Appendix A

Instructions for Developing a Stormwater Assessment Workplan

From: ***DEQ Guidance for Evaluating the Stormwater Pathway at Upland Sites***

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DEQ is a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.

State of Oregon
Department of Environmental Quality

APPENDIX A:
INSTRUCTIONS FOR DEVELOPING
A STORMWATER ASSESSMENT WORKPLAN

This template provides an organizational structure and directions for developing a stormwater assessment workplan. It includes both prescriptive (indicated by "➢") and descriptive directions. DEQ encourages those involved in developing a workplan to adhere to these directions to the extent possible. This will reduce the amount of time and effort both parties need to invest in the workplan development and review process.

Section 1 Introduction

A typical sampling plan for a stormwater evaluation will involve one round of catch basin sediment sampling to help identify site COIs and contaminants sources, followed by a minimum of four rounds of stormwater sampling. Any deviations from this approach should be discussed with and approved by DEQ prior to submittal of the draft workplan.

- Describe purpose and objectives of the workplan.

  For example, the purpose of a stormwater assessment workplan could be the following:

  > *To undertake sampling and/or implement source control measures as necessary to ensure stormwater discharges from the site do not pose an unacceptable risk through transport of hazardous substances to the [waterbody]*.

Section 2 Site Description and History

- Describe facility location and land uses on adjacent parcels. Include location map showing proximity to adjacent sites and the relevant waterbody.

- Describe historic and current site operations and include a site map depicting the location of structures and activities.

- Describe potential current and historic upland contaminant sources (e.g., buildings, chemical storage and disposal areas, rails, tanks, spills, dry wells, drainage ways, catch basins, outfalls, sewer lines, stormwater lines, other pipelines, septic tanks, trenches, lagoons, industrial processes) and show location of each on a site map.

- Include a site drainage map showing detailed information about stormwater drainage both on and adjacent to the site. The map should show:

  a. all stormwater catch basins, control structures and points of offsite discharge (e.g, outfalls and connections to adjacent conveyance systems), each identified by a unique number or code;

  b. all conveyances with arrows indicating the direction of flow in all portions of the stormwater system and the diameters of the conveyance pipes;

c. the boundary of the drainage areas or subbasins that drain to each discharge point, and the direction of overland flow within each subbasin (i.e., towards each catch basin or other drainage point); and

d. areas of pervious and impervious surfaces.

Section 3 Regulatory History

- Describe the site's regulatory history, including:

a. Stormwater permit, including summary of monitoring data and inspection reports and findings.

b. Regulated tanks (above and below ground).

c. Hazardous waste management (RCRA Generator Status and inspection reports/findings).

d. Other permits (wastewater, solid waste, air, other).

e. Violations of environmental regulations.

Section 4 Previous Environmental Investigations and Cleanups

- Summarize previous environmental investigations, including removal of contaminated material and description of material left in place.

- Present relevant stormwater and sediment data from previous investigations and monitoring activities in summary tables that clearly identify the sampling location(s), unit of measurement, compounds detected, laboratory Limit of Quantitation (LOQ) and Limit of Detection (LOD) values. Detected compounds should be in bold text and compounds exceeding SLVs should be shaded for easy reference.

Note: LOQ and LOD have essentially the same meaning as Method Reporting Limit (MRL) and Method Detection Limit (MDL), respectively.

Section 5 Stormwater Pollution Prevention and Control Measures

- Describe the types and frequency of preventative measures implemented at the facility to reduce stormwater contamination. Preventative measures are typically management techniques that reduce the exposure of stormwater to potential contaminants. Examples of preventative measures include:

  - Employee education and training programs: proper material handling, storage, and disposal practices; alternative materials; toxic use reduction; spill prevention and response, etc.;
  - Debris Removal: catch basin cleaning and parking lot sweeping etc.;
  - Exposure Reduction: limiting exposure of materials that are potential contaminant

sources to rainfall or runoff; reducing and covering inventory installing secondary containment for hazardous liquids, etc.; and
- Runoff Diversion: channeling runoff away from contaminant sources.

- Describe structural control measures used at the facility to reduce the level of contaminants in stormwater by mechanisms such as filtering, settling, or biological uptake. These are usually engineered systems (e.g., oil/water separators; constructed wetlands; swales). Design documents should be available for review.

NOTE: If this information is thoroughly described in an approved Stormwater Pollution Control Plan, the plan can be attached and referenced rather than reiterating the information in this workplan.

Section 6 Catch Basin Sampling Plan

Catch basin sediment samples provide information on the types of contaminants that are getting into the stormwater system. The data is used to identify potential contaminant sources or source areas and to help determine the list of analytes for stormwater sampling.

- Provide a brief description of the objectives of the sampling plan and the number of samples to be collected.

6.1 Catch Basin Sediment Sampling Locations

Catch basin sampling locations should be near to and representative of all of the different kinds of activities and/or potential sources on the site. Potential source areas include portions of the site where historic activities and/or spills indicate that contaminants may be present.

At some sites it will be necessary to sample all of the catch basins, whereas other sites may only require a subset to be sampled because those catch basins are "representative" of the different activities or potential source areas at the site. If representative sampling locations are used, a justification must be provided describing the rationale underlying this determination (e.g., "the catch basins drain areas that support the same kinds of activities and potential sources").

When there is more than one catch basin that is equally representative of an activity or potential source area, a "composite" sediment sample may be collected by combining comparable amounts of sediments from two or more catch basins in that area. The composite sample increases the likelihood that the sample will include contaminants resulting from localized releases that affect only a portion of the area. In instances where only small amounts of sediment are present in the catch basins, it may be necessary to composite sediments from two or more catch basins in order to obtain sufficient sample volume for laboratory analyses.

If the catch basin has a filter sock, sediment samples should be collected from both the filter and the bottom of the catch basin. This provides more complete information on potential sources at the site as well as the effectiveness of the BMP. However, if only one sample is to be analyzed, the catch basin sample should be selected.

- Determine which catch basins or structures will be sampled, either individually or as part of a composite, to achieve the objective of obtaining samples that represent each unique activity and potential source on the site.

- Provide a site map of the stormwater conveyance system that shows the sampling locations.

- Include a table in the workplan that includes the following information:
    - a list of all catch basins (each should have a unique identifier that is used on this list and on the stormwater system maps);
    - the date of the last catch basin cleanout;
    - the types of activities and/or potential sources that drain to that catch basin; and
    - whether the catch basin will be sampled individually or as part of a composite, or will be represented by another catch basin draining a similar area.

Example table:

CB ID	Drainage Subbasin	Date of last cleanout	Activities and potential sources draining to the CB	Proposed for sampling?*	If not sampled, represented by which sampled location?

*If it will be part of a composite sample, indicate that here

6.2 Sampling Schedule

The objective of catch basin sampling is to identify potential contaminant source locations on the site and to detect constituents that may not be detected in water samples because they are present at concentrations that are below detection limits. At many sites, this can be accomplished with a single round of sampling because catch basin sediments provide a time-integrated snapshot of potential sediment discharge to the river. However, multiple rounds of sampling may be needed if O&M procedures (e.g., catch basins clean outs), the seasonality of activities on the site or other factors could prevent the accumulation of a representative sample.

- Indicate when catch basin sampling will occur.

6.3 Sampling Methods and Documentation

The method for catch basin sediment sampling will depend on the structure of the catch basins, the expected presence or absence of standing water, and the characteristics of the sediment itself (*e.g.*, density, moisture content, grain size). Comprehensive field documentation of each sampling event should be made to aid in the interpretation of analytical results.

Standard sample collection methods and chain-of-custody procedures require basic information such as date and time, sample collector, and number of sample bottles filled and parameters to be analyzed. Consult with the analytical laboratory for chain-of-custody forms.

- Follow the sample collection and documentation procedures described in "Standard Operating Procedures: Guidance for Sampling of Catch Basin Solids" developed by the City of Portland, Bureau of Environmental Services (COP 2005).

Alternative sampling methods may be used if approved by DEQ.

6.4 Analytical Suite

When conducting a stormwater pathway evaluation, the list of COIs should include both site-specific COIs and COIs related to the receiving waterbody and organisms.

Site-specific COIs should be determined based on a review of information on site use and operating history, and any available site data. At a minimum, the following information, when available, should be considered when developing site-specific COIs for catch basin sediment sampling:

- Contaminants associated with current and historical operations (historical operations include any known operations at the site, not just those undertaken by the current owner).
- Materials stored on site and their potential for release.
- Hazardous and solid wastes generated on-site and their potential for release.
- Knowledge of historical contaminant releases (spills, leaks, dumping, etc.).
- Nature and extent of contamination.
- Facility drainage system and proximity of catch basins to potential contaminants.
- Results from waste disposal characterization of catch basin cleaning solids.
- Compliance history with regulatory permits (wastewater or air permits, pretreatment requirements, etc.).
- Stormwater permit monitoring results and requirements.

The list of site COIs may be expanded if elevated concentrations of other contaminants have been found in sediments, surface water or fish tissue in the vicinity of the site and information is needed to demonstrate that the site is not a source of those contaminants. Sample analysis should also include total organic carbon (TOC) and a laboratory grain size analysis to help determine whether the samples are representative of what's in the system and what's getting to the river.

- Develop the list of analytes based on site COIs

- Samples should be analyzed for TOC and (if volume allows) grain size analysis.

- Describe whether and how the analyses will be prioritized in the event that sufficient sample volume is not available for all analytical tests.

6.5 Analytical Methods and Detection Limits

The table below lists analytical methods for common COIs that may be included in catch basin sediment sample analyses. Some sites may have additional site-specific COIs.

Analyte	Method Protocol*
TOC	Plumb 1981
Metals	EPA 6020A/7471B
PCB Aroclors	EPA 8082A
Herbicides	EPA 8151A
Organochlorine pesticides	EPA 8081B
Semivolatile Organics	EPA 8270D
PAHs and Phthalates	EPA 8270C-SIM
Grain size	PSEP 1986

**The methods listed here are suggestions only and are likely to be updated from time to time.*

To meet the established data quality objectives, RPs must ensure their laboratories can achieve the low detection limits needed to allow for screening against the conservative screening level values (see Appendix D). For catch basin sediments, this often means that the laboratory must conduct a clean-up procedure on the sample prior to analysis to minimize matrix interference. However, even with cleanup procedures, certain SLVs are lower than laboratories can feasibly achieve, particularly for some bioaccumulative chemicals (e.g., the 0.39 ug/kg bioaccumulative screening level for Total PCBs and SLVs for a few pesticides).

- Provide a table listing the analytes, analytical methods (including sample cleanup procedures), sample volume needed for each analysis and your laboratory's target LOQs and LODs. [Note: Target LOQs for PCB aroclors should be < 50 ug/kg. All detected aroclors should be added up to get a value for Total PCBs to screen against SLVs.]

- Consider including additional analytes if those contaminants are present in elevated concentrations in sediments, surface water and/or fish tissue in the vicinity of the discharge.

6.6 Data Quality Assurance and Control

- Include or reference a site-specific data quality assurance plan that is developed in accordance with DEQ or EPA guidance documents (e.g., EPA 2001, EPA 2002).

6.7 Reporting

- Submit a sampling report to DEQ within 30 days of receiving laboratory data reports. This report should contain the following elements:

    - Discussion of sampling activities and any deviations from the sampling plan.
    - Data summaries in both electronic and hard copies, using the data summary and screening tables provided in Appendix D. The tables should clearly identify the sampling location(s), unit of measurement, compounds detected, laboratory LOQs and LODs, and DEQ SLVs. Detected compounds should be in bold text and compounds exceeding SLVs should be shaded for easy reference.
    - Discussion of compounds detected, compounds detected above the SLV and magnitude of SLV exceedance.

- Discussion of contaminant concentrations using the tool provided in Appendix E.
- Field documentation (e.g. field notes and photos).
- Copies of original laboratory reports and chain-of-custody documentation.

Section 7 Stormwater Sampling Plan

7.1 Sampling Locations

Stormwater samples provide information on the types and concentrations of contaminants entering the waterbody. The ideal stormwater sampling locations are usually where stormwater leaves the site – either from the end of the outfall if the outfall discharges directly into the waterbody or, for sites that discharge into a shared stormwater conveyance, just upstream from where the site's pipes connect to the shared line.

If there is more than one discharge point, it may be possible to identify "representative" sampling locations[1] if those locations drain an area with potential sources of COIs that are comparable to other drainage areas. If representative sampling locations are used, a justification must be provided describing how this is the case.

- Refer to the stormwater system map to determine where stormwater discharges leave the site. The sampling locations are typically selected by determining where the most "downstream" outlet, manhole or other sampling portal is located.

- If representative sampling locations are used, provide justification for this determination.

- Include a site map showing the stormwater conveyance system, delineated drainage areas and stormwater sampling locations.

7.2 Sampling Schedule

Stormwater sampling for screening generally should include at least four separate storm events.

- At least two of the four sampling events should represent "first flush" conditions. First flush is defined to mean within the *first 30 minutes of stormwater discharge.* [Note: It may be necessary to observe initiation of flow at the sampling location to verify first flush samples because the initiation of flow at this location does not usually line up with initiation of rainfall recorded at the nearest rain gage. A flow meter would be another way to capture this information.]
- All other samples should be collected within the *first three hours of stormwater discharge.*

- Describe the number of storms to be sampled and types of samples to collect (e.g., first flush). Also include a schedule for initiating/completing the rounds of stormwater sampling.

[1] NPDES 1200-Z permittees have selected "representative" catch basins for stormwater sampling, based on the areas where industrial activities take place and industrial materials are stored and handled. These selected catch basins are identified in the facility's stormwater plan approved by DEQ's Water Quality Program. This information could be helpful in identifying representative catch basins but may not be sufficient by itself. For example, the plan may only cover a portion of the site, or the selection of representative catch basin may not have included consideration of all potential sources of contaminants.

7.3 Storm Event Criteria and Selection

- Schedule sampling events when it the following storm event criteria are predicted:
  - Antecedent dry period of at least 24 hours (as defined by <0.1" over the previous 24 hours);
  - Minimum predicted rainfall volume of >0.2" per event; and
  - Expected storm duration of at least 3 hours.

Adhering to target storm event criteria helps to ensure that stormwater runoff will be adequate for sample collection and will be representative of stormwater runoff. If stormwater samples are also going to be used to satisfy NPDES permit monitoring requirements, check to see if other criteria or specific requirements apply.

Weather forecast information can be obtained from the National Weather Service at *http://www.wrh.noaa.gov/pqr/* or by contacting the National Weather Service by phone. Web site information includes rainfall observations and forecasts, both of which are essential to storm event targeting. Refer to the WDOE guide for additional tips on storm event selection (WDOE 2002).

Rain gage data can be used to evaluate the antecedent dry period criteria, as well as storm event rainfall distribution and totals. Rainfall data for the Portland area can be found at https://or.water.usgs.gov/non-usgs/bes/raingage_info/clickmap.html. This information is updated hourly. Additional Rain gage data for Oregon is available at https://waterdata.usgs.gov/or/nwis/current/?type=precip&group_key=county_cd. Note that the rain gage data is always recorded in Pacific Standard Time (PST) and the data tables do not account for the time change that occurs during Daylight Savings Time.

If samples are collected and it is later determined that the storm did not meet target criteria (e.g., there was only 0.15" of rain), it may still be possible to use the sample if it is representative of the runoff event. Any such explanation should be clearly laid out in the sampling report (e.g., "there was a steady discharge that included flow from all parts of the drainage basin").

- When reporting on sampling events, provide a graph of the rainfall distribution (inches per hour) for the timeframe that begins 24 hours prior to the storm event and covers the entire storm event. Also indicate when sampling took place. [An example hydrograph is attached to this document.]

7.4 Sampling Methods

Grab samples are collected at a discrete moment during the timeline of a storm event and characterize the nature of stormwater discharging from the site at that time.

- Follow the Washington Department of Ecology guidance for stormwater grab sample collection and documentation procedures (WDOE 2002).

One alternative to grab samples is flow-weighted or time-weighted composite stormwater samples. Composite samples are created by combining a number of discrete individual samples of specified volumes taken at specified intervals during a storm event. Samples can be collected

and composited manually or with automatic sampling equipment. Composite samples provide information on the "average" stormwater quality (aka Event Mean Concentration) during a storm event and are typically collected for the purpose of estimating contaminant loading to the waterbody. DEQ can provide guidance for this approach to stormwater sampling when requested.

7.5 Analytical Suite

Parameters for the initial round of stormwater sampling and analysis should be developed on a site-specific basis, with consideration of a number of factors, including the following:

- Site-specific Chemicals of Interest (COIs).
- Site-specific catch basin sediment data and other available stormwater sediment data (e.g., in-line sediment data).
- COI fate and transport (*e.g.*, would the COI be more likely transported in stormwater in a dissolved or solid phase).
- NPDES permit parameters and other potential regulatory requirements.
- Available sediment, surface water, or tissue data near the site's outfalls or shared conveyances.

Stormwater analytes typically include parameters detected in catch basin sediment above SLVs. However, because this is a screening evaluation, it is better to err on the side of making the analytical list more rather than less inclusive. The fact that a certain pollutant is not detected in catch basin sediments may not be sufficient, in and of itself, to exclude that contaminant from stormwater monitoring. LODs for catch basin samples and other lines of evidence, such as current and historic facility operations and the activities that took place in the vicinity of the catch basin since it was last cleaned out, should also be considered.

Sample analyses are commonly conducted on unfiltered whole water samples but adding analysis of unfiltered samples may be appropriate in some instances. For example, understanding whether a contaminant is present in the particulate or dissolved phase may be important when selecting source control measures.

Various field parameters such as pH, conductivity and temperature can be useful to the data interpretation process. Including these field tests in the analytical suite may allow correlation of screening level exceedances to specific operations or runoff characteristics if multiple measurements are made during a storm event.

- Develop the list of stormwater analytes based on factors and considerations described above.

- Indicate whether analyses will be conducted on whole water and/or filtered samples.

- All samples should be analyzed for Total Suspended Solids and Total Organic Carbon.

7.6 Analytical Methods and Detection Limits

The table below lists common stormwater COIs and analytical methods. Additional analytes may be warranted at some sites.

Analyte	Method Protocol*
Total Suspended Solids	EPA 160.2
Total Organic Carbon	EPA 415.1
Metals	EPA 200.8/7470A
PCB Aroclors	EPA 8082A
Herbicides	EPA 8151A
Organochlorine pesticides	EPA 8081B
Semivolatile Organics	EPA 8270D
PAHs and Phthalates	EPA 8270D-SIM

**The methods listed here are suggestions only and will be updated from time to time. Alternative methods that provide lower detection limits (e.g., detection limits for PCB congeners in water samples are typically a couple orders of magnitude lower than for PCB aroclors) or other advantages may be preferred in some instances.*

To meet the established data quality objectives, laboratory reporting limits should achieve the stormwater SLVs provided in Appendix D. However, DEQ acknowledges that it may not be feasible to achieve the SLV for all contaminants because the SLVs for some contaminants are very low (e.g., the bioaccumulative SLVs for Total PCBs and SLVs for a few pesticides and herbicides). The RP should check with the DEQ project manager before sampling to verify that proposed method reporting limits are low enough.

- Provide a table listing the analytes in priority order (including TOC and TSS), analytical methods, sample volume needed for each analysis and your laboratory's target LOQs and LODs. [Note: Target LOQs for PCB aroclors should be < 0.05 ug/l. All detected aroclors should be added up to get a value for Total PCBs to screen against SLVs.]

7.7 Data Quality Assurance and Control

- Include or reference a site-specific data quality assurance plan that is developed in accordance with DEQ and EPA guidance documents (e.g., EPA 2002).

7.8 Reporting

Because it may take several months to fully implement the stormwater sampling plan, DEQ requests that RPs submit interim reports on the sampling activity and results. This enables DEQ to monitor sampling activities and notify the RP if changes to the workplan or additional guidance are needed to meet the investigation objectives. Reports should be submitted within 30 days of receipt of analytical results or as part of a quarterly report.

- Submit interim stormwater sampling reports that contain the following elements:
    - Discussion of sampling activities and any deviations from the sampling plan.
    - Field documentation (e.g. field notes and photos).
    - A rainfall distribution graph (see attached example) for each storm event for the timeframe that begins 24 hours before the storm event, with an indication of when sampling took place. Online access to Portland-area rain gages can be found at:

https://or.water.usgs.gov/non-usgs/bes/raingage_info/clickmap.html. *Note that rain gage times on this website are always in Pacific Standard Time (PST). For samples collected during Daylight Savings Time (DST), field notes and sampling documentation should note whether sample times are in PST or DST.* Additional rain gage data for Oregon is available at: https://waterdata.usgs.gov/or/nwis/current/?type=precip&group_key=county_cd

- Copies of original laboratory reports and chain-of-custody documentation.
- Data summaries in both electronic and hard copies, using the data summary and screening tables provided in Appendix D. The tables should clearly identify the sampling location(s), unit of measurement, compounds detected, laboratory LOQs and LODs, and SLVs. Detected compounds should be in bold text and compounds exceeding SLVs should be shaded for easy reference.
- Discussion of compounds detected, compounds detected above the SLV and the magnitude of SLV exceedance.
- Discussion of the contaminant concentrations using the tool provided in Appendix E.

➢ After the sampling plan has been fully implemented, compile all the information listed above for all sampling events into a comprehensive report.

The RP and DEQ will evaluate the sampling data and other site-related information to determine whether additional characterization or source control measures are needed.

Section 8 Attachments

The Stormwater Assessment Workplan should include at least the following attachments:

Figures:

1. Location map;
2. Site maps showing historic and current operations and activities, and potential contaminant sources; and
3. Stormwater conveyance system map.

Tables:

1. Relevant environmental data from previous investigations;
2. NPDES and other available stormwater monitoring data; and
3. List of COIs, analytical methods and target MRLs for both sediments and stormwater.

Appendices:

1. Quality Assurance Project Plan.

REFERENCES

COP, 2003. *Standard Operating Procedures – Guidance for Sampling of Catch Basin Solids.* City of Portland. July 2003. *http://www.oregon.gov/deq/FilterDocs/ph-CatchBasinSolids.pdf*

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EPA, 1993. *Guidance on Conducting Non-time Critical Removal Actions under CERCLA.* U.S. Environmental Protection Agency, Washington D.C. EPA/540/F-94/009. December 1993. *https://semspub.epa.gov/work/HQ/122068.pdf*

WDOE, 2002. *How to Do Stormwater Sampling – A guide for industrial facilities.* Washington State Department of Ecology. Publication #02-10-071. December 2002. *https://esd.uga.edu/sites/default/files/how_to_do_stormwater_sampling.pdf*

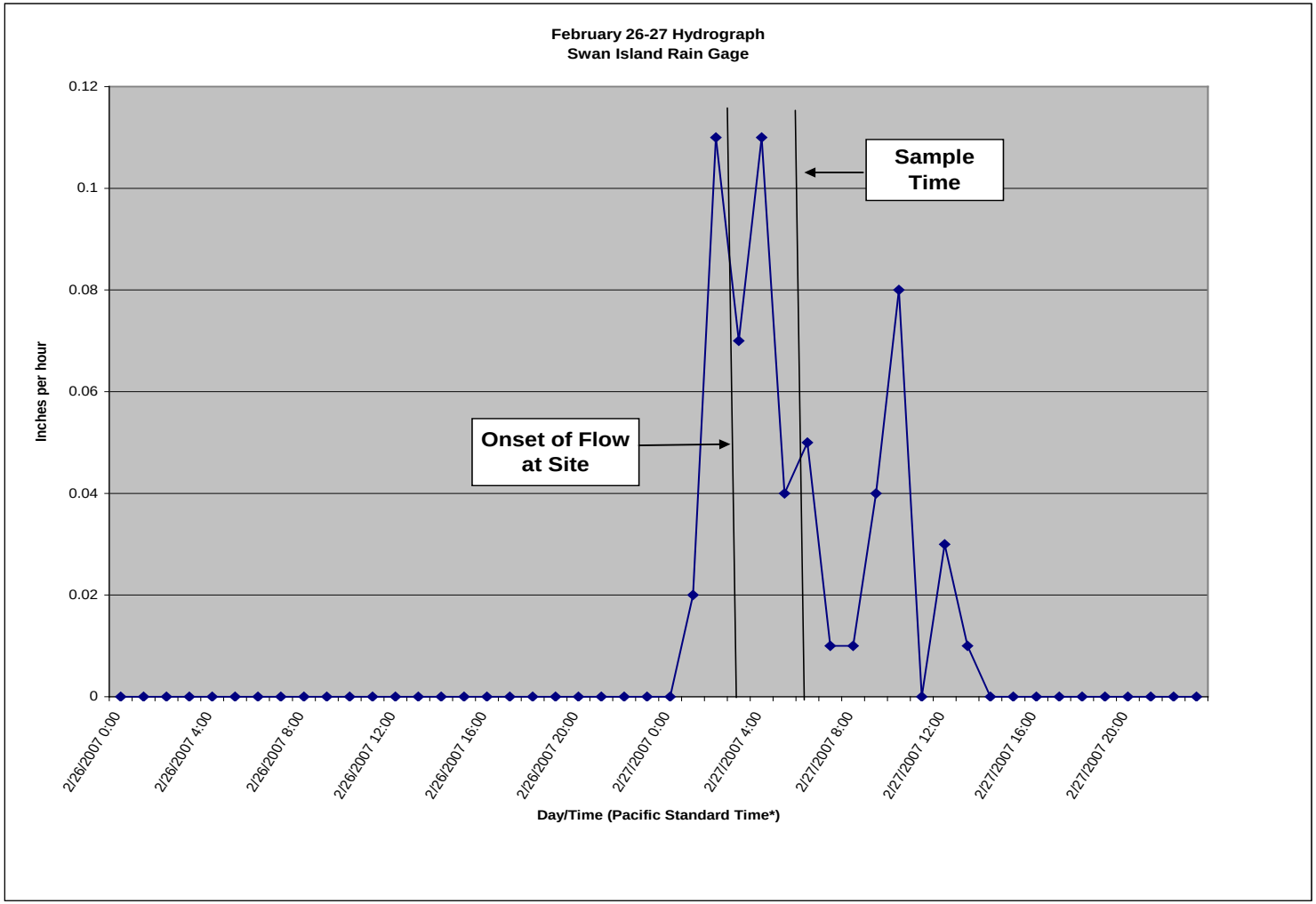
Example Hydrograph Showing Onset of Flow and Sample Time

Data obtained from http://or.water.usgs.gov/non-usgs/bes/precip.html

NOTE: To convert the website data into a column in Excel, highlight the data you want to import then copy and paste it into Excel. It will appear in one cell. Select that cell and go to Data, Text to Columns, and select Fixed Width. After completing this step, each data point will now occupy one cell in a row. To convert the row to a column, highlight and copy the data, place the cursor in an empty column, select Paste Special, and click on Transpose.

Each tip equals 0.01 inches of rainfall
Table and/or graph should provide rainfall data for min. of 24 hours preceeding storm
Onset of flow is generally obtained through observation (may not always be available)

Date/Time*	# of tips	Inches
2/26/2007 0:00	0	0
2/26/2007 1:00	0	0
2/26/2007 2:00	0	0
2/26/2007 3:00	0	0
2/26/2007 4:00	0	0
2/26/2007 5:00	0	0
2/26/2007 6:00	0	0
2/26/2007 7:00	0	0
2/26/2007 8:00	0	0
2/26/2007 9:00	0	0
2/26/2007 10:00	0	0
2/26/2007 11:00	0	0
2/26/2007 12:00	0	0
2/26/2007 13:00	0	0
2/26/2007 14:00	0	0
2/26/2007 15:00	0	0
2/26/2007 16:00	0	0
2/26/2007 17:00	0	0
2/26/2007 18:00	0	0
2/26/2007 19:00	0	0
2/26/2007 20:00	0	0
2/26/2007 21:00	0	0
2/26/2007 22:00	0	0
2/26/2007 23:00	0	0
2/27/2007 0:00	0	0
2/27/2007 1:00	2	0.02
2/27/2007 2:00	11	0.11
2/27/2007 3:00	7	0.07
2/27/2007 4:00	11	0.11
2/27/2007 5:00	4	0.04
2/27/2007 6:00	5	0.05
2/27/2007 7:00	1	0.01
2/27/2007 8:00	1	0.01
2/27/2007 9:00	4	0.04
2/27/2007 10:00	8	0.08
2/27/2007 11:00	0	0
2/27/2007 12:00	3	0.03
2/27/2007 13:00	1	0.01
2/27/2007 14:00	0	0
2/27/2007 15:00	0	0
2/27/2007 16:00	0	0
2/27/2007 17:00	0	0
2/27/2007 18:00	0	0
2/27/2007 19:00	0	0
2/27/2007 20:00	0	0
2/27/2007 21:00	0	0
2/27/2007 22:00	0	0
2/27/2007 23:00	0	0



***Note that the website always reports rain gage times in Pacific Standard Time (PST). If samples are collected during Daylight Savings Time (DST), field notes and sampling documentation should note whether sample times are in PST or DST**