for Aug 18, 2011
8 Made the latest version of the SWMP available to the public. If posted on website, list address in Comments. (Required by August 15, 2011 or date established by Ecology, S6.D.2.b)	Y		Information about WVU's SWMP posted on Facilities Management's website. Included on the SWMP website are annual reports to DoE and an opportunity for public feedback. Campus Environmental Health & Safety office "EHS Links" also connects to the Facilities Management Stormwater webpage.	Att-7: Facilities Management link http://www.wvu.edu/depts/fm/Services/StormWaterMgmt/index.html Att-8: EHS link http://www.wvu.edu/ehs/links.shtml
S6.D.3 Illicit Discharge Detection and Elimination				
9 Complied with all relevant ordinances, rules, and regulations of the local jurisdiction(s) that govern non-stormwater discharges. (Required from date of permit coverage, S6.D.3.a)	Y			
10 Developed and adopted policies to prohibit illicit discharges and identified enforcement mechanisms. (Required by 1 year from date of permit coverage, S6.D.3.b.)	Y		WVU's Stormwater Policy was adopted in 2008, is available via a link on SWMP website, and was included in WVU's 2009 Annual Report	

Question	Y/N/ NA	#	Comments (50 word limit)	Name of Attachment & Page Number, if applicable
11	Y		Implemented policies to prohibit illicit discharges, including an enforcement plan. (Required 1 year from date of permit coverage, S6.D.3.b)	
12	Y		Developed a map of the storm sewer system showing all known storm drain outfalls, receiving waters, and areas contributing runoff to each outfall. Made map available on request to Ecology or others, if requested. (Required by August 15, 2011 or date established by Ecology, S6.D.3.c)	Att-9: Wilson Maps with catch basin locations.
13	Y		Conducted annual field inspections and visually inspected for illicit discharges at approximately one third of all known outfalls. (Required to begin by 2 years from date of permit coverage, S6.D.3.d)	Att-9: Wilson Maps with catch basin locations.
13a		3	Number of outfalls inspected:	
14	Y		Developed and implemented procedures to identify and remove illicit discharges. Required by 2 years from date of permit coverage, S6.D.3.d)	See question 11
15	NA		Attached a summary of illicit discharges discovered and actions taken to eliminate the discharges. (Required annually after 2 years from date of permit coverage, S9)	

Question	Y/N/ NA	#	Comments (50 word limit)	Name of Attachment & Page Number, if applicable
16 Developed and implementing a spill response plan that includes coordination with a qualified spill responder. (Required by August 15, 2011 or date established by Ecology, S6.D.3.e)	Y		The Spill Response Plan utilizes part of draft policy for oil spills. This document Emergency Support Function 10, Appendix 1, Oil Spill Prevention Control and Countermeasure Plan, For, Western Washington University is being updated and is under review. The Spill Response Plan may have minor changes following the approval of that document.	Att-6: Spill Response Plan
17 Provided staff training or coordinated with existing training to educate relevant staff on proper BMPs for preventing illicit discharges, including spills. (Required by 2 years from date of permit coverage, S6.D.3.f)	Y		Additional training was added across campus in 2011. Stormwater discharge BMPs reviewed with Outdoor Maint. periodically for inspection requirements and corrective actions. Stormwater training is now an annual requirement for all Facilities Management personnel from the maintenance and construction shops. WWU continues to strengthen training & procedures to properly meet requirements for the MS4 permit.	Att-7: Stormwater Employee Training Att-10: Stormwater Training for ALL Att-11: Stormwater Training for Aramark (Food service provider) Att-12: Stormwater for EcoReps Att-13: Stormwater Training for EHS Att-14: Stormwater Training for Grounds (Outdoor Maintenance) Att-15: Stormwater Training for Parking Office Att-16: Excavation Permit
18 S6.D.4 Construction Site Stormwater Control Complied with all relevant ordinances, rules, and regulations of the local jurisdiction(s) that govern construction phase stormwater pollution prevention measures. (Required from date of permit coverage, S6.D.4.a)	Y			
19 Obtained NPDES permit coverage for all applicable construction projects under the control of the Permittee. (Required from date of permit coverage, S6.D.4.b)	Y		Contractor obtained NPDES permits for Miller Hall remodel which was completed in fall 2011. All construction projects permits held by contractors.	
20 Coordinated with local jurisdictions on construction projects owned or operated by other entities that discharge into Permittee's MS4. (Required after date of permit coverage, S6.D.4.c)	NA		There are no other discharges into WWU's MS4	

Question	Y/N/ NA	#	Comments (50 word limit)	Name of Attachment & Page Number, if applicable
21	Y		Appropriate staff training is a requirement of all contractors hired for major public work projects. Contractors follow WWU and City of Bellingham stormwater requirements	
22	Y		Provided access, as requested, for inspection of construction sites under the control of the Permittee during the active grading and/or construction period. (Required after date of permit coverage, S6.D.4.e)	
			S6.D.5 Post-Construction Stormwater Management for New Development and Redevelopment	
23	Y		Complied with all relevant ordinances, rules, and regulations of the local jurisdiction(s) that govern post-construction stormwater pollution prevention measures, including proper operation and maintenance of the MS4. (Required after date of permit coverage, S6.D.5.a)	
24	NA		Coordinated with local jurisdictions on projects owned or operated by other entities that discharge into Permittee's MS4. (Required after date of permit coverage, S6.D.5.b)	There are no other discharges into WWU's MS4
			S6.D.6 Pollution Prevention and Good Housekeeping for Municipal Operations	
25	Y		Developed and implemented an Operation and Maintenance program. (Required by 3 years from date of permit coverage, S6.D.6.a)	Routine inspection of stormwater intakes and outflows have been incorporated into WWU Outdoor Maintenance Shop preventive maintenance schedules. After "event" inspections are routine to look for any changes to stormwater systems non campus.
26	Y		Conducted spot checks of stormwater facilities after major storms. (Required to begin by 3 years from date of permit coverage, S6.D.6.a.i)	WWU Outdoor Maintenance personnel inspect stormwater intakes and outflows following major storms and take corrective action is taken as necessary Att-3: 2011 Program Activities.

Question	Y/N/NA	#	Comments (50 word limit)	Name of Attachment & Page Number, if applicable
27 Developed and implemented a Stormwater Pollution Prevention Plan (SWPP) for material storage areas, heavy equipment storage areas, and maintenance areas not covered by another NPDES permit that covers stormwater discharges associated with the activity. (Required by 3 years from date of permit coverage or date established by Ecology, S6.D.6.a.vi)	Y		A secondary containment program was initiated in 2011 for the Outdoor Maintenance Shop(Grounds). ALL portable gasoline containers MUST be secondary containment type cans. Example from 2010: FM Outdoor Maintenance and Shop Maintenance personnel assigned the responsibility to properly maintain facility/area as designed. Powered air sweeper is routinely used to sweep sidewalks, roadways, and maintenance areas of excess sand, dirt and debris to prevent from entering stormwater intakes.	Att-3: 2011 Program Activities. Att-24: Secondary containment email
28 Have NPDES permit for Stormwater Discharges Associated with Industrial Activities coverage for all applicable industrial facilities operated by the Permittee. (Required after date of permit coverage, S6.D.6.b)	NA		Have no industrial facility requirements	
29 Provided adequate training for staff to carry out the Operations and Maintenance plan to minimize impacts to water quality. (Required to begin by 3 years from date of permit coverage, S6.D.6.d)	Y		O&M water quality training ongoing 2011 on correct procedures for properly controlling pressure washer runoff, pipe flushing, and other non-stormwater discharges. WWU continues strengthening training & procedures to properly meet requirements for the MS4 permit in progress.	Att-3: 2011 Program Activities,
30 S7 Compliance with Total Maximum Daily Load Requirements	NA		No TMDL requirements	
31 Is there an approved Total Maximum Daily Load (TMDL) applicable to stormwater discharges from a MS4s owned or operated by the Permittee? (S7)	NA		No TMDL requirements	
32 Complied with the specific TMDL requirements identified in Appendix 2. (S7.A)	NA		No TMDL requirements	
33 Attached status report of TMDL implementation. (S7.A)	NA		No TMDL requirements	
33 Where monitoring was required in Appendix 2, conducted the monitoring according to an approved Quality Assurance Project Plan. (S7.A)				

Question	Y/N/NA	#	Comments (50 word limit)	Name of Attachment & Page Number, if applicable
General Conditions				
34 Notified Ecology of the failure to comply with the permit terms and conditions within 30 days of becoming aware of the non-compliance. (G20)	NA			
35 Notified Ecology immediately in cases where the Permittee becomes aware of a discharge into or from the Permittees MS4 which could constitute a threat to human health, welfare, or the environment? (G3)	Y		1. Virgin oil spill @ FM yard May 11, 2011. A freshly serviced FM vehicle developed an oil leak at the oil filter. Less than 2 -1/2 quarts of fluid was lost from the vehicle as it was driven from our Maintenance Garage to an inside area of the compound parking lot. Since the oil had just been changed we know that the quantity was less than 2 -1/2 quarts. 2. Misc. spills	Att-17: RE: Oil Spill in WWU yard Att-18: RE: WWU Oil Spill Follow Up 2 Att-20: ERTS 623082 Turbid Discharge Att-21: ERTS 624742 Unknown Substance Att-22: ERTS 626146 Fountain Overflow Att-23: ERTS 627328 Pipeline Breakage See question 17 above
36 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)	Y		Better awareness training is being provided through WWU EHS office. A stormwater power point training is part of the annual safety and awareness training.	
S4 Compliance with Standards				
37 If applicable, attached a summary of the status of implementation of any actions taken pursuant to S4.F and the status of any monitoring, assessment, or evaluation efforts conducted during the reporting period. (S4.F.3.d)	NA		Received no S4.F notification	

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 #1 if you have no information to report.

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. No Requirement	
2.	
3.	
4.	
5.	
6.	

STORM WATER MANAGEMENT PROGRAM

Program Overview
Annual Report

PROGRAM OVERVIEW

Western Washington University's, in concert with the Washington State Department of Ecology, will implement a Storm Water Management Program (SWMP) with the expressed purpose of reducing the discharge of pollutants from Western's storm water system to the maximum extent practicable and to protect the water quality of out-flowing waterways. Western's SWMP will consist of the following components:

Coordination

The SWMP will include mechanisms to encourage coordinated storm water related policies, programs and projects on Western owned properties with the City of Bellingham, other local jurisdictions, and university departments.

Public Education and Outreach

- Storm drain inlets will be labeled with the message "Dump no waste" and indicate the point of discharge as a river, lake, bay, or groundwater. 50% of drains will be labeled within 3 years of permit coverage and all drains will be labeled no later than 180 days prior to expiration date of the storm water permit.
- Annually, starting no later than 3 years from beginning of permit coverage, the university will distribute educational information to students and staff on the impact of storm water discharges on receiving water and the steps that can be taken to reduce pollutants in storm water runoff.

Public Involvement and Participation

- Western's SWMP will be posted and updated on the university website, with opportunity provided for public comment.
- No later than 180 days prior to expiration date of the storm water permit, the university will publish a public notice in the Bellingham Herald and solicit public review of the SWMP.

Illicit Discharge Detection and Elimination

- From the date of coverage of the storm water permit, Western will comply with all relevant ordinances, rules and regulations of the City of Bellingham, and other applicable local jurisdictions.

FACILITIES MANAGEMENT

STORM WATER MANAGEMENT PROGRAM

Program Overview
Annual Report

- Within 1 year from the date of permit coverage, Western will develop and adopt appropriate policies prohibiting illicit discharges and illegal dumping and identify enforcement mechanisms. The enforcement mechanisms will be implemented no later than 18 months from the date of permit coverage.
- No later than 180 days prior to the expiration date of the permit, Western will develop a storm sewer system map showing the locations of all known storm drain outfalls, labeling the receiving waters, and delineating the areas contributing runoff to each outfall. The map will be posted on the university website along with the SWMP.
- Within 2 years of the date of permit coverage, the university will conduct field inspections and visually inspect for illicit discharges at 1/3 of known outfalls and continue with 1/3 of outfalls each year thereafter. Procedures will be developed and implemented to identify and remove any illicit discharges and records will be kept of inspections and follow-up activities.
- No later than 180 days prior to expiration date of the permit, Western will develop and implement a spill response plan that includes coordination with a qualified spill responder.
- Western will train all relevant staff on proper best management practices (BMP) for preventing spills and illicit discharges.

Construction Site Storm Water Runoff Control

- From the date of coverage of the storm water permit, Western will comply with all relevant ordinances, rules and regulations of the City of Bellingham, and other applicable local jurisdictions that govern construction phase storm water pollution prevention measures.
- Western will obtain, as required, National Pollutant Discharge Elimination System (NPDES) permits that cover the storm water discharges associated with the construction activity, prior to discharging.
- Western will provide training, or coordinate with existing training programs, to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.
- Western will coordinate with the Department of Ecology, or local jurisdiction, to provide access for inspection of construction sites or other land disturbances greater than or equal to one acre.

STORM WATER MANAGEMENT PROGRAM

Program Overview
Annual Report

Post-construction Storm Water Management for New Development and Redevelopment

- From the date of coverage of the storm water permit, Western will comply with all relevant ordinances, rules and regulations of the City of Bellingham, and other applicable local jurisdictions that govern post-construction storm water pollution prevention measures.
- No later than 1 year from the date of permit coverage, Western will comply with the Minimum Technical Requirements for post construction storm water controls for new development and redevelopment of construction sites or other land disturbances greater than or equal to one acre.

Pollution Prevention and Good Housekeeping Maintenance and Operation

- Within 3 years from the date of permit coverage, Western will develop and implement a maintenance and operation (M&O) plan to minimize storm water pollution from activities conducted by the university.
- The M&O plan will include record keeping procedures to track 1) performance of operational source control activities, 2) performance of scheduled inspections and maintenance activities, 3) responses to spills and other potential pollution incidents.
- The M&O plan will include relevant training of all employees whose construction, operations, or maintenance job functions may impact storm water quality.

Reporting Requirements

- The university will maintain and make readily available a SWMP document that identifies the program plans and activities for the ensuing year(s).
- The university will submit no later than March 31 each year, beginning in the year 2008, an Annual Report to the Department of Ecology, using the forms provided.

General Conditions

- The university will comply with the general conditions of the storm water permit as identified by the Department of Ecology in accordance with the following:
 - Discharges and activities consistent with terms and conditions of permit
 - Proper operation and maintenance
 - Spill notification

STORM WATER MANAGEMENT PROGRAM

Program Overview
Annual Report

Prohibition of intentional storm water bypass
Right of entry allowed
Duty to mitigate
No conveyance of property rights
Compliance with other laws and statutes
Monitoring
No re-entry of removed substances
Severability
Revocation of coverage
Transfer of coverage
General permit modification and revocation
Reporting a cause for modification or revocation
Appeals
Penalties
Duty to reapply
Certification and signature
Non-compliance notification

WWU Storm Water Management Program

	2007				2008				2009				2010				2011				2012											
	W	S	S	F	W	S	S	F	W	S	S	F	W	S	S	F	W	S	S	F	W	S	S	F								
Submit NOI - Receive Permit Coverage	2/16																															
Permit Actions & Requirements																																
Comply with all relevant ordinances, rules, and regulations of the local jurisdiction (CoB) that govern non-stormwater discharges; construction phase stormwater pollution prevention measures; and post-construction stormwater pollution prevention measures, including proper operation and maintenance of MS4																																
Develop and Implement a stormwater management program																																
Prepare written documentation of the SWMP and submit report annually					3/31				3/31				3/31				3/31				3/31											
SWMP Components																																
<u>Public Education and Outreach</u>																																
Label all storm drain inlets owned or operated by WWU that are located in maintenance yards, in parking lots, along sidewalks, and at pedestrian access points - 50% within 3 years - relabel as needed									2/15																							
Each year, distribute educational information to students and staff about the impact of stormwater discharges on receiving waters and steps that can be taken to reduce pollutants in stormwater runoff																																
<u>Public Involvement and Participation</u>																																
Make the latest updated version of the SWMP available on website																																
Publish public notice and solicit public review of SWMP																					8/19											
<u>Illicit Discharge Detection and Elimination</u>																																
Develop and adopt appropriate policies prohibiting illicit discharges and illegal dumping; identify possible enforcement mechanisms	2/15																															
Develop and implement an enforcement plan using these enforcement mechanisms to ensure compliance with illicit discharge policies									8/15																							
Develop storm sewer system map and delineate areas of runoff and make available in electronic form																					8/19											

WWU Storm Water Management Program

	2007				2008				2009				2010				2011				2012			
	W	S	S	F	W	S	S	F	W	S	S	F	W	S	S	F	W	S	S	F	W	S	S	F
Each year, conduct field inspections and visually inspect for illicit discharges at all known outfalls that discharge to surface waters - 1/3 each year beginning no later than within 2 yrs									2/15															
Develop/implement procedures to identify/remove illicit discharges. Keep records of inspections and follow-up activities									2/15															
Develop/implement spill response plan																	8/19							
Provide relevant staff training on BMP to prevent spills and illicit discharges																								
<u>Construction Site Stormwater Runoff Control</u>																								
Prior to discharging, obtain NPDES permit coverage, where required, for all construction projects owned and operated by WWU																								
Coordinate with CoB to assist with achieving compliance with all relevant ordinances, rules, and regulations																								
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 (for construction projects)																								
Coordinate, as requested, with DoE or CoB to provide access for inspection of construction sites or other land disturbances under the control of WWU during the active grading and/or construction period																								
Comply with the Minimum Technical Requirements for new development and redevelopment on all new projects owned or operated by WWU if larger than one acre (see Appendix I)																								
<u>Post-Construction Stormwater Management for New Development and Redevelopment</u>																								
Comply with all relevant ordinances, rules and regulations that govern post-construction stormwater pollution prevention measures. Coordinate with CoB to assist with achieving compliance with ofinances, rules, and regulations																								
<u>Pollution Prevention and Good Housekeeping</u>																								
Develop and implement an operation and maintenance plan, including pollution prevention and good housekeeping procedures, to minimize stormwater pollution from activities conducted by WWU													2/15											

STORM WATER MANAGEMENT PROGRAM

Program Activities – 2011

PROGRAM ACTIVITIES FOR 2011

Following are the activities that will occur during 2011 to reduce the discharge of pollutants from Western Washington University's storm water system to the maximum extent practicable and to protect the water quality of out-flowing waterways.

Coordination

- The University, through the department of Facilities Management (FM), will actively maintain open communication with the city of Bellingham's department for storm water management, operators of other local MS4's, and the Department of Ecology to exchange best practices and address issues and concerns.

Public Education and Outreach

- Prepare and distribute educational information to students and staff on the impact of storm water discharges on receiving water and the steps that can be taken to reduce pollutants in storm water runoff.
- FM will provide additional Stormwater Management information through the University's Communication online publication "Western Today" @ (<http://www.onlinefast.org/wwutoday/>) and through the FM Director's "Desk Notes" @ (<http://www.onlinefast.org/wwutoday/search/node/desk%20notes>)

Public Involvement and Participation

- Maintain Western's SWMP website (<http://www.wvu.edu/depts/fm/>) and promote use for public information and comment.

Illicit Discharge Detection and Elimination

- Comply with all relevant ordinances, rules, and regulations of the local jurisdiction (CoB) that govern non-storm water discharges; construction phase storm water pollution prevention measures; and post-construction storm water pollution prevention measures, including proper operation and maintenance of MS4.
- Maintain SWMP policies and procedures – adopt additional policies and procedures as necessary.

STORM WATER MANAGEMENT PROGRAM

Program Activities – 2011

- Conduct field inspections and visually inspect for illicit discharges at all known outfalls of MS4. Inspection activities to include identification and removal of any illicit discharges and recording of inspections and follow-up activities.
- Continue to provide training for all relevant staff on proper best management practices (BMP) to prevent spills and illicit discharges.
- Establish a BMP database with specific controls, examples and photos for WWU personnel to follow.
- The University's Environmental Health and Safety office (EHS) will provide initial training that will closely follow WWU' SWMP to new employees whose construction, operations, or maintenance job functions may impact storm water quality. SWMP training along with BMP's will be an annual requirement for those employees. Refresher training nominally will be semi-annual or more frequent for employees whose job functions more readily may impact storm water quality.
- All WWU employees in the Outdoor Maintenance Shop will use secondary containment for any transport of pesticides across campus.
- All Facilities Management personnel that transport hazardous materials will be provided training and necessary secondary containment Personal Protective Equipment (PPE) as required to do their assigned work. A review of hazardous materials will determine which FM shops are provided with this additional training.
- EHS will provide additional training for secondary containment across campus to any other departments that might at sometime transport hazardous materials. A review of hazardous materials will determine which campus personnel are provided with this additional training.

Gravel Parking Lots Storm Water Runoff Control

- Provide training, or coordinate with existing training programs, to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work. Parking Services, under the Department of Public Safety, provides maintenance and repair work for all Parking Lots.
- Improve response to any turbid water discharge from the gravel parking lots.
- Involve the University's EHS office more into the mainstream provisions of the MS4 permit to assist with training and compliance issues especially with the transportation of hazardous chemicals.

STORM WATER MANAGEMENT PROGRAM

Program Activities – 2011

- Initiate the request for funding through the state Legislature to replace the gravels lots on campus and provide a maintainable surface where WWU can meet the requirements of its secondary MS4 permit with the CoB. Coordination for funding requests will be through the University's EHS office and Facilities Management.

Construction Site Storm Water Runoff Control

- Comply with all relevant ordinances, rules and regulations of the City of Bellingham, and other applicable local jurisdictions that govern construction phase storm water pollution prevention measures.
- Obtain, as required, National Pollutant Discharge Elimination System (NPDES) permits that cover the storm water discharges associated with the construction activity, prior to discharging.
- Provide training, or coordinate with existing training programs, to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work. The EHS department will provide refresher training to FM project managers on a specified time frame throughout the project as determined by EHS. Nominally this will be semi-annual.
- Coordinate with the Department of Ecology, or local jurisdiction, to provide access for inspection of construction sites or other land disturbances greater than or equal to one acre.

Post-construction Storm Water Management for New Development and Redevelopment

- Comply with all relevant ordinances, rules and regulations of the City of Bellingham, and other applicable local jurisdictions that govern post-construction storm water pollution prevention measures.
- Comply with the Minimum Technical Requirements for post construction storm water controls for new development and redevelopment of construction sites or other land disturbances greater than or equal to one acre.

Pollution Prevention and Good Housekeeping Maintenance and Operation (M&O)

- Maintain a maintenance and operation plan, including pollution prevention and good housekeeping procedures, to minimize storm water pollution from

STORM WATER MANAGEMENT PROGRAM

Program Activities – 2011

activities conducted by WWU. The M&O plan includes relevant training of all employees whose construction, operations, or maintenance job functions may impact storm water quality.

- FM will move to improve the internal tracking measures for M & O through the campus Facilities Administration Management Information System (FAMIS)

Reporting Requirements

- No later than March 31, 2011, submit an Annual Report to the Department of Ecology, using the forms provided.
- No later than December 31, 2011 prepare program activities for 2012 and update the relevant SWMP documents.

General Conditions

- Comply with the general conditions of the storm water permit as identified by the Department of Ecology in accordance with the following:
 - Discharges and activities consistent with terms and conditions of permit
 - Proper operation and maintenance
 - Spill notification
 - Prohibition of intentional storm water bypass
 - Right of entry allowed
 - Duty to mitigate
 - No conveyance of property rights
 - Compliance with other laws and statutes
 - Monitoring
 - No re-entry of removed substances
 - Severability
 - Revocation of coverage
 - Transfer of coverage
 - General permit modification and revocation
 - Reporting a cause for modification or revocation
 - Appeals
 - Penalties
 - Duty to reapply
 - Certification and signature
 - Non-compliance notification



DUTY TO REAPPLY – Notice of Intent (NOI) for coverage under a National Pollutant Discharge Elimination System Municipal Stormwater General Permit

Introduction

This form must be used by all operators of municipal separate storm sewer systems (permittees) currently under coverage of one or more of the following municipal separate storm sewer systems (MS4) permits:

- **Phase I Permit** – National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General Permit for Discharges from Large and Medium Municipal Separate Storm Sewer Systems.
- **Phase II Permit for Western Washington** – NPDES and State Waste Discharge General Permit for Discharges from Small Municipal Separate Storm Sewers in Western Washington.
- **Phase II Permit for Eastern Washington** – NPDES and State Waste Discharge General Permit for Discharges from Small Municipal Separate Storm Sewers in Eastern Washington.

The Department of Ecology (Ecology) will use the information provided to ensure permittees have continuing coverage under:

- The appropriate existing (2007) permit to be in effect from August 2012 to August 2013:
 - **Phase I** (with possible minor changes).
 - **Eastern Washington Phase II** (unchanged).
 - **Western Washington Phase II** (unchanged).
- And, the appropriate updated (2012) permit to be in effect from August 2013 to August 2018:
 - **Phase I** (updated).
 - **Eastern Washington Phase II** (updated).
 - **Western Washington Phase II** (updated).

Please answer all questions accurately and completely. If a question does not apply, answer NA to that question. See instructions at the back of the form for more information.

Operators of MS4s currently under an existing permit must complete this application, obtain an authorized signature, and return it to Ecology postmarked no later than **August 19, 2011** in order to be in compliance with General Condition G18 of their existing permit. Permittees may complete this form by hand, or download the form from Ecology's web site and fill it out electronically.

An authorized signature on a hard copy is needed to complete the application. Please reference supporting documents in the text and attach as necessary.

Phase I, Phase II WWA & EWA Municipal Stormwater Permits

Mail completed NOI to:

**Department of Ecology
Water Quality Program
Municipal Stormwater Permits
PO Box 47696
Olympia, WA 98504-7696**

Ecology will send each applicant an acknowledgment of receipt. If you have questions about this application, please contact the appropriate Ecology employee listed in the instructions at the end of this form, or call Ecology's Water Quality Program at 360-407-6600.

Part 1 - Owner/Operator Information

A. Applicant information			B. Responsible official or representative		
Name of city, county, or special district: Western Washington University			Name Tim Wynn		
			Title Director of Facilities		
			Phone 360-650-3496		
			Email tim.wynn@wwu.edu		
Mailing Address 516 High Street			Mailing Address 915 26th Street		
PO Box (Optional)			PO Box (Optional)		
City Bellingham	State WA	Zip 98225-9121	City Bellingham	State WA	Zip 98225-9121

C. Billing address, if different			D. Contact person		
Name			Name David Sherwood		
Mailing Address			Title Facilities & Utilities Maintenance Manager		
PO Box (Optional)			Phone No. Business 360-650-3727	Ext.	
City	State	Zip	Email david.sherwood@wwu.edu		
			Fax No. (Optional) 360-650-3226		
E. Ownership status (check appropriate box)					
<input type="checkbox"/> City or Town <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> Tribal					
Special Purpose District:(secondary permittee)					
<input type="checkbox"/> Diking/drainage district <input type="checkbox"/> Port <input type="checkbox"/> Flood control district <input checked="" type="checkbox"/> University <input type="checkbox"/> Public school district <input type="checkbox"/> Park district <input type="checkbox"/> State agency (give name) _____ <input type="checkbox"/> Other (please describe) _____					

Ecology is an equal opportunity agency.

Phase I, Phase II WWA & EWA Municipal Stormwater Permits

Part 2 – Permit(s) under which the applicant is requesting coverage

- Phase I Municipal Stormwater Permit
- Phase II Municipal Stormwater Permit for Western Washington
- Phase II Municipal Stormwater Permit for Eastern Washington

If you operate municipal separate storm sewer systems located in areas covered by more than one permit, please list the locations of all of the municipal separate storm sewer systems for which you are requesting permit coverage.

Part 3 – Co-permittee information

Complete this part of the NOI only if you are co-applying with another entity to meet the requirements of the permit. Permittees that co-apply are responsible for meeting permit conditions related to their discharge(s).

- Not applicable
- Applicable, list all co-permittees:
 - Co-applicant's Name:
 - Co-applicant's Name:
 - Co-applicant's Name:
 - Co-applicant's Name:

Part 4 - Certification


An authorized person, such as a principal executive officer or ranking elected official, must sign the certification statement.

OR

A duly authorized representative of the executive officer (or ranking elected official) may sign the certification (see instructions).

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 gather and evaluate the information submitted. 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 knowing violations.

David E. Sherwood Manager, Facilities
Print or type name of responsible official or representative Title

 7/6/2011
Signature of responsible official or representative Date

INSTRUCTIONS

When to apply:

Mail the NOI no later than **August 19, 2011**. Upon receipt of a complete NOI, Ecology will notify the applicant by mail of confirmation of coverage under the reissued permits.

Questions:

If you have questions, please contact the Municipal Stormwater Permit specialist who manages the permit in the county or counties in which your facility or district is located:

Island, Skagit and Whatcom Counties	<u>Christina Maginnis</u>	360-715-5212
Phase I Permittees (City of Seattle, King and Snohomish Counties, Port of Seattle) and Phase II permittees in Snohomish County.	<u>Rachel McCrea</u>	425-649-7223
Phase II Cities within King County and within Kitsap County.	<u>Anne Dettelbach</u>	425-649-7093
Clallam and Pierce Counties and the Port of Tacoma (Phase I and Phase II)	<u>Vince McGowan</u>	360-407-7320
Clark, Cowlitz, Grays Harbor, Lewis, and Thurston Counties	<u>Lisa Cox</u>	360-690-7120
Benton, Chelan, Douglas, Kittitas, and Yakima Counties	<u>Terry Wittmeier</u>	509-574-3991
Asotin, Franklin, Grant, Spokane, Walla Walla, and Whitman Counties	<u>Dave Duncan</u>	509-329-3554

Or, call Ecology's Water Quality Program office at 360-407-6600, and the receptionist will direct you to another staff member who can assist you.

Where to mail this re-application form:

Mail the signed NOI to: Washington Department of Ecology
 Water Quality Program
 Municipal Stormwater Permits
 PO Box 47696
 Olympia, WA 98504-7696

LINE-BY-LINE INSTRUCTIONS

Part 1 - Owner/Operator Information

A. Applicant information - Fill out the name and mailing address of the city, county, or public entity that will have continuing coverage under the permits.

B. Responsible official or representative – Fill out the name, address and contact information for the person responsible for signing the application and all reports. See Part 4 for more information.

C. Billing address, if different - If a separate department or office handles billing, enter the appropriate contact information. There is an annual permit fee associated with this permit.

D. Contact person - Enter the name, title, phone number, and email for the lead person who will be in charge of developing the stormwater management program and meeting the stormwater permit requirements.

E. Ownership status - Check the appropriate box indicating the ownership status (e.g., city, county, or special district type).

Ecology is an equal opportunity agency.

Phase I, Phase II WWA & EWA Municipal Stormwater Permits

Part 2 – Permit(s) under which the applicant is requesting coverage

Check the box that corresponds to the permit(s) under which you are applying for coverage. The geographic locations covered by each permit break down as follows:

- **Phase I** – regulates entities within, or partially within the unincorporated areas of Clark, King, Pierce, or Snohomish counties; or the cities of Seattle or Tacoma.
- **Phase II Western Washington** – regulates entities in the census-defined urban areas of western Washington and some cities with populations over 10,000.
- **Phase II Eastern Washington** – regulates entities in the census-defined urban areas of eastern Washington and some cities with populations over 10,000.

Note: Applicants may submit a single NOI to request coverage of all of the regulated MS4s which they operate. For example, a single NOI may be submitted to cover the main campus and any satellite campuses of a university which may require permit coverage. Applicants requesting coverage for multiple sites/locations must list the locations for each site/location for which coverage is being requested. When more than one permit is checked, Ecology will assign the permit that will provide coverage.

Part 3 – Co-permittee information

If you are not co-applying with another entity check “Not applicable” and continue to Part 6 of the NOI. Complete the rest of Part 5 of the NOI only if you are co-applying with another entity to meet the requirements of this permit.

If you are co-applying with another entity or entities, please check “Applicable, list all co-permittees” and list the names of the co-permittees, not including yourself. Permittees that co-apply are responsible for meeting permit conditions related to their discharge(s).

Part 4 - Certification

An authorized person, such as a principal executive officer or ranking elected official, must sign the certification statement;

OR

A duly authorized representative of the executive officer (or ranking elected official) may sign the certification as long as:

1. The signator receives written authorization from the executive officer or ranking elected official. This document must be submitted to Ecology.
2. The authorization specifies an individual or position that has responsibility for the overall development and implementation of the stormwater management program.

If you need this document in a format for the visually impaired, call the Water Quality Program at 360-407-6600. Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.

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From: news@wwu.edu
To: [David Sherwood](#)
Subject: Western Today for Thursday, Aug. 18, 2011
Date: Thursday, August 18, 2011 10:36:53 AM

Western Today for Thursday, Aug. 18, 2011



On campus



The Academic Instructional Center on the south end of campus, the newest building at Western Washington University to achieve LEED certification, is one reason Western is ranked 14th in the country on the latest 'Cool Schools' list from Sierra Magazine. In the background is the Environmental Studies Building, home to Huxley College of the Environment. File photo by Matthew Anderson | WWU

Western is 14th on Sierra Club's annual list of 'Coolest Schools'

Western Washington University has been ranked 14th in the nation in the Sierra Club's fifth annual "Coolest Schools" ranking of colleges around the country helping to solve climate issues and operate sustainably.

In the spotlight

University, PSE of WWU reach tentative labor agreement

The Public School Employees Chapter of Western Washington University and the University have concluded negotiations for a collective bargaining agreement covering a number of the University's classified employees.

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In the media

Alaska on the page: New and notable titles
[Juneau Empire](#)

3 WA universities make Sierra Magazine green list
[The News Tribune](#)

Mobile voicemail: Why 'saved' isn't really saved, and your messages aren't really yours
[GeekWire](#)

Gay-rights activists, faith-based nonprofits waging online culture war
[The Denver Post](#)

Calming those freshman fears
[The \(Everett\) Weekly Herald](#)

Campus news

East College Way to close Aug. 21 for repaving

Aug. 18, 19 Board of Trustees meetings to be audiocast live online

Shepard to speak Aug. 24 at Bellingham City Club

Western seeks feedback on stormwater management program

Western seeks feedback on stormwater management program

Published: Mon, 08/15/2011 - 15:53

environment Facilities Management

WESTERN TODAY STAFF

Western Washington University is seeking feedback on its [stormwater management program](#), which is up for renewal by the state Department of Ecology in February. More information: **Public Notice** Western Washington University, located at 516 High Street in Bellingham, Washington, is seeking renewal of: **Phase II Permit # WAR04-5701 for Western Washington** – "National Pollutant Discharge Elimination System and State Waste Discharge General Permit for Discharges from Small Municipal Separate Storm Sewers in Western Washington" The permit renewal will regulate stormwater discharges from the municipal separate storm sewer system located in Bellingham Washington. The permit requires Western Washington University to develop and implement a stormwater management program that:

- Protects the discharge of pollutants to the maximum extent practicable.
- Protects water quality.
- Satisfies appropriate requirements of the Clean Water Act.

Any person desiring to present views to the Department of Ecology concerning this renewal application may notify Ecology in writing within 30 days from the last date of publication of this notice. Submit comments to: Washington Department of Ecology Water Quality Program Municipal Stormwater Permits P.O. Box 47696 Olympia, WA 98504-7696 Fax: (360) 407-6426

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UPDATED: 10:08 am Off-campus visitors with disabilities are welcome at Western

Woodring projects given funding to pursue innovation

Registration open for spring employee wellness programs

Lopresti to speak March 21 at senior center Monday water shutoff canceled

Policy on receiving honoraria under review, deadline is March 23

In the media

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WWU business college and NW Innovation Resource Center connect students, entrepreneurs *Bellingham Business Journal*

UW Student Home Invasion 911 Calls Show Terror *ABC News*

Award-winning journalist, author to speak at WWU winter commencement *The Bellingham Herald*

Officers Prepare For Impaired Drivers For St. Patrick's Day *KGMI 790-AM*

Study: Young people not so 'green' after all *The Gainesville (Fla.) Sun*

Twitter updates

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Western Washington U **WWU**

Blee19 Winter volume of @theplanetmag is now available @WWU. Check out this one of a kind undergrad publication. 18 hours ago · reply · retweet · favorite

WWU We're proud of Andy, too. Thanks for posting! RT @bungalowbling St Patty's Day at WWU, aka Andrew's College Graduation! nblo.gs/vhMrX yesterday · reply · retweet · favorite

ezynski A lot of friends are #graduating from college today. @WWU has a lot to be proud of; as do we all. yesterday · reply · retweet · favorite

petersm0 Hell yeah! Congraduations! RT @JaminAgosti: Officially a graduate and #WWU alum! #TweetingWhileGraduating

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SPILL RESPONSE PLAN

What is the Issue?

Accidental spills of petroleum products, common household cleaning products, hazardous materials or hazardous waste, can have negative impacts on the environment and public health. Other materials might include admixtures, cleaning solutions, paint, acid or alkaline solutions, antifreeze, and other liquid materials that have potential environmental concern. Spill prevention and good housekeeping practices are key steps to prevent spills from happening and when they do having the knowledge and response materials to know what to do when a spill does occur.

Regulatory Requirements

In Washington State, The Department of Ecology (DoE) is the agency that regulates the requirements for water quality standards and Stormwater Management. The water quality standards include: Chapter 173-200 WAC, Water Quality Standards for Ground Waters of the State of Washington; Chapter 173-201A, Water Quality Standards for Surface Waters of the State of Washington; and Chapter 173-204, Sediment Management Standards.

As a Secondary MS4 Stormwater permittee to the City of Bellingham, Western Washington University is required to ensure that hazardous or flammable waste is not allowed to go into the storm drain systems. General use products, hazardous waste, petroleum products, and other hazardous materials must be kept in proper labeled containers and stored in such a manner and location that if the container is ruptured or develops a leak, that the contents will not discharge, flow, be washed, or fall into a stormwater system that drains into surface water or ground water.

Spill Response Plans are specifically required under the permit requirements. The plan must identify the process to contact key personnel and agencies, the materials of concern, spill prevention measures, and spill response procedures. Spill Response Plans should clearly state how to stop the source of the spill, how to contain and clean up the spill, how to dispose of contaminated materials, and how to train personnel to prevent and control future spills.

This plan will prove valuable in minimizing the costs and efforts of cleaning up an uncontrolled release of hazardous materials to the environment.

General Information

Refer to the complete text of Western Washington University oil spill plan (**draft**): **Emergency Support Function 10, Appendix 1, Oil Spill Prevention Control and Countermeasure Plan, For, Western Washington University**. This *Prevention, Control, and Countermeasure Plan* is as regulated under 40 CFR 112.7

The following types of oil containers are included in this regulation:

- Emergency Generators
- Virgin and Waste Oil Containers 55 gallons or greater
- Electric Transformers
- Animal Fats and Vegetable Oils (as in 40 CFR 112.12)
- 55 gallon drum(s) of gasoline

Flammable Liquids

Of specific concerns are any flammable liquids that may get into the storm drainage systems.

In any situation where flammable liquids get into the stormwater system, calls ***must be immediately*** made to the following agencies.

Contact List

All spills of oil or petroleum products into navigable waters (storm drains fall into this category) must be **immediately reported** by the spiller to the National Response Center (NRC). The NRC will contact appropriate local United States Coast Guard or Environmental Protection Agency (EPA) offices. Notifying state offices does not relieve the spiller from federal requirements to notify the NRC.

ALL OF THE FOLLOWING AGENCIES MUST BE CALLED WHEN ANY HAZARDOUS MATERIAL FLOWS INTO A STORMWATER SYSTEM REGARDLESS OF HOW SMALL THE QUANTITY

National Response Center (NRC)

1-800-424-8802 Toll Free

1-202-267-2675 Toll Call

Or online @ <http://www.nrc.uscg.mil/nrchp.html>

Be prepared to answer the following:

- Where is the spill?
- What spilled?
- Is it a flammable or hazardous substance?
- How much spilled?
- How concentrated is the spilled material?
- Who spilled the material?
- Is anyone cleaning up the spill?
- Are there resource damages (e.g. dead fish or oiled birds)?
- Who is reporting the spill?
- How can we get back to you?

The Washington Emergency Management Division (EMD) 24-hour Emergency Spill Response

1-800-258-5990 or 1-800-OILS-911

The Washington State Department of Ecology 24-hour Emergency Spill Response Northwest
Office, Bellevue:
1-425-649-7000

Bellingham Fire Department
911

City of Bellingham Stormwater Hotline @
360-778-7979 to report any type of pollution.

If the nature of the spill is such that additional containment effort is needed, the following contacts are provided:

Company	Location	Phone Number	Contact Names
BAI ENVIRONMENTAL SERVICES	Lynden	(360)354-1134	info@bai-environmental.com
Clean Harbors		800.645.8265 (800.OIL.TANK)	http://www.cleanharbors.com/
NRC Environmental Services	Kent	800-337-7455 (1-800-33-SPILL (77455)) 253-872-8988 Fax: 253-872-8989	www.nrces.com Keith Gehring kgehring@nrces.com
Western States Environmental, Inc.	Auburn	(253) 520-3995 (206)391-2825	contact@spillcleanup.com

Equipment available to address a spill: See attached list below for spill response materials across campus.

- All Facilities Management vehicles are labeled and equipped with a portable spill cleanup kit
- Outdoor Maintenance mowers, lifts, backhoe, dump truck and other equipment that have onboard hydraulic system also have spill kits onboard.
- Two sizeable spill response kits on wheels are located on the main campus, one at Facilities Management Maintenance Warehouse (MW) and one in our Science, Math and Technology Education (SMATE) facility main mechanical room (Room 101 @ south end of the facility).
- One large spill response kit on wheels is located at the Shannon Point Marine Center in Anacortes, Washington. It is located under the overhang of the main 3 story research building.

- “Kitty litter” dry sweep absorbent is stored in bulk 50 lb bags @ Facilities Managements Fleet Maintenance Garage on the loft.
- All storm drains within the Facilities Management maintenance compound have storm drain covers available specifically sized for use in isolating and preventing spilled materials from entering the storm drain. The covers are clearly marked and are stored in PVC pipe with end caps.

Spill Response Measures contact list:

- Contact your supervisor immediately
- Contact WWU Work Control Center @ 360-650-3420 to mobilize employees to assist in containing and cleanup of spill.
- Contact WWU Environmental Health & Safety Office @ 360-650-3604. EHS will implement their spill response protocol.
- Follow WWU protocol for notification if any hazardous waste or flammable substance has gone into a storm system
- National Response Center @ 1-800-424-8802
- Washington Emergency Management Division @ 1-800-258-5990
- City Of Bellingham Stormwater Hotline @ 360-778-7979
- Bellingham Fire Department call 911 if spill is flammable or hazardous
- Notify Department Of Ecology (DOE) @ 360-715-5200, DOE Spill Response Team

Basic BMP's

Western Washington University has a published list of Best Management Practices for both Operation and Source Control BMP's. Ongoing efforts are to take this list and reduce them to very specific practices most likely to happen on campus and to produce small laminated “flashcards” that Facilities Management and other personnel on campus can have for quick reference for spill response.

Training: Western Washington University's Environmental Health and Safety Office (EHS) will train campus employees for stormwater response including where spill response kits are located on campus and at the Shannon Point Marine Center in Anacortes, Washington.

Employees will learn that even if they aren't the person that made the spill, that as employees of the university, they are compelled to act, notify their supervisors who in kind will begin the campus notification process that will marshal the necessary materials and personnel to respond to a spill. Stormwater Management now is an annual training requirement for all Facilities Management craft and shop personnel. We expect that our trained employees will take appropriate and immediate action when they observe a spill to do the right thing.

Vehicles receive scheduled maintenance inspections to reduce spills. Preventative maintenance reduces the quantity and frequency of leaking vehicles and equipment. Hydraulic oil, transmission oil, and engine oil leaks from vehicles and equipment are repaired as soon as the discrepancy is noted. Drip pans are required while working on hydraulic fluid systems or when a leak is being repaired.

Training records and the types of training are maintained by WWU Environmental Health and Safety office.

Covered Containment: Barrels and other containers are stored in covered areas with impervious floor and secondary berm where required. Materials are shipped off campus to the appropriate waste site depending on the makeup of the recovered waste. EHS is responsible for the storing and shipping of any hazardous substance from campus.

Covered Temporary Storage: The Outdoor Maintenance Department has covered areas where collected materials from spill cleanup can be stored until there are shipped away from campus. Secondary containment is set up in covered equipment storage bays. Typically small spills require less cleanup therefore the material generated does not warrant immediate transport to a permanent disposal site.

BMP Instructions: Information on proper handling procedures and storage requirements are listed in the BMP's.

BASIC SPILL RESPONSE PLAN ACTIONS

It is important that all employees be trained to carry out the spill response actions set forth below, and that each employee be familiar with the site drawing that shows where hazardous materials/substances, spill kit(s), and all potentially susceptible and vulnerable storm drains/catch basins are located.

Response Actions in Case of a Spill:

- 1) If possible, shut off or isolate the source of the spill immediately.
- 2) Notify spill contact individual & other emergency contact(s): supervisor, manager, Work Control Center, EHS, etc.
- 3) Use appropriate personal protective equipment depending on the spill material.
- 4) Cover/block any drains/catch basins in the spill area to prevent material from entering into the stormwater system.
- 5) Use absorbent materials, such as absorbent pads, floor sweeping compound or kitty litter to contain spills that are relatively small in nature and where the spilled chemical and its hazardous properties have been properly identified and assessed.
- 6) If possible, clean up the spill using absorbent materials. Collect these absorbent materials and treat as hazardous waste.
- 7) If the spill is large or otherwise uncontrollable, or poses a potential immediate hazard to human health and safety, call Emergency Response Agencies.

Contact list and phone numbers

Name	Phone Number
------	--------------

WWU (Facility) Oil Spill Response Coordinator	(360)650-6512
National Response Center	(800)424-8802
Washington Emergency Management Division:	(800)258-5990 OR (800)OILS-911
Department of Ecology, Northwest Region	(425)649-7000
Bellingham Fire Department	911
WWU Environmental Health & Safety	(360)650-3064
WWU Viking Union Lakewood (Lake Whatcom) Manager	360-650-2900
WWU Facilities Management Dispatch	(360)650-3420
WWU University Residences and Sodexo	(360)650-7322
WWU University Police	(360)650-3555

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**Table 1
Emergency Generators at WWU**

PM ITEM	BUILDING	LOCATION	DESCRIPTION	FUEL CAP (gal)	RATED KW	CONNECTED LOADS	* DIRECTION OF FLOW	INDOORS / OUTDOORS	Secondary containment (if so, what type?)	Security
ACSGEN	Administrative Services Building A	NW corner of buildings parking lot	Standby Gen Set	474	275		SW to SE	INDOORS	No	Fenced, locked
BISGEN	Biology	Cooling Tower on Steam Plant Roof	Emergency Gen Set	185	150	Emergency Lights, Fire Alarms	UNIFORM	OUTDOORS	Not really, Curbing	Yes
BHSGEN	Bond Hall	Off loading dock, Room 101	Standby Generator	240	200		UNIFORM	OUTDOORS	Yes - Double walled tank	Yes
CBSGEN	Chemistry Building	Cooling Tower on Steam Plant Roof		150	175		UNIFORM	INDOORS	Not really, Curbing	Yes
CFSGEN	Communications Facility	Room 52A	Standby Generator, 125kw	275	125		UNIFORM	INDOORS	Yes - Double walled tank	Yes
SVSGEN	Campus Recreation	Gated courtyard on the SW end of all weather sports field outside room SV 159	Campus Rec Center	300	200		W	OUTDOORS	Yes - Double walled tank	Yes - Gate available to lock area, but hardly used.
CSSGEN	Campus Services Facility	North end of the secured parking lot behind secured gate	Standby Generator Set	540	300	Emergency Lights, Fire Alarms	S to SW	OUTDOORS	No. Leak detector on tank. Housing unit is not sealed to prevent leaks	Yes
ESSGEN	Environmental Studies Building	Mechanical Room 7, Room 700A		175	60			INDOORS	No	Yes
FASGEN	Fairhaven Administration	Room 114 (MR1) of Fairhaven Academic	Emergency Generator	60	45	Emergency Lights, Fire Alarms	UNIFORM	INDOORS	No	Yes
HHSGEN	Haggard Hall	Room 103	Standby Generator Set	90	30	Emergency Lights, Fire Alarms, Passenger Elevator	UNIFORM	INDOORS	No	Yes
PPMGEN	Mobile - Stored at Physical Plant		Mobile Generator	480	300		UNIFORM	OUTDOORS	No	Yes

PPSGEN	Physical Plant	South side by Paint Shop	Gen Set At Physical Plant	195	150	Entire Building	S	OUTDOORS	No	Yes
SLSGEN	SMATE	Room 105A	Generator Set	55	30		UNIFORM	INDOORS	No	Yes
SPSGEN	Steam Plant	Cooling tower on Steam Plant roof	Steam Plant Gen Set	225	150	Boiler #5 & Controls	UNIFORM	OUTDOORS	Not really, Curbing	Yes
VUCSGEN	Viking Union	Northern most end of PA near ramped service road to VU and South of Book Store	Viking Complex Standby Generator	110	100	Emergency Lights, Fire Alarms, Plaza Cash Security, KUGS	UNIFORM	INDOORS	Yes - Double walled tank	Yes
			[VA,VU,BK]			radio station		INDOORS		
13510E	Whacker (mobile generator stored at Physical Plant)	Do not include? Specs say that Whacker has 50 gal capacity	Mobile (Small Trailered) Generator	50	75			OUTDOORS		Yes
	Shannon Point Marine Center	N/A	Emergency Generator			N/A	N/A	N/A	N/A	
Main			TOTAL VOLUME	3437						

Table 2 Oil Spill Procedural Checklist

In the event of a spill or accidental release of fuel oil or other combustible material on premises, WWU personnel follow the procedural checklist outlined below. An oil spill may occur during fueling of emergency generators or from the emergency generator itself.

For an Incidental Oil Spill:

An incidental spill is a minor spill that can be contained with materials and personnel on hand, with very low risk of drainage to a storm drain system or soil. Procedures to follow in response to an incidental spill are as follows:

Checklist for First Responding Department (Department who owns material/oil)

- Stop the spill source.
- Shut off any ignition sources.
- Contact WWU EHS at 360-650-3064 during office hours or at x3911 after hours (via Campus Police)
- Initiate containment and cleanup, concentrating on avoiding any storm drains nearby.
- Package the waste in a 5 gallon bucket or other secure packaging. Label the waste generated from the cleanup with a waste label.
- Fax or mail in a Hazardous Waste/ Surplus Chemical Collection Request Form to Environmental Health & Safety (EHS) so that EHS can collect your materials.
- If you have any questions, or need more cleanup materials, call WWU EHS at 360-650-3064.

For a Minor Oil Spill:

A minor spill is a spill large enough that it will likely flow to local curbed areas (without storm drain inlets) or soil. An outside contractor will typically be needed to clean up the large spill and contaminated areas. Therefore EH&S must be contacted as an intermediary and to help with spill assessment and response. However, no oil will reach nearby waterways, so the spill does not require notification of the National Response Center and other water quality authorities. Procedures to follow in response to a minor spill are as follows:

Checklist for First Responding Department (Department who owns material/oil)

- Contact WWU EHS at 360-650-3064 during office hours or at x3911 after hours (via Campus Police)
- Stop the spill source as possible with plug and patch or place absorbent directly under leak. Locations of absorbent material are listed below.
- Shut off any ignition sources.

- Use oil containment equipment (e.g. socks, booms, plywood, sandbags, drain plugs, and tape) to prevent spill from running into storm and sewer drains. Keep oil confined if it runs over soil.
- Use oil absorbing equipment to absorb the spill on the surface as much as possible.
- Utilize non-sparking tools and an empty drum for disposal, clean up and pick up all spill fuel oil and oil-soaked absorbent material and place it in the drum for later disposal. Secure lid and ring over the drum to contain any fuel vapors.
- If the nature of the spill is such that additional containment effort is needed, the following contacts are provided:
 - Stand by to help with spill assessment and cleanup.
 - Arrange for further clean up, packing and disposal of all the wastes generated by the spill.

For a Major Oil Spill:

A major spill has some risk of reaching navigable waters via storm drains or overland flow. It requires fast response from an outside contractor for containment and cleanup, as well as notification of the National Response Center and other water quality authorities.

Note that a spill small in volume can qualify as a "major" spill. For example, a spill of two gallons of oil at Viking Union Lakewood might drain directly to Lake Whatcom; if there is any real risk of it doing so, it qualifies as a "major" spill. The National Response Center must be notified (by EH&S) if there is any visible oil sheen on any local natural body of water, i.e. stream, river or lake. Procedures to follow in response to a major spill are as follows:

Checklist for First Responding Department (Department who owns material/oil)

- Contact WWU EHS at 360-650-3064 during office hours or at x3911 after hours (via Campus Police.)
- Stop the spill source. Locations of absorbent material are listed below.
- Shut off any ignition sources.
- Use oil containment equipment (e.g. plywood, sandbags, drain plugs, and tape) to prevent spill from running into storm and sewer drains or into soil.
- Use oil absorbing equipment to absorb the spill on the surface as much as possible.
- Utilize non-sparking tools and an empty drum for disposal, clean up and pick up all spill fuel oil and oil-soaked absorbent material and place it in the drum for later disposal. Secure lid and ring over the drum to contain any fuel vapors.
- If the nature of the spill is such that additional containment effort is needed, the following contacts are provided:
 - Stand by to help with spill assessment, cleanup and notification of authorities (or if it is a spill that is small in volume, refer to your incidental spill response protocol.)

Company	Location	Phone Number	Contact Names
BAI ENVIRONMENTAL SERVICES	Lynden	(360)354-1134	info@bai-environmental.com
Clean Harbors		800.645.8265 (800.OIL.TANK)	http://www.cleanharbors.com/
NRC Environmental Services	Kent	800-337-7455 (1-800-33-SPILL (77455) 253-872-8988 Fax: 253-872-8989	www.nrces.com Keith Gehring kgehring@nrces.com
Western States Environmental, Inc.	Auburn	(253) 520-3995 (206)391-2825	contact@spillcleanup.com

WWU Spill Response Material Storage Locations

Locations of Oil Absorbent Material and Spill Equipment	
Location	Type of Absorbent
FM Fueling Station	Drain cover, spill pads, spill booms
FM inner fenced compound yard catch basins	Drain covers @ every storm drain catch basin
FM Maintenance Warehouse (MW) Look for "SPILL KIT INSIDE" building placard.	Large mobile spill kit on wheels. (1) XL Tote Combo with 8" Wheel Set, (200) Pads, (18) Large Socks, (60) Medium Socks, (1) 1.5 Cubic Ft Bag ENSORB(R), (1) Pack Wipers, (20) Disposal Bags, (20) Ties, (1) Emergency Response Guide, (4) Nitrile Gloves, (2) Goggles, (1) Instructions, (1) MSDS"
FM Maintenance Garage	Spill booms, main kitty litter (approx 35 bags) storage in loft

Weight Room along service road behind Wade King Student Recreation Center	Spill pads, spill booms
SMATE (Science, Math and Technology Education) Look for "SPILL KIT INSIDE" building placard.	Large mobile spill kit on wheels. (1) XL Tote Combo with 8" Wheel Set, (200) Pads, (18) Large Socks, (60) Medium Socks, (1) 1.5 Cubic Ft Bag ENSORB(R), (1) Pack Wipers, (20) Disposal Bags, (20) Ties, (1) Emergency Response Guide, (4) Nitrile Gloves, (2) Goggles, (1) Instructions, (1) MSDS"
FM Tank Truck with 100 gallon fuel tank	Spill kit
FM vehicles, any hydraulic actuated or propelled Grounds Equipment	Spill kit is in every FM vehicle and Grounds vehicle where fluids may be present. Gallons Sorbed per Package 7, Includes(15) 15 x 19" Pads, (3) 3" x 4 ft. SOCs, (1) Pair Nitrile Gloves, (1) Disposal Bag, (1) Goggles, (1) Instruction Sheet
Shannon Point Marine Center – Mechanical Room 1 of ME Building and in shed behind Maintenance Mechanic onsite quarters	Spill booms, absorbent materials and pads, 20 gallons and 60 gallons waste drums
Shannon Point Marine Center	Large mobile spill kit on wheels. (1) XL Tote Combo with 8" Wheel Set, (200) Pads, (18) Large Socks, (60) Medium Socks, (1) 1.5 Cubic Ft Bag ENSORB(R), (1) Pack Wipers, (20) Disposal Bags, (20) Ties, (1) Emergency Response Guide, (4) Nitrile Gloves, (2) Goggles, (1) Instructions, (1) MSDS"
EHS Department - Env. Studies Bldg. Rm 72	Spill pads, spill booms, spill pillows, Plug N Patch Kit in Cabinet 4, chemical sorbent, oil sorbent, neutralizing sorbent, hazmat bags
EHS Department – ET Haz Mat Storage Shed:	85 gallon salvage drum, spill pads, spill booms,
EHS Department – Chemistry Building Waste Room	
EHS Department – Biology Building Waste Room	Spill pad, spill booms, hazmat bags & ties
EHS Department – Physical Plant Connex	30 gallon poly overpack drums, 55 gallon metal drums
Locations of Manual and Mechanical Transfer Pumps	
FM Outdoor Maintenance – Facilities Management	
FM Plumbing Services – Facilities Management	
EHS – Chemistry Building Waste Room, Biology Building Waste Room, Connex – Facilities Management	

Checklist for Facilities Management: Reporting and Follow Up

- Assist in cording off area.
- Provide personal protective equipment (PPE), containment, and materials.
- Work with Environmental Health & Safety (EHS) on containment and cleanup.

Checklist for University Police: Reporting and Follow Up

- Regulate traffic.
- Assist in cordoning off area.
- Arrange medical assistance.
- Assist in evacuation if necessary.
- Investigate.

EHS or Supervisory Reporting and Follow-up

- Arrange for further clean up, packing and disposal of all the wastes generated by the spill.
- Assess personal protective equipment (PPE).
- Ensure use of personal protective equipment (PPE).
- Complete the WWU Oil Spill/ Leak Report in Table 3 of ESF 10 Appendix 1 Oil Spill of the Emergency Management Plan.
- For flammable material, monitor vapor concentrations.
- From Hazardous Materials Response Guidebook, determine size of area to cordon off and possible evacuation.
- Evaluate affected personnel for possible medical response.
- Investigate the source and causes of the incident and determine the best permanent corrective actions to avoid reoccurrence of the incident.
- Critique the spill response efforts and revise associated procedures.
- Replenish or replace any spill kit(s), tools or emergency response items spent or lost during the spill response incident.

Table 3
Western Washington University
Oil Spill/Leak Report

Report received from: _____

Name _____ Date reported _____
 Address _____ Time reported _____
 Telephone _____ Received by _____
 Location of Oil Spill/Leak _____

Address _____
 Phone of the facility: _____

Description of Problem: _____

1. Date and Time of discharge ___ / ___ / ___ AM/PM
 2. Type of material discharged _____ unknown
 3. Estimates of total quantity discharged _____
 4. Source of discharge _____
 5. Description of all affected media _____
 6. Cause of the discharge _____
 7. Damages or injuries caused by the discharge _____
8. Actions being used to stop, remove, and mitigate the effects of the discharge

9. Is an evacuation needed? Yes No
10. Names of individuals and/ or organizations who have also been contacted

Action Required	Phone	Date	Time
1. Dispatch Facilities Management staff	650-3420	_____	_____
2. Dispatch Environmental Health & Safety	650-3064	_____	_____
3. Call Bellingham Fire Department	911	_____	_____
4. Call Department of Ecology (as applicable for Reportable Quantity)	(425) 649-7000	_____	_____

Completed by:

Table 5
WWU Transformers

PM #	BUILDING	LOCATION	FUEL CAP (gal)	FLUID TYPE	DIRECTION OF FLOW *	INSIDE/ OUTSIDE	NOTES	SECONDARY CONTAINMENT	SECURITY
AHTRAN1	Arntzen Hall	C13A	195	rtemp oil	LEVEL	Inside	Located on concrete floor	Yes	Yes
BWTRAN1	Birnam Woods	West side of rec room	68	transformer oil	S	Outside	On gravel	No	Yes
BWTRAN2	Birnam Woods	East side of Building 5	68	transformer oil	SE	Outside	On concrete slab	No	Yes
BWTRAN3	Birnam Woods	West side of Building 7	68	transformer oil	S	Outside	On concrete slab with drain	No	Yes
BWTRAN4	Birnam Woods	West side of Building 1	68	transformer oil	SE	Outside	On concrete slab	No	Yes
CVTRAN	Carver Gym	Courtyard near Dance Rm	294	transformer oil	S	Outside	On concrete slab	No	Yes
EHTRAN	Edens Hall	Southwest side of building	196	transformer oil	LEVEL	Outside	On concrete	No	Yes
UTHVSW87	Edens Hall switch	Southwest side of building	172	transformer oil	LEVEL	Outside	Next to transformer on pad	No	Yes
ETTRAN	Engineering Tech	Room 163	260	transformer oil	LEVEL	Inside	On concrete	Yes	Yes
ESTRAN1	Environmental studies	Room 03	285	silicone	LEVEL	Inside	On concrete	Yes	Yes
FATRAN1	Fairhaven Acad	Room ER-1	110	silicone	LEVEL	Inside	On concrete	Yes	Yes
FCTRAN1	Fairhaven #1	Between Stack 1 and 2	68	transformer oil	SW	Outside	On concrete with drain	No	Yes
FCTRAN2	Fairhaven #2	Between Stack 3 and 4	68	transformer oil	W	Outside	On concrete with drain	No	Yes
FCTRAN3	Fairhaven #3	Between Stack 5 and 6	68	transformer oil	W	Outside	On concrete with drain	No	Yes
FCTRAN4	Fairhaven #4	Next to Stack 9	68	transformer oil	LEVEL	Outside	On concrete with drain	No	Yes
FCTRAN5	Fairhaven #5	Next to Stack 11	68	transformer oil	SE	Outside	On concrete with drain	No	Yes
HITRAN	Highland Lounge	Located on North side	133	transformer oil	N	Outside	On concrete slab	No	Yes
MCTRAN1	Marine center lab	South west side of building	190	transformer oil	N	Outside	On grass	No	Yes
MCTRAN2	Marine center Housing	North side of housing	107	transformer oil	N	Outside	On grass	No	Yes
MCTRAN3	Marine center Utility	West side of main road b/w housing and lab	180	transformer oil	W	Outside	On grass	No	Yes
SF-MC-H-2	Marine center Switch	At the entrance of the housing driveway	363	transformer oil	W	Outside	On grass	No	Yes
NATRAN	Nash Hall	Rm 9 - Electrical Vault	75	transformer oil	LEVEL	Inside	On concrete floor	Yes	Yes
NATRAN	Nash Hall	Rm 9 - Electrical Vault	75	transformer oil	LEVEL	Inside	On concrete floor	Yes	Yes
NATRAN	Nash Hall	Rm 9 - Electrical Vault	75	transformer oil	LEVEL	Inside	On concrete floor	Yes	Yes
OMTRAN1	Old Main South	Rm 104B - Electrical Vault	330	transformer oil	E	Inside	On concrete slab	Yes	Yes
OMTRAN2	Old Main North	Rm 104B - Electrical	210	transformer oil	NW	Inside	On concrete slab	Yes	Yes

		Vault							
PHTRAN	Parks Hall	Under stairs b/v Pks and Hux	200	transformer oil	NW	Outside	On concrete slab	No	Yes
SPTRAN1	Steam Plant #1	NW side of Steam Plant	190	transformer oil	N	Outside	On concrete slab	No	Yes
SPTRAN2	Steam Plant #2	NW side of Steam Plant	1650	transformer oil	SE	Outside	On concrete slab	No	Yes
RXTRAN1	Ridgeway Transformer 1	Next to Beta and Gamma	200app	transformer oil	NE	Outside	On concrete slab	No	Yes
RXTRAN2	Ridgeway Transformer 2	Next to Kappa's Tennis Courts	200app	transformer oil	N	Outside	On concrete slab	No	Yes
RXTRAN3	Ridgeway Transformer 3	South side of Delta	200app	transformer oil	E	Outside	On concrete slab	No	Yes
RXTRAN4	Ridgeway Transformer 4	South side of Sigma	200app	transformer oil	E	Outside	On concrete slab	No	Yes
RXTRAN5	Ridgeway Transformer 5	Next to commons	200app	transformer oil	W	Outside	On concrete slab	No	Yes
RXTRAN6	Ridgeway Transformer 6	Next to Highland Lounge	200app	transformer oil	LEVEL	Outside	On concrete slab	No	Yes
TCTRAN	Tennis Courts	East of Tennis Courts by Softball Field		Mineral oil	S	Outside	On concrete slab	No	Yes

Table 6

Animal Fats and Vegetable Oils at WWU Dining Services

Building	Location	Description	Capacity (gal)	Direction of Flow	Secondary Containment
Viking Union	Loading Dock	Waste liquid fryer oil	100	NW	No
Ridgeway Common s	Loading Dock	Waste liquid fryer oil	100	NW	No
Fairhaven	Loading Dock	Waste liquid fryer oil	100	NE	No
Steam Plant	Loading Dock	Waste liquid fryer oil	400	NW	No

Attachment A

PowerPoint of Emergency Generators



FM HOME

How can we help you?

Reporting Emergencies

"Shape of Things to Come"

Interactive Construction Map

Construction Alerts

Utility Shutdowns

Guide to Services

- **Work Control Center**
- **Organizational Chart**
- **Administration**
- **Operations**
- **Facilities Design & Construction Admin.**
- **Renovation Services**
- **Resource Mgmt.**
- **Office of Sustainability**

Metrics

Forms

Facilities Facts

FAMIS

FAMIS Self-Service

FAMIS User Guide

FM Policies and Procedures

FM Essential Personnel

Site Index

Storm Water Management Program

Att-8

search



Beginning in 2007, Western Washington University, in concert with the Washington State Department of Ecology, implemented a Storm Water Management Program (SWMP) with the expressed purpose of reducing the discharge of pollutants from Western's storm water system to the maximum extent practicable and to protect the water quality of out-flowing waterways. Western's SWMP consists of the following components:

- [Program Overview](#)
- [Implementation Schedule](#)
- [Program Documents](#)
 - [Program Policy - POL-5700.13](#)
 - [Program Procedure - PRO-5700.13A](#)
 - [Map of WWU Storm Water System](#)
- [Annual Reports to the Department of Ecology](#)
 - [2007 Annual Report](#)
 - [2008 Planned Program Activities](#)
 - [2008 Annual Report](#)
 - [2009 Planned Program Activities](#)
 - [2009 Annual Report](#)
 - [2010 Planned Program Activities](#)
 - [2010 Annual Report - under construction](#)
 - [2011 Planned Program Activities](#)

Program contact information

- Western Washington University is interested in your comments and questions regarding its Storm Water Management Program. For program feedback, please contact [Dave Sherwood](#) , WWU Facilities Management, at 360-650-3727.



[Website Comments](#) | [Facilities Management](#) | [Contact Us](#)

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STORMWATER MANAGEMENT

From 1/1/1980 to 3/19/2012

Department	Name	Course Date	Expiration	Hours	Trainer	Notes
	Scheetz, Maureen	01-05-11		0.25	John Kingsford-Smith	
Chemistry Department						
	Anthony-Cahill, Spencer	04-29-11	06-30-12	0.1	Online Course	
	Carlton, Gary	04-29-11	06-30-12	0.1	Online Course	
	Clark, Timothy	04-29-11	06-30-12	0.1	Online Course	
	Markworth, Christopher	04-29-11	06-30-12	0.1	Online Course	
	Murphy, Amanda	04-29-11	06-30-12	0.1	Online Course	
	O'Neil, Gregory	04-29-11	06-30-12	0.1	Online Course	
	Raymond, Elizabeth	04-29-11	06-30-12	0.1	Online Course	
	Rider, David	04-29-11	06-30-12	0.1	Online Course	
	Vannelli, Tommaso	04-29-11	06-30-12	0.1	Online Course	
	Vyvyan, James	04-29-11	06-30-12	0.1	Online Course	
	Wilkinson, Fraser Scott	04-29-11	06-30-12	0.1	Online Course	
Environmental Health & Safety						
	Boyer, Bruce	11-21-11		1	John Kingsford-Smith	
	Brandstrom, Thomas	01-12-11		0.2	John Kingsford-Smith	
	Brandstrom, Thomas	11-21-11		1	John Kingsford-Smith	
	Edwards, Kari	09-06-11		0.25	Online	
	Hennessey, Colleen	04-20-11		0.25	John Kingsford-Smith	
	Mueller, Paul	11-21-11		1	John Kingsford-Smith	
	Racich, Stephen	01-05-11		0.25	John Kingsford-Smith	
	Shiple, Gayle	10-06-11		2	John Kingsford-Smith	
	Stinson, Jonah	11-21-11		1	John Kingsford-Smith	
	Sullivan, Susanna	01-05-11		0.25	John Kingsford-Smith	
	Sullivan, Susanna	10-06-11		2	John Kingsford-Smith	
	Sullivan, Susanna	11-21-11		1	John Kingsford-Smith	
	Woll-Salkeld, Holly	11-21-11		1	John Kingsford-Smith	
	Woods, Jared	11-21-11		1	John Kingsford-Smith	

Department	Name	Course Date	Expiration	Hours	Trainer	Notes
Environmental Sciences						
	Bunn, Rebecca	04-29-11	06-30-12	0.1	Online Course	
	Homann, Peter	04-29-11	06-30-12	0.1	Online Course	
	Love, Brooke	04-29-11	06-30-12	0.1	Online Course	
	Shull, David	04-29-11	06-30-12	0.1	Online Course	
Facilities Management - ALL						
	Hedwall, Lance	01-12-11		0.2	John Kingsford-Smith	
Facilities Management-Carpenter Shop						
	Beltman, Duane	01-12-11		0.2	John Kingsford-Smith	
	Bouma, Dennis	01-05-11		0.25	John Kingsford-Smith	
	Eastman, Kevin	01-05-11		0.25	John Kingsford-Smith	
	Evans, Craig	01-05-11		0.25	John Kingsford-Smith	
	Jewett, Eric	01-05-11		0.25	John Kingsford-Smith	
	McCaulley, Brian	01-19-11		0.25	John Kingsford-Smith	
	Parker, Paul	01-12-11		0.2	John Kingsford-Smith	
	Pike, Jack	01-05-11		0.25	John Kingsford-Smith	
	Schuette, Pat	01-05-11		0.25	John Kingsford-Smith	
Facilities Management-Academic Custodial Services						
	Bocek, Gary	12-09-11		2	John Kingsford-Smith	
	Burton, Gary	12-09-11		2	John Kingsford-Smith	
	Osthimer, Jeff	12-09-11		2	John Kingsford-Smith	
	Perigo, Joel	12-09-11		2	John Kingsford-Smith	
	Perigo, William (BJ)	12-09-11		2	John Kingsford-Smith	
Facilities Management-Electric Shop						
	Bisconer, Michael	01-05-11		0.25	John Kingsford-Smith	
	Crawford, Seth	01-12-11		0.2	John Kingsford-Smith	
	Ebinger, Shirley	01-05-11		0.25	John Kingsford-Smith	
	Escher, Fred	01-05-11		0.25	John Kingsford-Smith	

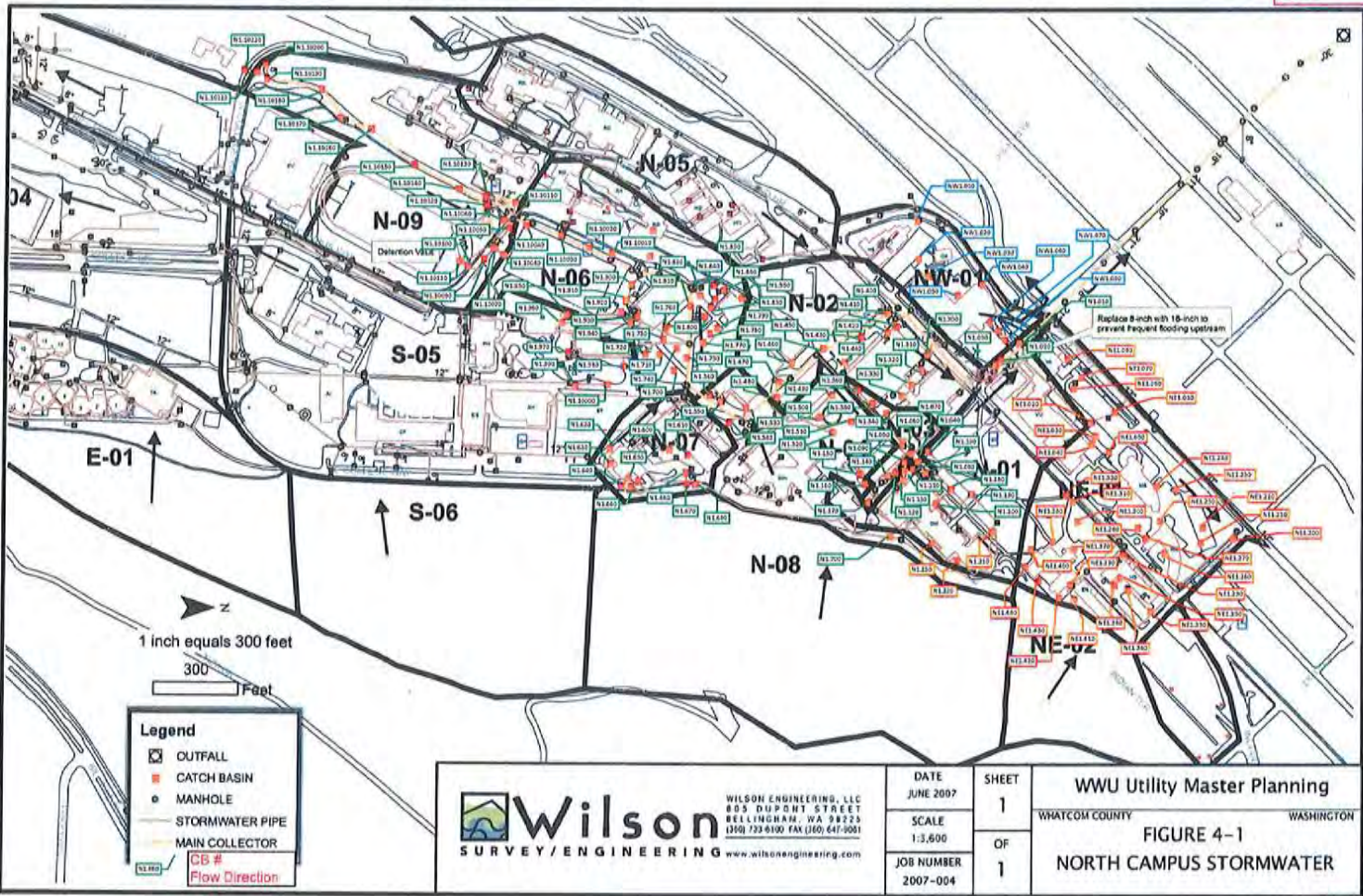
Department	Name	Course Date	Expiration	Hours	Trainer	Notes
	Pelfrey, Eric	01-05-11		0.25	John Kingsford-Smith	
	Rawls, Ronald	01-05-11		0.25	John Kingsford-Smith	
	Salkeld, Douglas	01-19-11		0.25	John Kingsford-Smith	
	Stilts, Scott	01-19-11		0.25	John Kingsford-Smith	
	Vermeulen, Gerald	01-05-11		0.25	John Kingsford-Smith	
Facilities Management-Facilities						
	Berry, Mike	11-03-11		2	John Kingsford-Smith	
Facilities Management-Maintenance - Academic						
	Carter, Markland	01-05-11		0.25	John Kingsford-Smith	
	Cunningham, Lawrence	01-12-11		0.2	John Kingsford-Smith	
	George, Charles	01-12-11		0.2	John Kingsford-Smith	
	Harvey, Timothy	01-19-11		0.25	John Kingsford-Smith	
	Hungate, Lloyd	01-05-11		0.25	John Kingsford-Smith	
	Kramer, Jerald	01-19-11		0.25	John Kingsford-Smith	
	MacCoy, Peter	01-12-11		0.2	John Kingsford-Smith	
	Miller, Dan	01-05-11		0.25	John Kingsford-Smith	
	Morris, Merrill	01-05-11		0.25	John Kingsford-Smith	
	Porter, Josh	01-19-11		0.25	John Kingsford-Smith	
	Sherwood, David	10-06-11		2	John Kingsford-Smith	
Facilities Management-Maintenance - Auxiliary						
	Andrews, David	01-12-11		0.2	John Kingsford-Smith	
	Clark, John W.	01-12-11		0.2	John Kingsford-Smith	
	Kirkbride, Robert	01-12-11		0.2	John Kingsford-Smith	
	Leuenberger, Jeremy	01-19-11		0.25	John Kingsford-Smith	
	Porter, A., Richard	01-05-11		0.25	John Kingsford-Smith	

Department	Name	Course Date	Expiration	Hours	Trainer	Notes
	Rinn, Timothy	01-12-11		0.2	John Kingsford-Smith	
	Swenson, Mark	01-19-11		0.25	John Kingsford-Smith	
Facilities Management-Outdoor Maintenance						
	Berry, Mike	01-19-11		0.25	John Kingsford-Smith	
	Bossert, Evan	10-06-11		2	John Kingsford-Smith	
	Castro, Enrique	01-05-11		0.25	John Kingsford-Smith	
	Castro, Enrique	10-06-11		2	John Kingsford-Smith	
	Cleveland, Paul	01-19-11		0.25	John Kingsford-Smith	
	Cleveland, Paul	10-06-11		2	John Kingsford-Smith	
	Dedourek, Frank	01-05-11		0.25	John Kingsford-Smith	
	Dedourek, Frank	10-06-11		2	John Kingsford-Smith	
	Elich, Peter	01-19-11		0.25	John Kingsford-Smith	
	Elich, Peter	10-06-11		2	John Kingsford-Smith	
	Godfrey, Randy	01-05-11		0.25	John Kingsford-Smith	
	Godfrey, Randy	10-06-11		2	John Kingsford-Smith	
	Hendon, Tracy	11-03-11		2	John Kingsford-Smith	
	Hodge, Gary	01-19-11		0.25	John Kingsford-Smith	
	Hodge, Gary	10-06-11		2	John Kingsford-Smith	
	Holladay, Tyler	01-19-11		0.25	John Kingsford-Smith	
	Holladay, Tyler	10-06-11		2	John Kingsford-Smith	
	Mason, Luke	10-06-11		2	John Kingsford-Smith	
	Page, Curt	01-19-11		0.25	John Kingsford-Smith	
	Page, Curt	10-06-11		2	John Kingsford-Smith	
	Preuss, Dawn	01-05-11		0.25	John Kingsford-Smith	

Department	Name	Course Date	Expiration	Hours	Trainer	Notes
	Preuss, Dawn	10-06-11		2	John Kingsford-Smith	
	Taylor, Brandon	01-19-11		0.25	John Kingsford-Smith	
	Taylor, Brandon	11-03-11		2	John Kingsford-Smith	
	Vallejo, William Scott	01-19-11		0.25	John Kingsford-Smith	
	Vallejo, William Scott	10-06-11		2	John Kingsford-Smith	
	Weeks, Dan	01-05-11		0.25	John Kingsford-Smith	
	Weeks, Dan	10-06-11		2	John Kingsford-Smith	
	Zeretzke, Heidi	01-05-11		0.25	John Kingsford-Smith	
	Zeretzke, Heidi	10-06-11		2	John Kingsford-Smith	
Facilities Management-Paint Shop						
	Bailey, Jason	01-12-11		0.2	John Kingsford-Smith	
	Burdette, Deming	01-12-11		0.2	John Kingsford-Smith	
	Gray, Solon Glenn	01-12-11		0.2	John Kingsford-Smith	
	Loveday, Mel	01-12-11		0.2	John Kingsford-Smith	
	Miller, White	01-12-11		0.2	John Kingsford-Smith	
	Norsby, V., Danny	01-12-11		0.2	John Kingsford-Smith	
	Roe, Philip	01-12-11		0.2	John Kingsford-Smith	
	Vanko, Steven	01-12-11		0.2	John Kingsford-Smith	
Facilities Management-Plumbing/Sheetmetal						
	Brady III, James F.	01-19-11		0.25	John Kingsford-Smith	
	Carbone, Gennaro	01-12-11		0.2	John Kingsford-Smith	
	Fast, Donald	01-12-11		0.2	John Kingsford-Smith	
	Harrison, William	01-19-11		0.25	John Kingsford-Smith	
	Morrow, Steve	01-19-11		0.25	John Kingsford-Smith	
	Mueller, John	01-19-11		0.25	John Kingsford-Smith	

Department	Name	Course Date	Expiration	Hours	Trainer	Notes
	Springstead, Tim	01-19-11		0.25	John Kingsford-Smith	
	Streubel, Paul	01-12-11		0.2	John Kingsford-Smith	
	Waugh, Dennis	01-19-11		0.25	John Kingsford-Smith	
Facilities Management-Steam Plant						
	Peacock, Kelly	01-05-11		0.25	John Kingsford-Smith	
	Smith Jr., Hugh	01-05-11		0.25	John Kingsford-Smith	
Facilities Management-Technical Maintenance						
	Bezugly, Alex	01-12-11		0.2	John Kingsford-Smith	
	Bruggeman, Larry	01-12-11		0.2	John Kingsford-Smith	
	Chervenock, Roger	01-12-11		0.2	John Kingsford-Smith	
	Hadley, Chris	01-12-11		0.2	John Kingsford-Smith	
	Holmwood, David	01-12-11		0.2	John Kingsford-Smith	
	Huschka, Glenn	01-19-11		0.25	John Kingsford-Smith	
	Koenig, Rod	01-12-11		0.2	John Kingsford-Smith	
	Weaver, Lane A	01-12-11		0.2	John Kingsford-Smith	
	Wolf, Stan	01-19-11		0.25	John Kingsford-Smith	
Facilities Management-Work Control Center						
	Garfield, Sasha	01-12-11		0.2	John Kingsford-Smith	
Institute for Environmental Toxicology & Chemistry (Huxley)						
	Markiewicz, April	04-29-11	06-30-12	0.1	Online Course	
Parking & Transportation Services						
	Pack, Allan	12-22-11		1	John Kingsford-Smith	
	Thacker, Roger	10-06-11		2	John Kingsford-Smith	
	Triplett, Andre	12-22-11		1	John Kingsford-Smith	
Physics/Astronomy Department						
	Berseth, Polly	04-29-11	06-30-12	0.1	Online Course	
University Police						
	Jenkins, Kevin	12-22-11		1	John Kingsford-Smith	

Department	Name	Course Date	Expiration	Hours	Trainer	Notes
	Stegmeier, Randy	10-06-11		2	John Kingsford-Smith	
Shannon Point Marine Center						
	McKeen, Gene	04-29-11	06-30-12	0.1	Online Course	
	Schwarck, Nate	04-29-11	06-30-12	0.1	Online Course	
	Van Alstyne, Kathryn	04-29-11	06-30-12	0.1	Online Course	



Legend

- OUTFALL
- CATCH BASIN
- MANHOLE
- STORMWATER PIPE
- MAIN COLLECTOR
- CB #
- Flow Direction

Wilson
SURVEY/ENGINEERING www.wilsonengineering.com

WILSON ENGINEERING, LLC
805 DUPONT STREET
BELLINGHAM, WA 98225
(360) 733-6100 FAX (360) 647-0001

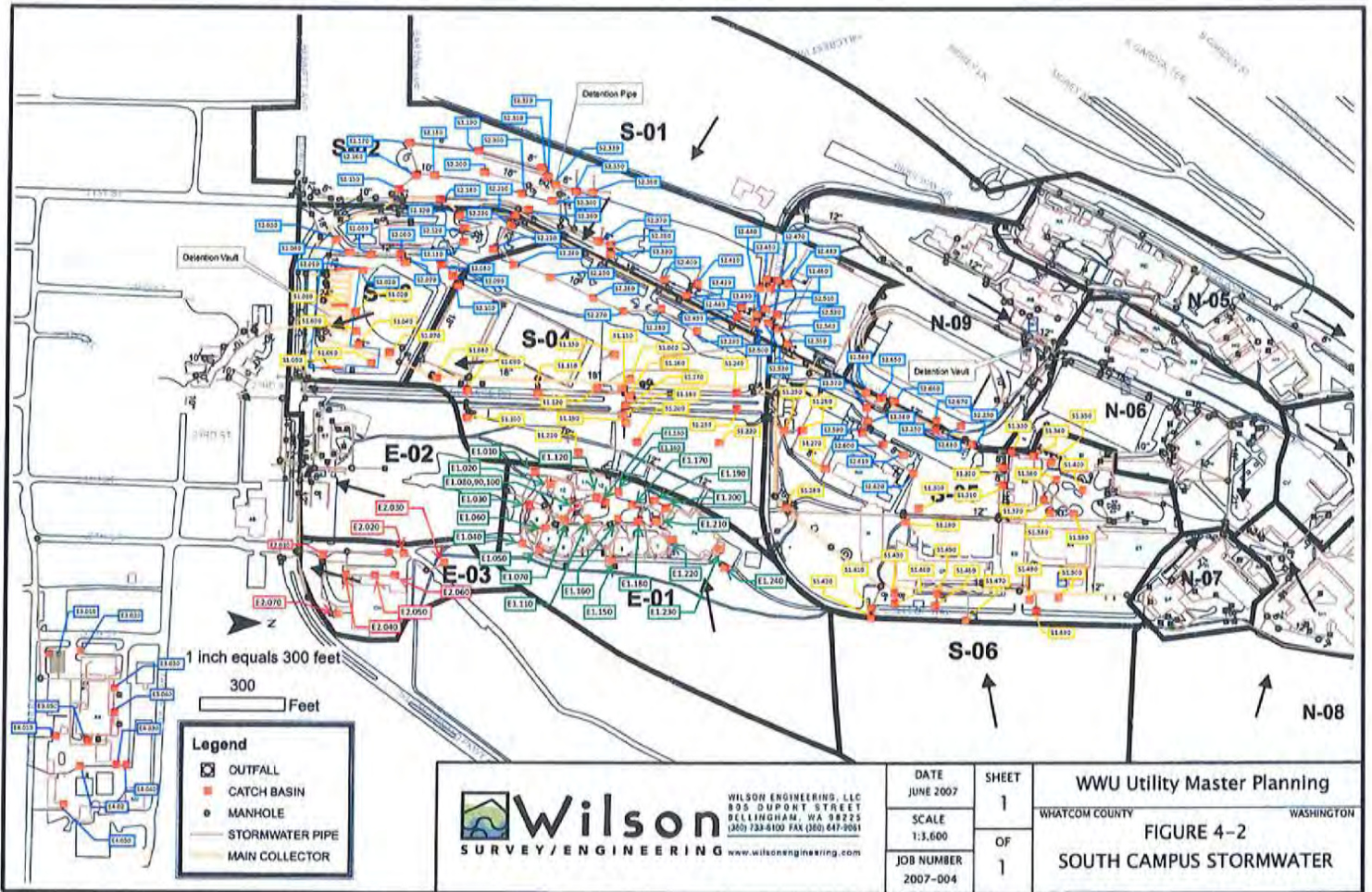
DATE	JUNE 2007
SCALE	1:3,600
JOB NUMBER	2007-004
SHEET	1
OF	1

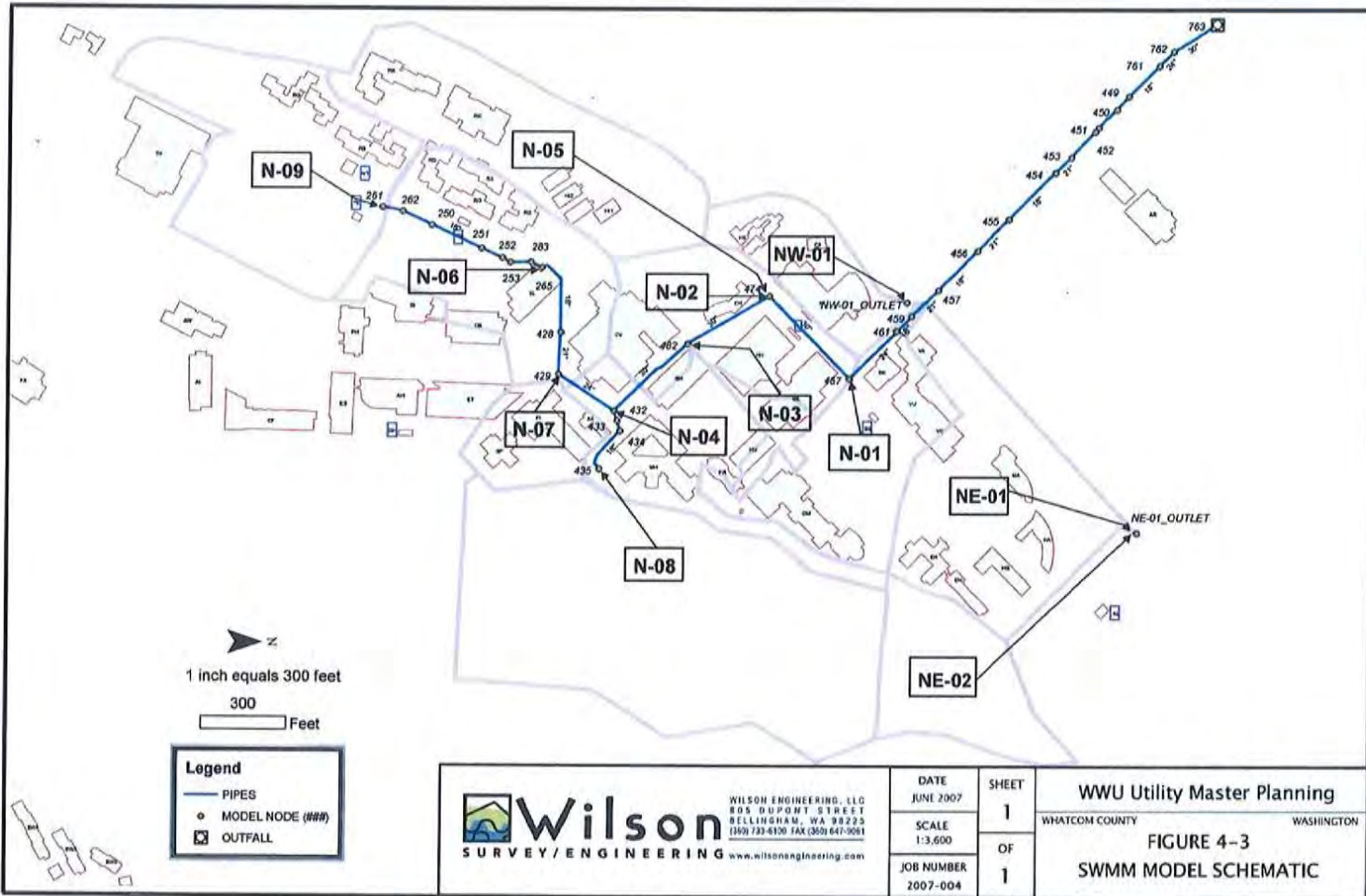
WWU Utility Master Planning

WHATCOM COUNTY WASHINGTON

FIGURE 4-1

NORTH CAMPUS STORMWATER





Legend

- PIPES
- MODEL NODE (###)
- ◻ OUTFALL

Wilson
 SURVEY/ENGINEERING www.wilsonengineering.com

WILSON ENGINEERING, LLC
 805 DUPONT STREET
 BELLINGHAM, WA 98225
 (360) 733-6100 FAX (360) 647-9061

DATE	JUNE 2007	SHEET	1
SCALE	1:3,600	OF	1
JOB NUMBER	2007-004		



WWU Utility Master Planning	
WHATCOM COUNTY	WASHINGTON
FIGURE 4-3	
SWMM MODEL SCHEMATIC	

Stormwater Management

Environmental Health & Safety
January 2011

Storm Water Management


Recent issues with the WA Department of Ecology necessitate implementation of storm water management to prevent contamination of local drainage and water bodies.



Storm Water Management

All employees transporting chemicals must ensure that:

- the containers are closed and secured (tied, strapped in, or other means)
- in secondary containment (inside an extra container or vessel) so that leaks don't enter local water systems.
- A spill kit is present in vehicle



Storm Water Management

In the event of a spill or incident where chemicals or hazardous materials could enter a storm water system:


- **Immediately** notify EHS by calling 650-3064 or use FM radios if phones are not available.
- Cover or block access to storm drains if it can be done safely (use plastic present in spill kit)

Storm Water Management

- Every employee is required to prevent chemicals, particles, and even tap water from directly entering the city's storm water system
 - Tap water and sediments can be discharged onto lawns and other planted areas
- If you observe any potential issues, contact EHS or Work Control Center immediately

Storm Water Management


Excavation and other land disturbance requires special procedures to ensure that sediments do not enter the storm water systems.



Storm Water Management

Protecting the ecology of
Whatcom County is part of EVERY
WWU employee's responsibility!



Storm Water Management for Aramark Employees



Fall 2011


Storm Water Management

The WA Department of Ecology alerted Western of the need to implement required storm water management to prevent contamination of local drainage and water bodies.



Why do we care?

“Water is the most critical resource issue of our lifetime & our children’s lifetime. The health of our waters is the principal measure of how we live on the land.”



Luna Leopold
Chief Hydrologist USGS

Sanitary vs. Storm Water

- Almost all major cities including Bellingham treat sanitary wastewater before discharging it.
- In contrast, most storm water is discharged without treatment.
- At Western, storm water on part of the south campus receives detention and bio-filtration treatment but the north campus flows directly to Bellingham Bay.

Surface Runoff Before and After Development

Before development almost all rainfall is taken up by plants, evaporates or infiltrates through the ground. After conventional development, surface runoff increases significantly while evaporation and infiltration into the ground decrease.

Ground as a Filter



- Ground acts as a filter for sediments and many other potential contaminants, trapping them before they can reach our natural waters.
- This filtration protects aquatic organisms, fish and our drinking water.
- Tap water and sediments can be discharged onto lawns and other planted areas.

Impacts to Aquatic Environment




- Decrease Food-Chain Organisms
- Impair Feeding
- Clog Gills
- Reduce Photosynthesis
- Diminished Spawning
- Smothered Eggs and Fry

Sediments Stress Fish!
Chlorine in Potable Water Stresses Fish!


Western's Pollutant Sources

- Runoff from parking lots – heavy metals, petroleum products and fine particles
- Potable water discharges
- Sediments from poor erosion control
- Sanitary sewer breaks
- Other illicit discharges, i.e. cooking oil in storm water drain



Who Manages the Storm Water Program?

- Collective effort of three departments within the Business and Financial Affairs Division
 - Facilities Management
 - Parking
 - Environmental Health & Safety



Western Protects Storm Water

- Education Outreach
- Cleaning Storm Water Catch Basins
- Immediate Spill Response
- Providing Equipment in Vehicles for Spills
- Putting Only Rain Down the Drain

We need your help to protect our waters.
Everyone needs to think before they send even drinking water to the storm water system.

Storm Drain Labels

Located adjacent to storm drains. Please report to x3420 if a label is missing.



Pollutant Control Measures





- Follow procedure for disposal of waste cooking oil and grease – Aramark to fill in. What is the procedure?
- Waste cooking oil and grease must not be dumped down a storm drain.
- If you are unsure of where to dispose of waste oil, contact your supervisor.




Pollutant Control Measures

- Pressure Washing – Does Aramark pressure wash outside areas mainly in Aramark employee control? Specifically at dining hall locations, but café's and markets also apply? Aramark to answer.

- Pressure washer water must be dechlorinated before discharging to the storm drain.

Pollutant Control Measures



- Managing mop water with cleaning solution and other cleaning agents – How does this get discharged? Aramark to comment
- Water with cleaners need to be discharged to the sanitary sewer.

Pollutant Control Measures

What can you do at home to control pollutants entering our waterway?




- Scoop the Poop! – Pick up your dog waste, place it in the garbage and wash your hands.
- Use less hazardous cleaning solutions – Whenever possible use natural cleaning products.

Pollutant Control Measures

- Drip-free cars – Contain oil leaks that you know about until you can get your vehicle fixed.
- Clean cars – If you must wash your car at home, wash it on the grass, gravel or other permeable surface and use biodegradable soaps.




Pollutant Control Measures


- Disposal of Toxics in Bellingham: For household waste such as motor oil, cleaners, and pesticides (NOT FOR WWU WASTE!)
- Recycling & Disposal Services (RDS) in Ferndale: Recyclables and non-hazardous waste such as household trash and wood/ concrete debris
- Others:
 - ReStore
 - ReElectronics
 - Z Recyclers

Storm Water Management

Protecting the ecology of Whatcom County is part of EVERY ONE at Western's responsibility!

Only rain down the drain!



Storm Water Management Public Outreach for Western Residents



Fall 2011


Storm Water Management

The WA Department of Ecology alerted Western of the need to implement required storm water management to prevent contamination of local drainage and water bodies.



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- Others:
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Storm Water Management


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How Can Eco-Reps Help Protect Storm Water?



- Thoughts?
- Projects?
- Assessing Effectiveness of Projects

Storm Water Management For EHS



Fall 2011



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Storm Water Management

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Darwin Award – Honorable Mention

(January 2007, Australia) A 25-year-old Brisbane man came frightfully close to literally sucking himself down the drain of the gene pool! When flash floods turned Brisbane streets into raging rivers, this one thought it would be fun to catch a wave on his surfboard. Fun was fun, until his foot wedged in a storm drain and he was sucked down. After a bumpy and winding three kilometer ride through the storm sewer, he popped out in a creek, relatively unscathed. The young man who found the lucky survivor had this advice for those thinking to emulate the surfer's adventure: "Never surf on a flooded street."

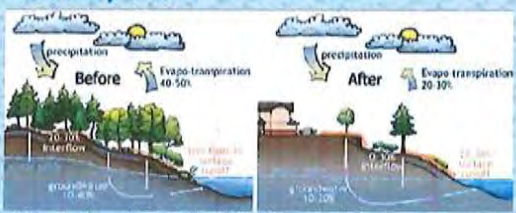
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- Clog Gills
- Reduce Photosynthesis
- Diminished Spawning
- Smothered Eggs and Fry

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Chlorine in Potable Water Stresses Fish!

Pollutant Sources – Specific to WWU





- Sediments from poor erosion/ sediment control.
- Sanitary sewer breaks.
- Other illicit discharges.

Pollutant Sources – Specific to WWU

Runoff from Parking Lots

- Heavy metals and petroleum products from cars.
- Fine particles from gravel lots.



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- Tap water and sediments can be discharged onto lawns and other planted areas.



Pollutant Sources – Specific to WWU

Potable Water Discharges

- If a water main breaks, the potable water discharge must be reported.
- Pressure washing releases potable water to the environment. If washing on hard surfaces,
 - Always direct the pressure washer runoff to landscape or a sanitary drain.
 - If this is not possible, water must be collected for proper disposal
 - In some cases, pumps or shop vacs may even be necessary
 - Use dechlorinating tablets




Transporting Hazardous Materials


All employees transporting chemicals must ensure that:

- The containers are closed and secured (tied, strapped in, or other means).
- Chemicals are in secondary containment (inside an extra container or vessel) so that leaks don't enter local water systems.
- A spill kit is present.

Every employee is required to prevent chemicals, particles, and even tap water from directly entering the city's storm water system.



Transporting Gas Cans



- With the most recent purchase of new and robust gas cans, Western is choosing to forgo secondary containment for transporting gasoline.
- Inspection of gas cans will occur on an annual basis to ensure that this choice continues to be in the best interest of storm water management.
- Secondary containment requirements still pertain to other chemicals, pesticides and gasoline in older gas cans.

Best Management Practices (BMP's) for Soil Erosion and Sediment Control

Excavation can be a source of sediments that can contaminate storm water runoff.

Ways to mitigate soil erosion

- Cover practice options
- Silt fence

Ways to mitigate turbid runoff from running into storm drain

- Use of sandbags to divert to grass
- Filters in storm drain




Secure Your Load



- Ensure that your load is secured so that materials and chemicals do not fall out of your vehicle during transit.
- Use bungee cords, straps, cargo bar and/or anchoring against a side.

Excavation Procedures



The Outdoor Maintenance folks have been trained in contacting EHS or other competent person in acquiring an excavation permit of disturbing more than 5 cubic feet of soil.


Sediment Control

Excavation and other land disturbance requires special procedures to ensure that sediments do not enter the storm water systems.



Excavation Permit

- Before disturbing more than 5 cubic ft, call EHS for an Excavation Permit, much like confined space entry procedures



Excavation Permit							
Company Name: _____							
Date: _____							
Location: _____							
Excavation Depth: _____							
Permit Number: _____							
Approved by: _____							
Excavation Description	NA	YES	NO	Excavation Depth	NA	YES	NO
Excavation depth greater than 5 cubic feet				Excavation depth greater than 5 cubic feet			
Excavation near underground utilities				Excavation near underground utilities			
Excavation near storm water systems				Excavation near storm water systems			
Excavation near traffic				Excavation near traffic			
Excavation near other structures				Excavation near other structures			
Excavation near power lines				Excavation near power lines			
Excavation near water bodies				Excavation near water bodies			
Excavation near sensitive areas				Excavation near sensitive areas			
Excavation near hazardous materials				Excavation near hazardous materials			
Excavation near other workers				Excavation near other workers			
Excavation near public areas				Excavation near public areas			
Excavation near environmental resources				Excavation near environmental resources			
Excavation near other sensitive areas				Excavation near other sensitive areas			

Best Management Practices

The Department of Ecology has developed a number of best management practices (BMP's) to protect the waters of Washington State.


Western is required to use these as we implement the Storm Water Management Program.

Parking Lots

BMP OS-1 Good Housekeeping (cont.)

- Promptly repair or replace all substantially cracked or otherwise damaged paved secondary containment, high-intensity parking and any other drainage areas which are subjected to pollutant material.
- Western is working to obtain funding to improve parking areas. In the meantime, sand bags are present to divert runoff and filters are used on storm drain grates to catch fine particles.
 - If you see broken sandbags or clogged filters, notify your supervisor.

Storm Water Management BMP's



BMP OS-1 Good Housekeeping

- Promptly contain spills or leaks on soil, vegetation or paved area
- Do not hose down pollutants from any area to the ground or storm drain, conveyance ditch or receiving water

Storm Drain Maintenance


- Replace filters as necessary.
- Report missing labels to supervisor.




Storm Water Management BMP's

BMP OS-1 Good Housekeeping (cont.)


- Clean oil, debris, sludge from all systems like catch basins, settling detention basins, oil/ water separators to prevent contamination of the storm water.
 - Collect material for proper disposal.
 - Sludge from catch basins in parking areas may contain elevated levels of toxic metals.
- Promptly repair or replace all leaking connections, pipes, hoses, valves, etc. which can contaminate storm water.



Storm Water Management BMP's

BMP OS-2 Preventative Maintenance

- Conduct all oily parts cleaning, steam cleaning, or pressure washing of equipment or containers inside a building or on an impervious contained area.
- Direct contaminated storm water from such an area to a sanitary sewer.
- Do not rinse pesticide or chemical containers here.



Drains to sanitary sewer through the Auto Shop's oily water separator

Storm Water Management BMP's

BMP OS-3 Spill Prevention and Cleanup

- If a spill has reached a sanitary or storm sewer, calls must be made ASAP in the following order:
 - Notify Supervisor who will call EHS and Work Control to mobilize a clean up crew as necessary.
- Have spill containment and cleanup kits readily accessible.
- Do not flush absorbent materials or other spill cleanup materials to storm drain. Collect contaminated absorbent material and contact EHS for proper disposal.

Spill Kit Usage

- Use booms/ socks to contain spill and/or divert away from storm drain
- Use spill pads to absorb material
- Use bags and/or 5 gallon pail to contain spill debris and contact EHS for proper disposal



Spill Kits at FM

- Two kits are located in the Outdoor Maintenance Shop balcony.
- Spill kits have been placed in all FM vehicles.
- Storm drain covers mounted on FM buildings on sides closest to storm drain

Truck Spill Kits

Spill Kits for trucks and vehicles contain:

- Spill pads
- Two socks
- 1 pair gloves
- Plastic bag



Spill Kit Contents

- Spill booms or socks
- Spill pads
- Plastic bags and zip ties
- Emergency Response Guide



Large Spill Kits Locations

Several Large spill kits are available to handle spills at locations:

- Facilities Maintenance Warehouse
- Shannon Point Marine Center
- Weight Training Room

- Replacement items are stored in the Maintenance Warehouse

Spill kits for mowers, backhoes, & other outdoor maintenance equipment

All large equipment items powered by gas or diesel must have a spill kit available on hand when operating

Take pics of some of these when they are assembled

Pollutant Control Measures

What can you do to at home and at work to control pollutants entering our waterway?




- Scoop the Poop! – Pick up your dog waste, place it in the garbage and wash your hands.
- Use less hazardous cleaning solutions – Whenever possible use natural cleaning products.

Catch Basin Covers


- Covers for catch basins will be available near the catch basins at Facilities Management
- On dock for the basins in the back
- Always store them horizontally
- Must be covered to block UV rays which cause deterioration

Pollutant Control Measures

- Drip-free cars – Contain oil leaks that you know about until you can get your vehicle fixed.
- Clean cars – If you must wash your car at home, wash it on the grass, gravel or other permeable surface and use biodegradable soaps.




Emergency Response Guidebook (ERG)



- ERG contains information on potential hazard and emergency response information.
- Provides guidance on:
 - Spills or Leaks
 - First Aid
 - Fire
 - Health

Pollutant Control Measures

- Disposal of Toxics in Bellingham: For household waste such as motor oil, cleaners, and pesticides (NOT FOR WWU WASTE!)
- Recycling & Disposal Services (RDS) in Ferndale: Recyclables and non-hazardous waste such as household trash and wood/ concrete debris
- Others:
 - ReStore
 - ReElectronics
 - Z Recyclers

Summary – Excavation

- An excavation permit should be issued if disturbing over 5 cubic feet.
- Appropriate soil and erosion control techniques should be used to minimize if not eliminate sediments (especially fine particles) from entering our water system. Sediments kill fish!
- Appropriate personal protective equipment should be donned.
- Area should be secure.

Storm Water Management

**Protecting the ecology of
Whatcom County is part of EVERY
WWU employee's responsibility!**

Only rain down the drain!


Summary - Transportation

- Always use secondary containment when transporting chemicals.
- Secure your load! This includes chemicals and materials such as empty drums.
- Have a spill kit in your vehicle for immediate response capability.

Summary – Spill Response and Potable Water Discharge

- In the event of a chemical spill or illicit discharge
 - Call your supervisor who will call EHS and Work Control
- Know where the FM spill kits are located and how to use them.
- Use dechlorinating tablets for potable water discharge to the storm drain.
- If potable water is being used for outdoor cleaning, it must be diverted into vegetation or collected.



Storm Water Management For FM Outdoor Maintenance



Summer 2011


Storm Water Management

The WA Department of Ecology alerted Western of the need to implement required storm water management to prevent contamination of local drainage and water bodies.



Why do we care?

“Water is the most critical resource issue of our lifetime & our children’s lifetime. The health of our waters is the principal measure of how we live on the land.”



Luna Leopold
Chief Hydrologist USGS

Sanitary vs. Storm Water

- Almost all major cities including Bellingham treat sanitary wastewater before discharging it.
- In contrast, most storm water is discharged without treatment.
- At Western, storm water on part of the south campus receives detention and bio-filtration treatment but the north campus flows directly to Bellingham Bay.

Impacts to Aquatic Environment




- Decrease Food-Chain Organisms
- Impair Feeding
- Clog Gills
- Reduce Photosynthesis
- Diminished Spawning
- Smothered Eggs and Fry

Sediments Stress Fish!
Chlorine in Potable Water Stresses Fish!

Pollutant Sources – Specific to WWU

Runoff from Parking Lots


- Heavy metals and petroleum products from cars.
- Fine particles from gravel lots.





Pollutant Sources – Specific to WWU

Potable Water Discharges

- If a water main breaks, the potable water discharge must be reported.
- Pressure washing releases potable water to the environment. If washing on hard surfaces,
 - Always direct the pressure washer runoff to landscape or a sanitary drain.
 - If this is not possible, water must be collected for proper disposal
 - In some cases, pumps or shop vacs may even be necessary



Pollutant Sources – Specific to WWU

- Sediments from poor erosion/ sediment control.
- Sanitary sewer breaks.
- Other illicit discharges.


Ground as a Filter

- Ground acts as a filter for sediments and many other potential contaminants, trapping them before they can reach our natural waters.
- This filtration protects aquatic organisms, fish and our drinking water.
- Tap water and sediments can be discharged onto lawns and other planted areas.




Dechlorinating Water

- In lieu of discharging potable water on the ground or grass, use dechlorinating tablets to dechlorinate the water and discharge to either the sanitary or storm water drains. Discharging to sanitary is preferred.



Transporting Hazardous Materials



All employees transporting chemicals must ensure that:

- The containers are closed and secured (tied, strapped in, or other means).
- Chemicals are in secondary containment (inside an extra container or vessel) so that leaks don't enter local water systems.

Transporting Hazardous Materials (cont)

All employees transporting chemicals must ensure that a spill kit is present. Every employee is required to prevent chemicals, particles, and even tap water from directly entering the city's storm water system.



Secure Your Load



- Ensure that your load is secured so that materials and chemicals do not fall out of your vehicle during transit.
- Use bungee cords, straps, cargo bar and/or anchoring against a side.

Darwin Award – Honorable Mention

(January 2007, Australia) A 25-year-old Brisbane man came frightfully close to literally sucking himself down the drain of the gene pool! When flash floods turned Brisbane streets into raging rivers, this one thought it would be fun to catch a wave on his surfboard. Fun was fun, until his foot wedged in a storm drain and he was sucked down. After a bumpy and winding three kilometer ride through the storm sewer, he popped out in a creek, relatively unscathed. The young man who found the lucky survivor had this advice for those thinking to emulate the surfer's adventure: "Never surf on a flooded street."

Sediment Control

Excavation and other land disturbance requires special procedures to ensure that sediments do not enter the storm water systems.



Best Management Practices (BMP's) for Soil Erosion and Sediment Control

- Excavation can be a source of sediments that can contaminate storm water runoff.
- Cover practice options:
 - Vegetative cover such as grass, trees, shrubs on erodible soil areas; or
 - Covering with mats such as clear plastic, jute, synthetic fiber; and/or
 - Preservation of natural vegetation including grass, trees, shrubs and vines



Soil Erosion and Sediment Control

- Every disturbed soil area must be covered no matter how small if it may rain or create dust in the air.
- If the dirt removed will go back into the hole, use a tarp and sand bags to keep the dirt clean.
- If the dirt removed is debris, straw may be used (minimum 2 inch thickness).
- Use a silt fence on all excavation areas.
- If water is flowing, use sandbags to direct water.

Installing a Silt Fence

- Silt fences must be buried four inches below grade to prevent runoff from going under fence.
- Fences need to be inspected and maintained DAILY to ensure they are working properly.
- Silt fencing is available in the outdoor maintenance shop.



Using Sandbags to Direct Water Flow to Landscape

- Overlap sandbags to form a barrier to:
 - Direct water away from storm catch basins.
 - Direct water away from exposed soil.
 - Slow the flow of water so that heavier materials will settle.

Excavation Procedures



1. Locate utilities
2. Wear appropriate PPE (gloves, hardhat, etc.)
3. Secure the area – use tape, cones, and/or barricades
4. Protect storm drains; use sediment filter bags and/or covers for drains

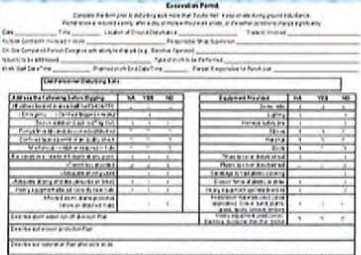
Excavation Procedures – cont.

5. Install sediment control measures
6. Slope & shore as necessary
7. Confined space – air monitoring
8. Notify about discharges to storm water system, including potable water



Excavation Permit


- Before disturbing more than 5 cubic ft, call EHS for an Excavation Permit, much like confined space entry procedures



Excavation Exercise

In the event of a pending rain storm, what would you use to cover the dirt piles and where would you cover?

What could be used to divert turbid water from the storm drain?




Fine Arts Sewer & Storm Line Repair Work

Best Management Practices

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Storm Water Management BMP's




BMP OS-1 Good Housekeeping

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Storm Water Management BMP's

BMP OS-1 Good Housekeeping (cont.)

- Clean oil, debris, sludge from all systems like catch basins, settling detention basins, oil/ water separators to prevent contamination of the storm water.
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Parking Lots

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- Promptly repair or replace all substantially cracked or otherwise damaged paved secondary containment, high-intensity parking and any other drainage areas which are subjected to pollutant material.
- Western is working to obtain funding to improve parking areas. In the meantime, sand bags are present to divert runoff and filters are used on storm drain grates to catch fine particles.
 - If you see broken sandbags or clogged filters, notify your supervisor.

Storm Drain Maintenance

- Replace filters as necessary.
- Report missing labels to supervisor.




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BMP OS-2 Preventative Maintenance

- Conduct all oily parts cleaning, steam cleaning, or pressure washing of equipment or containers inside a building or on an impervious contained area.
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- If a spill has reached a sanitary or storm sewer, calls must be made ASAP in the following order:
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- Have spill containment and cleanup kits readily accessible.
- Do not flush absorbent materials or other spill cleanup materials to storm drain. Collect contaminated absorbent material and contact EHS for proper disposal.

Spill Kits at Outdoor Maintenance



- Two kits are located in the Outdoor Maintenance Shop balcony.
- Put them in your vehicle when transporting hazardous materials such as gasoline, pesticides, etc.

Spill Kit Contents

- Spill booms or socks
- Spill pads
- Plastic bags and zip ties
- Emergency Response Guide




Spill Kit Usage

- Use booms/ socks to contain spill and/or divert away from storm drain
- Use spill pads to absorb material
- Use bags and/or 5 gallon pail to contain spill debris and contact EHS for proper disposal




Truck Spill Kits

Spill Kits for trucks and vehicles contain:

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Pollutant Control Measures

- Drip-free cars – Contain oil leaks that you know about until you can get your vehicle fixed.
- Clean cars – If you must wash your car at home, wash it on the grass, gravel or other permeable surface and use biodegradable soaps.




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- Contact EHS for an excavation permit if disturbing over 5 cubic feet.
- Use appropriate soil and erosion control techniques to minimize if not eliminate sediments (especially fine particles) from entering our water system. Sediments kill fish!
- Use appropriate personal protective equipment and secure the area.

Summary - Transportation

- Always use secondary containment when transporting chemicals.
- Secure your load! This includes chemicals and materials such as empty drums.
- Have a spill kit in your vehicle for immediate response capability.

Summary – Spill Response and Potable Water Discharge


- In the event of a chemical spill or illicit discharge
 - Call your supervisor who will call EHS and Work Control
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- Use dechlorinating tablets for potable water discharge to the storm drain.
- If potable water is being used for outdoor cleaning, it must be diverted into vegetation or collected.

Storm Water Management

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Storm Water Management for Parking Officers



Fall 2011


Storm Water Management

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Sanitary vs. Storm Water

- Almost all major cities including Bellingham treat sanitary wastewater before discharging it.
- In contrast, most storm water is discharged without treatment.
- At Western, storm water on part of the south campus receives detention and bio-filtration treatment but the north campus flows directly to Bellingham Bay.

Surface Runoff Before and After Development



Before development almost all rainfall is taken up by plants, evaporates or infiltrates through the ground. After conventional development, surface runoff increases significantly while evaporation and infiltration into the ground decrease.

Impacts to Aquatic Environment



- Decrease Food-Chain Organisms
- Impair Feeding
- Clog Gills
- Reduce Photosynthesis
- Diminished Spawning
- Smothered Eggs and Fry

Sediments Stress Fish!
Chlorine in Potable Water Stresses Fish!

Ground as a Filter

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Transporting Hazardous Materials

All employees transporting chemicals must ensure that:


- The containers are closed and secured (tied, strapped in, or other means).
- Chemicals are in secondary containment (inside an extra container or vessel) so that leaks don't enter local water systems.
- Have a spill kit is present.

Every employee is required to prevent chemicals, particles, and even tap water from directly entering the city's storm water system.



Transporting Gas Cans

- With the most recent purchase of new and robust gas cans, Western is choosing to forgo secondary containment for transporting gasoline.
- Inspection of gas cans will occur on an annual basis to ensure that this choice continues to be in the best interest of storm water management.
- Secondary containment requirements still pertain to other chemicals, pesticides and gasoline in older gas cans.



Secure Your Load

- Ensure that your load is secured so that materials and chemicals do not fall out of your vehicle during transit.
- Use bungee cords, straps, cargo bar and/or anchoring against a side.



Pollutant Sources – Specific to WWU

Runoff from Parking Lots


- Heavy metals and petroleum products from cars.
- Fine particles from gravel lots.




Pollutant Sources – Specific to WWU

Potable Water Discharges

- If a water main breaks, the potable water discharge must be reported.
- Pressure washing releases potable water to the environment.
 - FM Outdoor Maintenance uses dechlorinating tablets when pressure washing in lieu of discharging potable water on grass or gravel.



Pollutant Sources – Specific to WWU




- Sediments from poor erosion/ sediment control.
- Sanitary sewer breaks.

Proper use of soil erosion and sediment control with cover practice in place.

Pollutant Sources – Specific to WWU

- Mop water with cleaners need to be discharged to the sanitary sewer.
- Waste cooking oil and grease must not be dumped down a storm drain. Aramark employees are instructed to dump waste cooking oils in proper receptacles for disposal.




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- Do not hose down pollutants from any area to the ground or storm drain, conveyance ditch or receiving water

Storm Water Management BMP's

BMP OS-1 Good Housekeeping (cont.)

Facilities Management is charged with:

- Cleaning oil, debris, sludge from all systems like catch basins, settling detention basins, oil/ water separators to prevent contamination of the storm water.
 - Collect material for proper disposal.
 - Sludge from catch basins in parking areas may contain elevated levels of toxic metals.
- Promptly repair or replace all leaking connections, pipes, hoses, valves, etc. which can contaminate storm water.



Parking Lots

BMP OS-1 Good Housekeeping (cont.)

- Promptly repair or replace all substantially cracked or otherwise damaged paved secondary containment, high-intensity parking and any other drainage areas which are subjected to pollutant material.
- Western is working to obtain funding to improve parking areas. In the meantime, sand bags are present to divert runoff and filters are used on storm drain grates to catch fine particles.
 - If you see broken sandbags or clogged filters, notify your supervisor.

Storm Drain Labels

Located adjacent to storm drains. Please report to x3420 if a label is missing.




Truck Spill Kits

Spill Kits for trucks and vehicles contain:

- Spill pads
- Two socks
- 1 pair gloves
- Plastic bag



Spill Kit Usage

- Use booms/ socks to contain spill and/or divert away from storm drain
- Use spill pads to absorb material
- Use bags and/or 5 gallon pail to contain spill debris and contact EHS for proper disposal




Pollutant Control Measures

What can you do to at home to control pollutants entering our waterway?

- Scoop the Poop! – Pick up your dog waste, place it in the garbage and wash your hands.
- Use less hazardous cleaning solutions – Whenever possible use natural cleaning products.




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- Drip-free cars – Contain oil leaks that you know about until you can get your vehicle fixed.
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Summary - Transportation

- Always use secondary containment when transporting chemicals.
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- Have a spill kit in your vehicle for immediate response capability.

Summary – Spill Response and Potable Water Discharge

- In the event of a chemical spill or illicit discharge
 - Call your supervisor who will call EHS and Work Control
- Know where your spill kit is located and how to use it. Call EHS for disposal of contaminated spill absorbent.
- If potable water is being used for outdoor cleaning, it must be diverted into vegetation or collected.

Storm Water Management

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ONE at Western's responsibility!**

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Excavation Permit

Complete this form prior to disturbing soils more than 5 cubic feet. Keep on site during ground disturbance.
 Permit renewal required weekly, after a day or more without work onsite, or if weather conditions change significantly

Date _____ Time _____ Location of Ground Disturbance _____ Trade(s) Involved _____
 Outside Contractor Involved in Work _____ Responsible Shop Supervisor _____
 On-Site Competent Person Designee with ability to stop job (e.g., Backhoe Operator) _____
 Issue(s) to be addressed _____ Type of Work to be Performed _____
 Work Start Date/Time _____ Planned Work End Date/Time _____ Person Responsible for Punch List: _____

List Personnel Disturbing Soils

Address the Following Before Digging	NA	YES	NO	Equipment Provided	NA	YES	NO
All utilities located in area /call 1-800-424-555	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2-way radio	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Emergency <input type="checkbox"/> Certified flaggers needed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lighting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Source isolation (Lock out/Tag Out)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Harness /safety line	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pumps/lines blinded/disconnected/blocked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Gloves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Confined Space permit or air quality check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hard hat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mechanical ventilation required in hole	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Boots	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If excavation exceeds 4 ft depth at any point	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Straw to cover disturbed soil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-Trench box provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Plastic to cover disturbed soil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-Adequate shoring used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sandbags to hold plastic covering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-Adequate sloping of sides (describe on back)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Erosion fence of plastic or straw	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heavy equipment placed correctly near hole	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Heavy equipment operator licensed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Affected storm drains protected (show on attached map)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Restoration materials used (circle applicable): Gravel, sand, plants, grass, spoils, cement, timbers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Describe storm water run-off diversion Plan:	Heavy equipment used (circle): Backhoe, bulldozer, trencher, tractor						
Describe soil erosion protection Plan:							
Describe soil restoration Plan after work ends:							

Add comments to margins or back. Return a copy to the EHS Office, MS 9070, Env. Studies Rm 72. Job Supervisor files original. Draft 1: 05-12-11
 I have reviewed the work authorized by this permit and the information in it. Written and verbal instructions and safety procedures have been received and understood. I know that I can and should stop the job and contact EHS if safety concerns arise or if conditions change to affect storm water quality.

Preparer Signature (EHS staff/competent person) _____ Job Lead/Supervisor/Designee _____

Western Washington University

Back of Permit Form

From: Maginnis, Christina (ECY) [CMAG461@ECY.WA.GOV]
Sent: Wednesday, May 11, 2011 2:41 PM
To: David Sherwood; Kaufman, Mak (ECY); wreilly@cob.org; Tim Wynn; Gayle Shipley; Steve Racich; William Managan; MHoward@cob.org
Cc: Lloyd Hungate; Gary Hardman; Sue Sullivan
Subject: RE: Oil Spill in WWU Facilities Management Maintenance Yard

Hi David,

Thank you for notifying Ecology of this oil spill in the WWU maintenance yard. I'll have our ERTS coordinator enter this information.

As you continue to clean up the spill, please email the follow up information until it is fully cleaned up.

Please call the oil and hazardous waste number to report this spill to Washington Emergency Management Division. 1-800-258-5990.

Christina Maginnis, Water Quality Program
Department of Ecology
1440 10th St., Suite 102
Bellingham, WA 98225
360-715-5212

From: David Sherwood [mailto:David.Sherwood@wwu.edu]
Sent: Wednesday, May 11, 2011 2:06 PM
To: Maginnis, Christina (ECY); Kaufman, Mak (ECY); Bill Reilly (wreilly@cob.org); Tim Wynn; Gayle Shipley; Steve Racich; William Managan; MHoward@cob.org
Cc: Lloyd Hungate; Gary Hardman; Sue Sullivan
Subject: Oil Spill in WWU Facilities Management Maintenance Yard
Importance: High

Hello to all. Between 11:45 and 12:00 today we experienced a motor oil spill in the main WWU Maintenance Yard @ 915 26th street. A freshly serviced FM vehicle developed an oil leak at the oil filter. Less than 2 -1/1 quarts of fluid was lost from the vehicle as it was driven from our Maintenance Garage to an inside of the compound parking spot. Since the oil had just been changed we know that the quantity was less than 2 -1\2 quarts. Because of where the vehicle traveled and was parked and because of the heavy rainfall some bit of the oil most certainly went into both Connelly and Taylor Creek drainages. The vehicle was driven from the building and was driven out across the gravel lot to a asphalt parking spot.

FM crews put down oil absorbent kitty litter, plugged off storm drains with drains dams, put up absorbent booms, put down absorbent pads and did as much clean up as possible. Sand was layered over some of the oil sheen in the gravel areas to prevent the rapid spread with the heavy rains. Booms and pads are going around these areas. We will get the pads and kitty litter cleaned up today. Our plan is to keep down the pads at least overnight and will re-evaluate tomorrow morning.

Thanks,

David E Sherwood
Facilities & Utilities Maintenance Manager
Stormwater Mangement Program Manager
Facilities Management
Western Washington University

360-650-3727 Office & cell
360-650-3226 fax
360-650-3727 (cell Changed as of 8-1-2009)

WESTERN'S P.R.I.D.E.

Facilities Management provides stewardship for Western's campus community with **Professionalism, Respect, Integrity, Dedication and Excellence.**

From: Maginnis, Christina (ECY) [CMAG461@ECY.WA.GOV]
Sent: Friday, May 20, 2011 4:44 PM
To: David Sherwood; wreilly@cob.org
Cc: William Managan
Subject: RE: WWU Oil Spill Follow Up

Hi David,

Thank you for reporting the follow up actions Western Washington University has completed following the oil spill last week. I'll add this to the ERTS and forward you the update.

Have a good weekend.

Christina Maginnis, Water Quality Program
Department of Ecology
1440 10th St., Suite 102
Bellingham, WA 98225
360-715-5212

From: David Sherwood [<mailto:David.Sherwood@wwu.edu>]
Sent: Friday, May 20, 2011 4:41 PM
To: Maginnis, Christina (ECY); Bill Reilly (wreilly@cob.org)
Cc: William Managan
Subject: WWU Oil Spill Follow Up

Hello Christina and Bill. I haven't seen the ERTS yet for this incident but need to get you updated to our course of action. This incident leaked 2 ½ quarts of oil over a length 721 feet of gravel and asphalt surface.

As of last Friday May13th @ 4:30 pm:

- Most absorbent materials had been picked up (booms, pads, kitty litter etc)
- The maintenance yard around the storm drains were cleaned up using our sweeper machine. Some booms were left in place in case there was any residual oil sheen. That "waste" has been collected and put under cover along with the initial cleanup on the date of the spill. We built a containment under one of our maintenance sheds to let the water evaporate from the cleanup materials and what little oil that was on the surface

As of Monday May 16th @ 4:30pm:

- All storm drain covers were removed once the areas around them had dried up enough to use our sweeper
- Again the maintenance yard around the storm drains were cleaned up using our sweeper machine
- Next week we will take that materials out to be disposed of at RDC.
- We have implemented a review of the materials we feel are necessary to have better spill response capabilities. Our existing maintenance staging areas (2) will be increased with more spill response materials. These will most likely end up being larger rolling kits that we can load into a pickup to move directly to a spill.
- We are inventorying all motorized equipment, especially our hydraulic driven ones that will have a small response kit on them. All of our Outdoor Maintenance vehicles will carry a spill response kit of some size to be determined
- The Fleet Maintenance Shop "Oil Bowser" will be labeled to inspect the filter gasket before installing a new oil filter. Our Paint Shop will be making that and installing that next week.
- I developed an emergency phone tree for any hazardous spills. This will aid anyone calling in to the required agencies in case of a spill on campus. This will be incorporated into our emergency response contact criteria next week

Thanks for your assistance in this matter,

David E Sherwood
Facilities & Utilities Maintenance Manager
Stormwater Mangement Program Manager
Facilities Management
Western Washington University
360-650-3727 Office & cell
360-650-3226 fax
360-650-3727 (cell Changed as of 8-1-2009)

WESTERN'S P.R.I.D.E.

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ERTS # 623082

Initial Report

External Reference #

Caller Information

First Name RICK
 Last Name NOLAN
 Business Name CITY OF BELLINGHAM - STORMWATER
 Street Address
 Other Address
 City BELLINGHAM State WA Zip 98225
 E-mail RNOLAN@COB.ORG Confidential_FL
 Phone (360) 778-7960 Ext Type Business

Where did it happen

Berth Location Name WESTERN WASHINGTON UNIVERSITY
 Street Address 781 25TH ST
 Other Address
 City/Place BELLINGHAM State WA Zip 98225
 County - Region WHATCOM NWRO FS ID
 WIRA # WRIA 1 - Nooksack Watershed
 Waterway TAYLOR CREEK Type CATCH BASIN
 Latitude Longitude
 Topo Quad 1:24:000 BELLINGHAM NORTH
 Direction/Landmark (mile post, cross roads, township/range)
 BILL MCDONALD PKWY & 25 ST

What happened

Spills Program Oil Spill? N

Incident Date 10/21/2010 Received Date 10/21/2010 14:49
 Medium SURFACE WATER-FRESH
 Material MUD/SILT
 Quantity Unit
 Source CONSTRUCTION SITE
 Cause ACCIDENT-OTHER
 Incident Type
 Activity REPAIRING
 Impact WATER POLLUTION
 Vessel Name
 Hull Number

Primary Potentially Responsible Party Information

First Name DAVID Last SHERWOOD
 Business Name WESTERN WASHINGTON UNIVERSITY
 Street Address 516 HIGH ST
 Other Address
 City BELLINGHAM State WA Zip 98225
 Phone (360) 650-3727 Ext Type Business
 E-mail David.Sherwood@wwu.edu

Additional Contact Information

Name Phone Ext Type

More Information

From: RNolan@cob.org [mailto:RNolan@cob.org]
 Sent: Thursday, October 21, 2010 2:49 PM
 To: Steve Morrow
 Cc: MOlinger@cob.org; JPorter@cob.org; makk461@ecy.wa.gov; kuba461@ecy.wa.gov
 Subject: Discharge from 781 25th St

Steve,

Hello. I was told today that Ron Bailey has retired from WWU and his duties have been assumed by others. One of his duties was to maintain compliance with a Washington State Department of Ecology open for WWU campus operations and discharges to waters of the State. If this duty is not yours, please pass this on to the appropriate person(s).

On my way to inspect a site nearby I noticed a very muddy surface discharge down 25th St entering a catch basin at the northeast corner of Bill McDonald Parkway and 25th St. This flows into the stormwater system, ultimately flowing into Taylor Creek, then entering Padden Creek before emptying into Bellingham Bay. I talked to briefly to Joe Attolini from WWU on site. I checked further and found a direct discharge into an on-site parking lot catch basin, which also flowed into the City stormwater system. A 3" water line appeared to have been accidentally hit, needing immediate repair and causing water problems. There were several WWU employees present, but none initially seemed to be aware of the environmental impacts of their work or have a plan in place to protect the stormwater system, including creeks, downstream of their site. I took two water samples from the site and asked the workers not to discharge any more dirty water into the stormwater system.

One worker asked about discharging dirty water to sanitary sewer. I suggested they contact the Post Point Wastewater Treatment Plant and request permission to discharge that into sanitary sewer if they wanted to use that option. For future reference that phone number is 778-7850 during the day or 778-7705 after hours. Permission is needed in part to notify the operator on duty about increased loading, so

Department of Ecology - Environmental Report Tracking System

ERTS # 623082

he can better monitor any effects on sewer lift stations. One general principal that the crew could use is to let dirty water infiltrate and have sediment come out of suspension by allowing a diffused flow to proceed over a vegetated area (the larger the better, generally). Another strategy would be to use a vacator (or eductor) truck, or trailer with a pull-tank, etc. to get rid of dirty water. I would encourage you to make sure there that crew members are familiar with regulations and principals of erosion controls and have the materials quickly available to avoid future problems.

The two samples I took were very turbid. Please check your State permit conditions and reporting requirements. I left voicemails for both Department of Ecology inspectors. The sample I took from the surface discharge at 25th and Bill McDonald Parkway had an extrapolated value of about 8000 ntu. The sample had to be diluted several times to be able to be read by the turbidimeter. Both samples were taken as the discharge was ending, so might have a higher concentration of suspended sediment, coming from the bottom of the excavation. Typical follow up might be to vacator turbid stormwater out of any effected catch basin sumps downstream of your site.

If you have any further questions, please call me at 778-7960.

Thanks,
Rick Nolan

From: Steve Morrow
Sent: Thursday, October 21, 2010 2:57 PM
To: David Sherwood; Scott Slagle; William Managan; Tim Wynn
Cc: Gary Hodge
Subject: FW: Discharge from 781 25th St

FYI

Stephen J. Morrow
Plumbing Supervisor
Facilities Management
(360) 650-3215 Phone
(360) 650-4216 Fax
(360) 303-7934 Cell

From: David Sherwood [mailto:David.Sherwood@wwu.edu]
Sent: Thursday, October 21, 2010 4:11 PM
To: Maginnis, Christina (ECY); Kaufman, Mak (ECY); Gayle Shipley
Cc: William Managan; Steve Morrow
Subject: FW: Discharge from 781 25th St

Just was notified about a half hour ago that we hit a water line on our property at the Commissary facility at 781 25th Street . We were exploring a sink hole at the south side of this building investigating a potential storm line separation when the water line was damaged. Thanks

David E Sherwood
Facilities & Utilities Maintenance Manager
Facilities Management
Western Washington University
360-650-3727
360-650-3226 fax
360-650-3727 cell Changed as of 8-1-2009

Entry Person ALBIN, LINSAY

Entry Date 10/25/2010

Department of Ecology - Environmental Report Tracking System

ERTS # 623082

Referral

<p>Referral Method</p> <p><input type="radio"/> E-mail ERTS number</p> <p><input checked="" type="radio"/> E-mail attachment</p> <p><input type="radio"/> Print</p> <p><input type="radio"/> Telephone</p>	<p>Person Referred to MAGINNIS, CHRISTINA</p> <p>Phone (360) 715-5212 Fax (360) 715-5225</p> <p>E-mail christina.maginnis@ecy.wa.gov</p> <p>Program/Organization WATER QUALITY</p> <p>Address 1440 10TH ST</p> <p>City BELLINGHAM WA 98225-7028</p> <p>Region/Location BFO</p> <p>Referral Date 10/25/2010</p>	<p>Referral # 138452</p> <p>Primary <input type="checkbox"/></p>
<p>Referral Method</p> <p><input type="radio"/> E-mail ERTS number</p> <p><input checked="" type="radio"/> E-mail attachment</p> <p><input type="radio"/> Print</p> <p><input type="radio"/> Telephone</p>	<p>Person Referred to BELLINGHAM WQ, BILL REILLY</p> <p>Phone (360) 778-7700 Fax (360) 778-7701</p> <p>E-mail wreilly@cob.org, CC: JPORTER, MOLINGER, MHO</p> <p>Program/Organization BELLINGHAM PUBLIC WORKS</p> <p>Address 2221 PACIFIC ST</p> <p>City BELLINGHAM WA 98229-</p> <p>Region/Location BELLINGHAM</p> <p>Referral Date 10/25/2010</p>	<p>Referral # 138454</p> <p>Primary <input type="checkbox"/></p>
<p>Referral Method</p> <p><input type="radio"/> E-mail ERTS number</p> <p><input checked="" type="radio"/> E-mail attachment</p> <p><input type="radio"/> Print</p> <p><input type="radio"/> Telephone</p>	<p>Person Referred to KAUFMAN, MAK</p> <p>Phone (360) 715-5221 Fax (360) 715-5225</p> <p>E-mail mak.kaufman@ecy.wa.gov</p> <p>Program/Organization WATER QUALITY</p> <p>Address 1440 10TH ST</p> <p>City BELLINGHAM WA 98225-7028</p> <p>Region/Location BFO</p> <p>Referral Date 10/25/2010</p>	<p>Referral # 138455</p> <p>Primary <input type="checkbox"/></p>

Followup (None)

ERTS # 624742

Initial Report

External Reference #

Caller Information

First Name PAUL Last Name MUELLER
 Business Name WESTERN WASHINGTON UNIVERSITY
 Street Address 516 HIGH ST
 Other Address
 City BELLINGHAM State WA Zip 98225
 E-mail
 Phone (360) 650-3064 Ext Type Business
 Confidential_FL

Where did it happen

Berth Anchorage
 Location Name WESTERN WASHINGTON UNIVERSITY
 Street Address 516 HIGH ST
 Other Address
 City/Place BELLINGHAM State WA Zip 98225
 County - Region WHATCOM NWRO FS ID
 WIRA # WRIA 1 - Nooksack Watershed
 Waterway Type CATCH BASIN
 Latitude Longitude
 Topo Quad 1:24:000 BELLINGHAM NORTH
 Direction/Landmark (mile post, cross roads, township/range)
 ON CAMPUS, BEHIND CHEMISTRY BUILDING

What happened

Spills Program Oil Spill? Y

Incident Date 1/28/2011 Received Date 1/28/2011 15:41
 Medium Fresh water
 Material Unknown
 Sheen Only Quantity To Water
 Source Type Other Primary
 Cause
 Incident Type Oil Spill
 Activity Unknown
 Impact WATER POLLUTION
 Vessel Name
 Hull Number

Primary Potentially Responsible Party Information

First Last
 Name
 Business Name
 Street Address
 Other Address
 City State WA Zip
 Phone Ext Type
 E-mail

Additional Contact Information

Name Phone Ext Type

More Information

Caller reports someone dumped an orange substance into the surface water drain behind the chemistry building. Although they tried to stop the person, they ran.
 They could see the orange substance in the drain, so used a sump pump on the catch basin, removing approx. 2-1/2 gallons. They diluted the material -- it diluted easily -- and pulled out approx. 5 gallons total. They tested it three times. The Ph was 6; it had no smell, and was not flammable.
 They saved the material as well as the absorbent they used on the surface.
 Steve Rasich was the person who performed the clean-up, 360.650.6513.

Entry Person ALBIN, LINSAY

Entry Date 1/31/2011

Department of Ecology - Environmental Report Tracking System

ERTS # 624742

Referral

Referral # 141278

Primary

Referral Method

- E-mail ERTS number
- E-mail attachment
- Print
- Telephone

Person Referred to CLINE, DAVID
Phone (425) 649-7141 Fax (425) 649-7098
E-mail dcli461@ecy.wa.gov
Program/Organization SPILLS, PREVENTION, PREPAREDNESS AND RESPONSE
Address 3190 160TH AVE SE
City BELLEVUE WA 98008-5452
Region/Location NWRO
Referral Date 1/31/2011

Referral # 141279

Primary

Referral Method

- E-mail ERTS number
- E-mail attachment
- Print
- Telephone

Person Referred to MAGINNIS, CHRISTINA
Phone (360) 715-5212 Fax (360) 715-5225
E-mail christina.maginnis@ecy.wa.gov
Program/Organization WATER QUALITY
Address 1440 10TH ST
City BELLINGHAM WA 98225-7028
Region/Location BFO
Referral Date 1/31/2011

Referral # 141281

Primary

Referral Method

- E-mail ERTS number
- E-mail attachment
- Print
- Telephone

Person Referred to BELLINGHAM WQ, BILL REILLY
Phone (360) 778-7700 Fax (360) 778-7701
E-mail wreilly@cob.org, CC: JPorter, MOlinger, Mhoward
Program/Organization BELLINGHAM PUBLIC WORKS
Address 2221 PACIFIC ST
City BELLINGHAM WA 98229-
Region/Location BELLINGHAM
Referral Date 1/31/2011

Referral # 141282

Primary

Referral Method

- E-mail ERTS number
- E-mail attachment
- Print
- Telephone

Person Referred to KAUFMAN, MAK
Phone (360) 715-5221 Fax (360) 715-5225
E-mail mak.kaufman@ecy.wa.gov
Program/Organization WATER QUALITY
Address 1440 10TH ST
City BELLINGHAM WA 98225-7028
Region/Location BFO
Referral Date 1/31/2011

Followup (None)

Department of Ecology - Environmental Report Tracking System

ERTS # 624742

ERTS # 626146

Initial Report

External Reference #

Caller Information

First Name DAVID
 Last Name SHERWOOD
 Business Name WESTERN WASHINGTON UNIVERSITY FACILITIES
 Street Address
 Other Address
 City BELLINGHAM State WA Zip 98225
 E-mail David.Sherwood@wwu.edu Confidential_FL
 Phone (360) 650-3727 Ext Type Business

Where did it happen

Berth Anchorage
 Location Name WESTERN WASHINGTON UNIVERSITY
 Street Address 516 HIGH ST
 Other Address RED SQUARE
 City/Place BELLINGHAM State WA Zip 98225
 County - Region WHATCOM NWRO FS ID
 WIRA # WRIA 1 - Nooksack Watershed
 Waterway Type STORM DRAIN
 Latitude Longitude
 Topo Quad 1:24:000 BELLINGHAM NORTH
 Direction/Landmark (mile post, cross roads, township/range)

What happened

Spills Program Oil Spill? N

Incident Date 4/3/2011 Received Date 4/4/2011 9:44

Medium SURFACE WATER-FRESH

Material WATER
Quantity Unit

Source PUBLIC AGENCY

Cause EQUIPMENT FAILURE

Incident Type

Activity ROUTINE/NORMAL OPERATIONS

Impact WATER POLLUTION

Vessel Name

Hull Number

Primary Potentially Responsible Party Information

First Last
 Name
 Business Name WESTERN WASHINGTON UNIVERSITY
 Street Address 516 HIGH ST
 Other Address
 City BELLINGHAM State WA Zip 98225
 Phone (360) 650-3727 Ext Type Business
 E-mail David.Sherwood@wwu.edu

Additional Contact Information

Name Phone Ext Type

More Information

From: David Sherwood [mailto:David.Sherwood@wwu.edu]
 Sent: Monday, April 04, 2011 9:44 AM
 To: Maginnis, Christina (ECY); Bill Reilly (wreilly@cob.org)
 Subject: Fisher Fountain Leaking

Hello Christina and Bill. We had an overfull Fisher Fountain in Red Square Sunday afternoon that ran water into the storm system. Our Plumber came in between about 1:00 pm to 2:320 pm to reconcile the problem. This wasn't a significant flow but more of a trickle from small cracks in the upper ring portion of the fountain. The fountain was drained down to a lower level to prevent any more water going into the storm drain which is about 7 feet from this side where the cracks are. The makeup water was shut off and tagged out. Our Plumber said that the water was noticeable, equivalent to as if there was a light rain coming down.

I don't know how much water went into the storm drain or how long it was doing this. Since this is a high traffic area it may not have been doing so for long. The fountain was just started up on Friday for the season. The fact is that some quantity of chlorinated water did get into the drainage from north campus into the city's main drain line to Bellingham Bay. We are investigating the cause this morning to determine the fault whether it be mechanical or electrical. This system is also linked into our Building Automation System (BAS) for some of the makeup water system and pump variable frequency. Until the cause is determined and corrected we will not re-engage the auto-fill system.

Thanks,

David E Sherwood
 Facilities & Utilities Maintenance Manager
 Facilities Management
 Western Washington University

Department of Ecology - Environmental Report Tracking System

ERTS # 626146

360-650-3727
360-650-3226 fax
360-650-3727 cell Changed as of 8-1-2009

From: David Sherwood [mailto:David.Sherwood@wwu.edu]
Sent: Tuesday, April 05, 2011 11:08 AM
To: Maginnis, Christina (ECY); Albin, Linsay (ECY)
Cc: wreilly@cob.org
Subject: RE: Fisher Fountain Leaking

Good morning to all. The problem of the fountain over flowing was discovered yesterday afternoon. The float level control was gone. There is an overflow that drains to the sanitary sewer much like a pool scupper so most of the water went that direction. A new control float was installed and checked for proper functionality. Thanks.

David E Sherwood
Facilities & Utilities Maintenance Manager
Facilities Management
Western Washington University
360-650-3727
360-650-3226 fax
360-650-3727 cell Changed as of 8-1-2009

Entry Person ALBIN, LINSAY

Entry Date 4/12/2011

Department of Ecology - Environmental Report Tracking System

ERTS # 626146

Referral

<p>Referral Method</p> <p><input type="radio"/> E-mail ERTS number</p> <p><input checked="" type="radio"/> E-mail attachment</p> <p><input type="radio"/> Print</p> <p><input type="radio"/> Telephone</p>	<p>Person Referred to MAGINNIS, CHRISTINA</p> <p>Phone (360) 715-5212 Fax (360) 715-5225</p> <p>E-mail christina.maginnis@ecy.wa.gov</p> <p>Program/Organization WATER QUALITY</p> <p>Address 1440 10TH ST</p> <p>City BELLINGHAM WA 98225-7028</p> <p>Region/Location BFO</p> <p>Referral Date 4/12/2011</p>	<p>Referral # 143705</p> <p>Primary <input type="checkbox"/></p>
<p>Referral Method</p> <p><input type="radio"/> E-mail ERTS number</p> <p><input checked="" type="radio"/> E-mail attachment</p> <p><input type="radio"/> Print</p> <p><input type="radio"/> Telephone</p>	<p>Person Referred to BELLINGHAM WQ, BILL REILLY</p> <p>Phone (360) 778-7700 Fax (360) 778-7701</p> <p>E-mail wreilly@cob.org, CC: JPorter, MOlinger, Mhoward</p> <p>Program/Organization BELLINGHAM PUBLIC WORKS</p> <p>Address 2221 PACIFIC ST</p> <p>City BELLINGHAM WA 98229-</p> <p>Region/Location BELLINGHAM</p> <p>Referral Date 4/12/2011</p>	<p>Referral # 143706</p> <p>Primary <input type="checkbox"/></p>

Followup (None)

ERTS # 627328

Initial Report

External Reference #

Caller Information

First Name DAVID
 Last Name SHERWOOD
 Business Name WWU
 Street Address 516 HIGH ST
 Other Address
 City BELLINGHAM State WA Zip 98225
 E-mail DAVID.SHERWOOD@WWU.ED Confidential_FL
 Phone (360) 650-3727 Ext Type Business

Where did it happen

Berth FAIRHAVEN COLLEGE Anchorage
 Location Name FAIRHAVEN COLLEGE
 Street Address
 Other Address ADMIN BLDG
 City/Place BELLINGHAM State WA Zip 98225
 County - Region WHATCOM NWRO FS ID
 WIRA # WRIA 1 - Nooksack Watershed
 Waterway Type CATCH BASIN
 Latitude Longitude
 Topo Quad 1:24:000 BELLINGHAM NORTH
 Direction/Landmark (mile post, cross roads, township/range)

What happened

Spills Program Oil Spill? N

Incident Date 6/12/2011 Received Date 6/13/2011 16:15
 Medium BUILDING/STRUCTURE
 Material WATER
 Quantity Unit
 Source PIPELINE
 Cause EQUIPMENT FAILURE
 Activity PIPELINE OPERATION
 Impact WATER POLLUTION
 Vessel Name
 Hull Number

Primary Potentially Responsible Party Information

First Name Last Name
 Business Name WWU
 Street Address
 Other Address
 City BELLINGHAM State WA Zip 98225
 Phone Ext Type
 E-mail

Additional Contact Information

Name Phone Ext Type

More Information

CALLER REPORTS AN 8-INCH DOMESTIC WATER LINE BROKE AT FAIRHAVEN COLLEGE AT APPROX. 2:30PM SUNDAY JUNE 12, 2011.
 CREWS RESPONDED; LAID DOWN DRAIN PLUGS, DAMS.
 LOTS OF SEDIMENT WENT TO WWU'S MS4, BUT NOT TO BELLINGHAM'S MS4.
 UNKNOWN QUANTITY; HOWEVER, WATER IS STILL DRAINING OUT OF THE BUILDING TODAY.
 EDUCTOR TRUCKS HAVE BEEN IN. FINAL SEDIMENT CLEAN UP TO BE COMPLETED TOMORROW AM, JUNE 14, 2011.

Entry Person ALBIN, LINSAY

Entry Date 6/13/2011

Department of Ecology - Environmental Report Tracking System

ERTS # 627328

Referral

<p>Referral Method</p> <p><input type="radio"/> E-mail ERTS number</p> <p><input checked="" type="radio"/> E-mail attachment</p> <p><input type="radio"/> Print</p> <p><input type="radio"/> Telephone</p>	<p>Person Referred to MAGINNIS, CHRISTINA</p> <p>Phone (360) 715-5212 Fax (360) 715-5225</p> <p>E-mail christina.maginnis@ecy.wa.gov</p> <p>Program/Organization WATER QUALITY</p> <p>Address 1440 10TH ST</p> <p>City BELLINGHAM WA 98225-7028</p> <p>Region/Location BFO</p> <p>Referral Date 6/13/2011</p>	<p>Referral # 145866</p> <p>Primary <input type="checkbox"/></p>
<p>Referral Method</p> <p><input type="radio"/> E-mail ERTS number</p> <p><input checked="" type="radio"/> E-mail attachment</p> <p><input type="radio"/> Print</p> <p><input type="radio"/> Telephone</p>	<p>Person Referred to KAUFMAN, MAK</p> <p>Phone (360) 715-5221 Fax (360) 715-5225</p> <p>E-mail mak.kaufman@ecy.wa.gov</p> <p>Program/Organization WATER QUALITY</p> <p>Address 1440 10TH ST</p> <p>City BELLINGHAM WA 98225-7028</p> <p>Region/Location BFO</p> <p>Referral Date 6/13/2011</p>	<p>Referral # 145867</p> <p>Primary <input type="checkbox"/></p>
<p>Referral Method</p> <p><input type="radio"/> E-mail ERTS number</p> <p><input checked="" type="radio"/> E-mail attachment</p> <p><input type="radio"/> Print</p> <p><input type="radio"/> Telephone</p>	<p>Person Referred to WESTERN WASHINGTON UNIVERSITY, FACILITIES</p> <p>Phone Fax</p> <p>E-mail David.Sherwood@wwu.edu; Sue.Sullivan@wwu.edu</p> <p>Program/Organization WESTERN WASHINGTON UNIVERSITY</p> <p>Address 516 HIGH ST</p> <p>City BELLINGHAM WA 98225-</p> <p>Region/Location NWRO/BFO</p> <p>Referral Date 6/13/2011</p>	<p>Referral # 145868</p> <p>Primary <input type="checkbox"/></p>

Followup (None)

David Sherwood

From: Sue Sullivan
Sent: Thursday, November 03, 2011 9:35 AM
To: Maginnis, Christina (ECY)
Cc: David Sherwood; Gayle Shipley; Gary Hodge
Subject: Gas cans and secondary containment
Attachments: IMG_0020 (Large).JPG; IMG_0019 (Large).JPG

Hi Christina,

We spoke a week or two ago about gas cans and the secondary containment that our gardeners have been transporting them in. The plastic gas cans they have been using have imploded especially when the secondary containment had a lid on it. During the summer, the expansion and contraction of gases posed a safety issue. With the lid off, the amount of debris and water that collects in the secondary containment is added maintenance during their work day. These two issues caused them to revisit their equipment and how they did things.

Outdoor Maintenance purchased robust gas cans that can withstand the pressure buildup. They are also sealed so that if they were to tip, gas will not leak. Outdoor Maintenance consulted EHS and together we decided that we would forgo the secondary containment on the grounds of the quality and sealing capacity of the gas can. We have instilled an annual inspection of these gas cans to ensure that the integrity is not compromised and if so, placing it in secondary containment till a suitable replacement is purchased. This inspection is in addition to normal daily checks.

We've modified our storm water training to reflect these changes and make it clear that secondary containment still applies to all other chemicals, pesticides and containers of gas (not in the mentioned gas cans). We also maintain that securing your load, gasoline and all, is imperative to safe transport.

I attached two pictures of the gas cans. Please feel free to e-mail or call with your thoughts on this matter. Thanks for continuing to work with us as we try to balance operational issues and effective storm water management.

Best,
Sue



WWU Stormwater Management Program

Definitions and Acronyms

Below are commonly used definitions and acronyms used in conjunction with stormwater management activities.

AKART means all known, available, and reasonable methods of prevention, control and treatment.

All known, available and reasonable methods of prevention, control and treatment refers to the State Water Pollution Control Act, Chapter 90.48.010 and 90.48.520 RCW.

ATBA = Areas to be Avoided

BAP = Best Achievable Protection

Best Management Practices ("BMPs") are the schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices approved by the Department that, when used singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to waters of Washington State.

BMP means Best Management Practice.

Bypass means the diversion of stormwater from any portion of a stormwater treatment facility.

Co-permittee means an operator of a regulated small MS4 which is applying jointly with another applicant for coverage under this permit. A co-permittee is an owner or operator of a regulated small MS4 located within or adjacent to another regulated MS4. A co-permittee is only responsible for complying with the conditions of this permit relating to discharges from the MS4 the co-permittee owns or operates. See also 40 CFR 122.26(b)(1)

CWA means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. (6-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq.

Discharge for the purpose of this permit means, unless indicated otherwise, any discharge from a MS4 owned or operated by the permittee.

ERTS = Environmental Response Tracking System

40 CFR means Title 40 of the Code of Federal Regulations, which is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the federal government.

Ground water means water in a saturated zone or stratum beneath the surface of the land or below a surface water body.

HAZMAT = Hazardous Material

Hyperchlorinated means water that contains more than 10 mg/Liter chlorine. Disinfection of water mains and appurtenances requires a chlorine residual of 10 mg/L at the end of the disinfection period. This level is well above the Maximum Residual Disinfectant Level of an annual average of 4 mg/Liter chlorine for potable water.

Illicit connection means any man-made conveyance that is connected to a municipal separate storm sewer without a permit, excluding roof drains and other similar type connections. Examples include sanitary sewer connections, floor drains, channels, pipelines, conduits, inlets, or outlets that are connected directly to the municipal separate storm sewer system.

Illicit discharge means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.

Material Storage Facilities means an uncovered area where bulk materials (liquid, solid, granular, etc.) are stored in piles, barrels, tanks, bins, crates, or other means.

Maximum Extent Practicable (MEP) refers to paragraph 402(p)(3)(B)(iii) of the federal Clean Water Act which reads as follows: Permits for discharges from municipal storm sewers shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system, design, and engineering methods, and other such provisions as the Administrator or the State determines appropriate for the control of such pollutants.

MEP means Maximum Extent Practicable.

MTRs means Minimum Technical Requirements.

Municipal Separate Storm Sewer System (MS4) means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

(i) owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State Law) having jurisdiction over disposal of wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.

(ii) designed or used for collecting or conveying stormwater.

(iii) which is not a combined sewer; and (iv) which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking, and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of pollutants to surface waters of the state from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington Department of Ecology.

Notice of Intent (NOI) means the application for, or a request for coverage under this General Permit pursuant to WAC 173-226-200.

Outfall means point source as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the State and does not include open conveyances connecting two municipal separate storm sewer systems, or pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the State and are used to convey waters of the State.

PPE = Personal Protective Equipment

Permittee unless otherwise noted, the term “Permittee” includes Permittee, Co-Permittee, and Secondary Permittee, as defined below:

(i) A “Permittee” is a city, town, or county owning or operating a regulated small MS4 applying and receiving a permit as a single entity.

(ii) A “Co-Permittee” is any operator of a regulated small MS4 that is applying jointly with another applicant for coverage under this Permit. Co-Permittees own or operate a regulated small MS4 located within or adjacent to another regulated small MS4.

(iii) A “Secondary Permittee” is an operator of regulated small MS4 that is not a city, town or county.

RCW means the Revised Code of Washington State.

Runoff is water that travels across the land surface and discharges to water bodies either directly or through a collection and conveyance system. See also “Stormwater.”

Secondary Permittee is an operator of regulated small municipal separate storm sewer system which is not a city, town or county. Secondary Permittees include special purpose districts and other MS4s that meet the criteria for a regulated small MS4 in S1.B.

Construction Site Sediment Transport Potential for a more detailed definition.

Small Municipal Separate Storm Sewer System or **Small MS4** is a conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels and/or storm drains which is:

- a. Owned or operated by a city, town, county, district, association or other public body created pursuant to State law having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer districts, flood control districts or drainage districts, or similar entity.
- b. Designed or used for collecting or conveying stormwater.
- c. Not a combined sewer system,
- d. Not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.
- e. Not defined as “large” or “medium” pursuant to 40 CFR 122.26(b)(4) & (7) or designated under 40 CFR 122.26 (a)(1)(v).

Small MS4s include systems similar to separate storm sewer systems in municipalities such as: universities, large publicly owned hospitals, prison complexes, highways and other thoroughfares. Storm sewer systems in very discrete areas such as individual buildings do not require coverage under this Permit.

Small MS4s do *not* include storm drain systems operated by non-governmental entities such as: individual buildings, private schools, private colleges, private universities, and industrial and commercial entities.

SOP = Standard Operating Procedure

Stormwater means runoff during and following precipitation and snowmelt events, including surface runoff and drainage.

Stormwater Management Program (SWMP) means a set of actions and activities designed to reduce the discharge of pollutants from the regulated small MS4 to the maximum extent practicable and to protect water quality, and comprising the components listed in S5 or S6 of this Permit and any additional actions necessary to meet the requirements of applicable

Total Maximum Daily Load (TMDL) means a water cleanup plan. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant’s sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The calculation must include a margin of safety to ensure that the water body can be used for the purposes the state has designated. The calculation must also account for reasonable variation in water quality. Water quality standards are set by states, territories, and tribes. They identify the uses for each water body, for example, drinking water supply, contact recreation (swimming),

and aquatic life support (fishing), and the scientific criteria to support that use. The Clean Water Act, section 303, establishes the water quality standards and TMDL programs.

Vehicle Maintenance or Storage Facility means an uncovered area where any vehicles are regularly washed or maintained, or where at least 10 vehicles are stored.

Waters of the State includes those waters as defined as "waters of the United States" in 40 CFR Subpart 122.2 within the geographic boundaries of Washington State and "waters of the state" as defined in Chapter 90.48 RCW which includes lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface waters and water courses within the jurisdiction of the State of Washington.

Water Quality Standards means Surface Water Quality Standards, Chapter 173-201A WAC, Ground Water Quality Standards, Chapter 173-200 WAC, and Sediment Management Standards, Chapter 173-204 WAC.