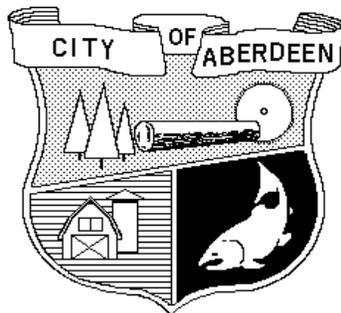


# **Illicit Discharge Detection and Elimination (IDDE) Program**

**City of Aberdeen Public Works**

**August 2011**

Updated March 2012



# City of Aberdeen, Washington

## Illicit Discharge Detection and Elimination (IDDE) Program

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## **Illicit Discharge Detection and Elimination (IDDE) Program**

### **Overview**

An illicit discharge is generally any discharge, release, or pumping of a pollutant or polluted water into the stormwater system. The National Pollutant Discharge Elimination System (NPDES) regulates the discharge of stormwater under the authority of the Federal Clean Water Act. Washington State Department of Ecology (Ecology) has the designated authority to administer NPDES within the State of Washington. Under this authority, Ecology has issued NPDES permits regulating the discharge of stormwater. The City of Aberdeen is under regulation of the Phase II Municipal Stormwater Permit issued on February 16, 2007. The current Phase II permit will remain in effect until February 15, 2012, after which a new Phase II permit will be issued.

The Phase II permit mandates permittees to prepare and implement an Illicit Discharge Detection and Elimination (IDDE) program. This plan and its implementation satisfies this requirement. The goal of this plan is to identify and then eliminate illicit discharges. Examples of illicit discharges include:

- Direct or indirect sanitary wastewater discharges that connect to the storm sewer or watercourse, such as a shop floor drain connected to a storm drain, a cross-connection between the municipal sanitary sewer and storm sewer systems, a damaged sanitary sewer line that is leaking sewage into a cracked storm sewer line, or a failing septic system that is leaking into a water course.
- Materials (e.g.; used motor oil) that have been dumped illegally into a storm drain catch basin.
- Improper home or business owner activities such as washing paint brushes into a catch basin, washing new textured concrete driveways into a storm drain, draining swimming pools to the storm system (swimming pools have high pH and chlorine), excess use of fertilizers, or washing cars with chemicals that enter the storm drain system.

The NPDES Permit sets forth the minimum elements of the plan which are listed below. These minimum elements are described throughout the remainder of this document.

- Municipal Storm Sewer System Mapping
- Ordinances (that effectively prohibit illicit discharges)
- Detection and Elimination Program
- Public Education
- Staff Training

## **Municipal Storm Sewer System Mapping**

### ***Current Program***

The City currently has the following stormwater-related information in their geographic information system (GIS) database:

- Storm sewers
- Catch Basins and manholes
- Ditches
- Streams (watercourses)
- Outfalls

The current program is compliant with the NPDES permit requirements and is completed in advance of the established August 19, 2011 deadline within the permit. Some of the more specific elements of the program as required by the permit are listed below:

1. A Map of all structural BMPs owned, operated, or maintained by the City.
2. For pipe outfalls 24-inch-diameter pipes and watercourse outfalls, a map with the following attributes for each outfall: tributary conveyances (type, material, and size where known), associated drainage areas, and land use. Although most of the watercourses and pipes have a cross-sectional area less than a 24-inch-diameter pipe, the City has elected to consider and map all of the known pipe outfalls 6 inches or greater and all flowing (dry weather) watercourses including seeps and drainages.
3. A program to develop and maintain a map of all connections (ditch or pipe) to the City's storm system allowed or authorized after January 2011.

The City of Aberdeen is bisected by the Chehalis and Wishkah Rivers. There are also numerous small streams and drainage channels that run through the City. The City has implemented an IDDE outfall screening program and has physically inspected all 30+ outfalls of the stormwater drainage system.

## **Ordinances**

### ***Current Ordinances***

Aberdeen Municipal Code Chapter 13.70 Storm and Surface Water Management prohibits illicit discharges and illicit connections and uses (section 13.70.200). Connections to the stormwater system must contain only stormwater and groundwater otherwise they are to be eliminated. The IDDE ordinance is included in the appendix for reference.

## **Detection and Elimination Program**

### ***Response to Suspected or Reported Illicit Charges***

The City currently has a Surface and Stormwater Management Program to fulfill an illicit discharge detection and elimination (IDDE) program which includes: commercial property

inspections, outreach and education, water quality monitoring and stormwater system operation and maintenance.

The City of Aberdeen maintains a hotline that citizens can call during business hours to report a suspected illicit discharge. Calls relative to illicit discharges can be received by several Public Works offices.

Aberdeen Phone Numbers:

Hotline – (360) 537-3393  
Street Department – (360) 537-3268  
Sewer Department – (360) 537-3285  
Engineering Department – (360) 537-3215

Calls to any of the above numbers will result in information being received and routed to the proper individuals.

## **Proactive Investigation**

### ***Prioritization Procedures***

In addition to maintaining a hotline for citizen complaints, the City is required to proactively conduct field assessments to identify illicit discharges and illegal connections to the City's stormwater system and receiving water bodies.

The first step of the proactive work is to prioritize those areas most likely to contain illicit discharges ("hot spots") based on an analysis of land use and other specific information. It is felt that the following types of areas are more likely to generate polluted discharges than others:

1. Locations where there have been repeated problems in the past. This could include areas with water quality data or where repeated complaints have been filed.
2. Older areas of a community typically have a higher percentage of illegal connections. Also, deteriorating sewer pipes can allow wastewater to exfiltrate out of the sanitary lines and into the surrounding environment.
3. Commercial and industrial areas tend to have a higher percentage of illicit discharges.
4. Areas with large and/or many storage vessels of hazardous solids or liquids.

Another consideration for Aberdeen is the proximity of the higher risk land uses (commercial/industrial) to receiving waters. These areas will have a short flow path and greater chance of adversely affecting a larger aquatic system in the event of an illicit discharge or spill.

The City may also choose to conduct a qualitative assessment of the City's surface waters by walking the marine shoreline and streams to identify additional areas of concern. This activity can also be used to ground-truth the outfall map, determine the accessibility of the streams for future monitoring, and provide a photographic record of existing conditions.

As of 2010, the City conducted field assessments of all outfalls discharging to water bodies in the City of Aberdeen. During those inspections the City determined if the tide gates needed any maintenance and performed what was needed. The City found evidence of normal stormwater debris (i.e. trash, plastic, Styrofoam, and garbage) at many locations but did not document the amounts or location. At the time of the inspections there wasn't any evidence of other types of illicit discharges and the exact findings were not documented. Future inspections will include photographs and written documentation of each inspection.

A GIS-based map can be developed of potential hot spots and prioritized water bodies. It is expected that due to internal training of staff and public outreach efforts required by the NPDES permit, the City will develop a better understanding of the causes and locations of illicit discharges. The GIS map (or other tracking tool) can be regularly updated to reflect reports from staff and the public as well as information learned by the on-going field assessment work as the City's IDDE program matures.

Based on IDDE considerations such as those above, the City has implemented a program. Beginning in 2012 the City will:

- **Sub-watershed Assessments:** The City has prioritized sub-watersheds for IDDE risk based on four screening factors: total impervious area, wastewater infrastructure material and age, land use, and previous problems.
- **Storm Facility Inspections:** PW will identify and inspect private commercial, private residential and City maintained stormwater facilities throughout the City limits. Work on this will begin when we receive our new aerial photographs and should be completed within the next year.
- **Fecal Coliform Receiving Water Trend Monitoring Program:** Implement an ongoing water quality monitoring program. Monitoring focuses on outfalls to streams and river waters. The data will assist in prioritizing additional detailed system inspections. The sampling will be performed as required by Phase II guidelines.
- **Outfall Reconnaissance:** Will complete a document inspection program for the mapped outfalls in 2011. The inspection program will include outfall location and screening for illicit discharges.

### ***General Field Assessment Procedures***

The following general recommendations apply to the dry weather field inspection and water sampling work (Center for Watershed Protection & Pitt, 2004):

1. Notify the public during field work projects. Public notices and informational mailers can improve the success of the program by educating the citizenry.
2. Develop training and protocols to keep workers safe during field work.
3. Make good use of the mapping information that has been developed by the City.
4. Fill out a standard field inspection form (see Appendix C).
5. Report spills illicit discharges or connections as required by the NPDES permit (Appendix B).

## ***Physical Parameters***

During dry weather field inspections, a variety of physical parameters will be recorded at each site to assess conditions. At flowing outfalls this includes flow, odor, color, turbidity, and presence or absence of floatables. The information that is obtained from the physical characteristics observed are indicators and cannot be fully relied upon by themselves.

A qualitative observation of flow (none, trickle, moderate, or substantial) should be made. Flow rates can be estimated by one of the following simple methods:

1. Record the time required for the full flow to fill container of a known volume.
2. Multiply cross-sectional flow area by flow velocity. For most instances, flow area is based on an estimate of mean depth and width. Flow velocity is based on the time of travel for an object floating near the surface over a known length.

Odor is described by one of the following terms: sewage, rancid/sour, petroleum/gas, sulfide, or other. The severity of the odor should also be recorded in the field.

Color can be a description of color type and intensity. It is also a quantitative measurement expressed in cobalt-platinum units (Table 1).

Turbidity can be a qualitative descriptor (clear, slight cloudiness, cloudy, or opaque). Alternatively, it can be measured in the field or in the office with a hand held turbidimeter. It is recommended that the City use a single make and model of meter to reduce the differences in readings associated solely with equipment readings.

Floatables are the best physical indicator. The most common floatables are sewage, suds, and oil sheens. Floatables do not include trash. The observation of sewage at an outfall location indicates that there is a severe problem with the MS4 and should be looked at as to where the source for the sewage is emanating from. Suds can indicate a variety of things. Some suds are naturally formed by the movement of the water. If the suds are located at a water drop off and break up quickly, this may only be water turbulence related. If the suds have a fragrant odor, this can indicate the presence of laundry water or wash water in the water body. Oil sheens need to be looked at to try and determine the source of the oil sheen. Some oil sheens are common and occur naturally by instream processes. This occurs when an iron bacteria forms a sheet-like film. This can be determined by looking at the sheen and seeing if it cracks when disturbed. Synthetic oil sheens, on the other hand, will swirl when disturbed. If this occurs, then the sheen is from an oil source.

The City may select a few water quality parameters that can be measured with inexpensive probes and test kits/strips in the field. These include temperature, pH, ammonia, conductivity, chlorine, and hardness. Other than conductivity, temperature and pH these same parameters can be assessed during laboratory analyses so the field testing is usually unnecessary. It is generally recommended that the majority of analyses be conducted in a more controlled “lab” setting.

There may be physical indicators of illicit discharges even if no flow is present. These include: outfall damage, deposits/stains, abnormal vegetation, poor quality of pooled water, benthic growth in pipe.

During a dry weather inspection, observed flows are considered non-stormwater related. The flow may or may not be the result of an illicit discharge. Also, the absence of a flow does not indicate the absence of an illicit discharge since these discharges can be intermittent or transitory. It is important to observe carefully during the dry weather inspection to determine if an intermittent or transitory pollution problem has occurred.

### ***Water Quality Sampling and Testing***

During dry weather inspections physical clues indicating a pollution problem often are not observable. Therefore, water quality sampling and testing will be an essential part of the City's IDDE program. Some parameters can be directly measured in the field using a portable instrument or test kit whereas others require laboratory analysis. Table 1 lists the parameters that must be sampled as well as suggested/optional parameters to be sampled to isolate an illicit discharge. The table also provides the analytical method used when samples are sent to an accredited laboratory and benchmark concentration that typically indicate when there is a problem. Note that these benchmark concentrations are based on samples collected from storm drains nationally. Therefore, benchmark concentrations would be lower for samples drawn from watercourses since the natural base flows would likely dilute any pollutants in water discharged from a contributing storm drainage system.

Table 1

<b>Water Quality Parameter</b>	<b>Use</b>	<b>Analytical Method</b>	<b>Benchmark Concentrations</b>
Specific conductance	B, I	SM 2510B	>2,000 $\mu$ s/cm
Hardness	B, I	EPA 130.1/SM 2340B	<10 mg/L or >2,000 mg/L as CaCO <sub>3</sub>
Turbidity	B, I	SM 2130B	>1,000 NTU
Color	S, I	SM 2120 B	>500 units
Bacterial counts	B	SM 9222 D/SM 9223 B	>200/>50
Ammonia	R, I	EPA 350.2/SM 4500 - NH <sub>3</sub>	>50 mg/L
Surfactants (as MBAS)	R, I	EPA 425.1/SM 5540C	>0.25 mg/L
pH	B, I	EPA 150.1/SM 4500H	< 5
Temperature	B	SM 2550 B	
Total chlorine	S	SM 4500-Cl G	
Fluoride	S	EPA 300.0	0.25 mg/L
Potassium	S, I	EPA 200.7	>20 mg/L
Optical brighteners (florescence)	S	Center for Watershed Protection 2004	
Dissolved oxygen	S	SM 4500-0 G	
Industrial (metals, metalloids, cyanide, oils, grease)	S (for industrial basins)	EPA 200.7/200.9 EPA 1664 Ecology NWTPH-Gx/Dx	
Other pollutants - nutrients, pesticides, automotive fluids	S	EPA 300.0 SM 2540 D	

*Key:*

B = basic parameter to be analyzed at all sites

R = key parameter to identify source of illicit discharge in a typical residential basin

S = possible supplemental parameter

I = key parameter to identify source of illicit discharge from an industrial/commercial area

## ***Immediate Response Procedures***

The field crew should be prepared to take immediate action in the event of encountering one of the following situations:

- Individuals actively in the process of introducing possible illegal substances or materials to the storm drain system
- Very strong chemical odor emanating from storm drain system
- Presence of fumes or smoke emanating from storm drain system
- Visible significant stream of a controlled chemical or petroleum product flowing in storm system or downstream waters
- Large chemical plume in stream or lake downstream of a City outfall
- Any condition that poses or could pose an immediate threat to property, human health or safety, or aquatic life.

The crew should take the following steps if one of the above situations is encountered:

1. Ensure crew and public safety by instructing people to stay clear of the area.
2. Call 911 to report active illegal dumping or potential fire or significant chemical incident.
3. Call the City's customer response number at 360-537-3393 to report a possible illegal discharge.
4. The following offices must all be called if an unauthorized discharge of oil or hazardous material such as a spill has occurred:
  - a) The National Response Center at 1-800-424-8802;
  - b) Washington Emergency Management Division at 1-800-OILS-911; and
  - c) Washington State Department of Ecology – Southwest Regional Office at 1-360-407-6300.
5. If a spill is encountered the following information should be recorded if possible:
  - a) Where is the spill?
  - b) What spilled?
  - c) How much spilled?
  - d) How concentrated is the spilled material?
  - e) Who spilled the material?
  - f) Is anyone cleaning up the spill?
  - g) Are there resource damages (e.g. dead fish or oiled birds)?
  - h) Who is reporting the spill?
  - i) Your contact information?
6. If possible isolate or contain visible chemical pollution in the effected water body with any materials that are accessible. For small discharges earth dams, absorbent pads, and containers may be useful to contain part of the illicit

discharge.

7. Take detailed notes and photos/video for subsequent investigation by City or other agencies.

At a minimum, follow-up work includes contacting the Washington State Department of Ecology – Southwest Office (see phone number above) to determine if any additional reporting or investigative actions are necessary.

For incidents not determined to be emergencies, the City should investigate or refer to the appropriate agency any complaints, reports, or monitoring information that indicates a potential illicit discharge, spill, or illegal dumping.

### ***Isolating Illicit Discharges (Source Tracing)***

The City's current hotline will continue to be an effective tool for locating illicit discharges. However, in situations where outfall screening identifies an illicit discharge several methods can be used to trace to the source of the illicit discharge. Tracing techniques include visual inspections of drainage structures and lines, dye testing, damming lines to isolate areas, video inspection, indicator monitoring, smoke testing, and optical brightener monitoring traps. Other more elaborate approaches include using remote sensing tools to identify soil moisture, water temperature, and vegetation anomalies associated with failing septic systems and tracking illegal dumping activities. The most common approach for the City will likely rely upon visual inspections of the catch basins in the storm line above the outfall in which an illicit discharge is suspected.

Several resources exist to assist in evaluating the likely source of an illicit discharge. Generally, the sources are washwater, sanitary sewer or septage, potable water leak, animal contamination, illegal dumping, or industrial discharge.

### ***Investigation and Response Procedures***

Once an illicit discharge or illegal connection has been located, details about the discharge connection should be documented. Photographs and video may be helpful to record the location and nature of an illicit connection. The City should determine the name and contact information of the property owner.

The response by the City will vary greatly depending on the type, location, frequency, severity, and source of illicit discharge. In general, the City will have several options available to address a specific discharge. In most cases where the violator is identified it is expected that they will voluntarily comply with any action required by the City to eliminate the potential for further illicit discharges. When the violation is the result of an illegal connection from a building, the property owner should respond once they are made aware of the connection, the environmental consequences, the applicable regulations, and the recommended remedy. If the violation is a failing septic system the violation is transferred to the Grays Harbor County Health District for enforcement. These transferred violations are monitored closely by the City to assure compliance with permit requirements.

The City will prepare a letter to be sent to the property owner for any illicit discharge or illegal connection. Depending on the circumstances the letter will describe the findings of the investigation, the required remedy, the required deadline for compliance, technical resources, and the enforcement actions, fines, and legal actions that could ensue for non-compliance. The letter should also describe the relevant codes and laws. The letter should specify who the property owner should contact for additional information and to notify the City when the required remedy has been completed.

The City will conduct a follow-up inspection following notification that the required remedy has been completed.

Should the owner not remedy the discharge, the City may proceed to abate the violation as a public nuisance in accordance with established City nuisance abatement policies and procedures.

## **Public Education**

### ***Public Information***

As part of the City's public outreach program, outreach material will be made available to the citizens. The education campaign will rely upon the City's website (<http://www.aberdeewa.gov>), brochures, print ads, website ads, drain markers and/or fact sheets to make citizens aware of stormwater, water pollution, and inform them of the City's hotline for reporting on possible illegal dumping, connections, or discharges. Additionally, target audiences with a high risk as a potential source, such as auto shops, mobile businesses, and commercial property owners/managers may receive specialized educational material.

The City has established a customer phone number (360-537-3393) for reporting of spills or illicit discharges.

## **Reporting and Recordkeeping**

### ***Tracking (Spills, Inspections, and Public Comment/Feedback)***

Tracking and documentation and inspections of suspected violations is a required part of the IDDE program (section S5C3e) and will be recorded on the appropriate form (see Appendix B).

Public comment/feedback will be conveyed to the IDDE program manager to ensure that the program is responsive to citizen complaints. The public will be directed to either the program manager directly or the hotline if they have general comments they would like to make on the City's IDDE program.

## **Staff Training**

### ***Training Lead***

For those staff responsible for implementing the IDDE program, on the job training will be managed by the City's IDDE program manager. The program manager will manage and assign training as described below and shown in the Training Summary Table below.

### ***Detailed Training***

Detailed training will be assigned to those individuals specifically involved in the immediate response procedures, source tracking of potential illicit discharges and sampling.

### ***General Training***

General training targets City field staff that may potentially see an illicit discharge including staff from the following departments: Street, Department of Community Development, Facilities Maintenance, Traffic, Sewer and Stormwater Maintenance and Parks. General training will be via PowerPoint presentation and printed material distributed to staff at staff meetings. DVD, print or webcast material may be distributed if the need arises as the program develops.

Training activities completed for the calendar year of 2012 are listed below. Training for 2013 shall maintain current levels and be progressive in areas deemed inadequate.

## ***City of Aberdeen - Employee Stormwater Training***

Date	Topic/ Message	Number of Participants	Subjects Discussed
4/18/2012	Stormwater Pollution Prevention for Construction Sites	43	Compliance with Stormwater Regulations General BMP Awareness Training Site Specific BMP Training Timing of Stormwater Training Trainee Evaluations Record Keeping
4/18/2012	Stormwater Pollution Prevention for MS4's	43	Good Housekeeping & Spill Prevention Spill Control & Response Vehicle Fueling Vehicle & Equipment Maintenance Vehicle & Equipment Washing Materials Management Waste Management Municipal Facility Maintenance Street and Parking Lot Cleaning Stormdrain System Cleaning Landscaping & Ground Maintenance Working over & Near Water
10/17/2012	NPDES - IDDE	33	Recognizing Illicit Discharges Reporting of Illicit Discharges Illicit Discharge Reporting Forms

## Appendix A – IDDE Ordinance

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**ORDINANCE NO. \_\_\_\_\_**

**AN ORDINANCE RELATING TO STORM AND SURFACE WATER MANAGEMENT, REPEALING CHAPTER 13.68 OF THE ABERDEEN MUNICIPAL CODE, ADOPTING A NEW CHAPTER 13.70, AMENDING ORDINANCE 5971, AND REPEALING ORDINANCES 6177, 6238, 6280, 6324, 6334, 6453.**

**WHEREAS**, the state of Washington has imposed new state-wide storm and surface water management regulations that require updates to the city's current utility code to comply with the mandatory state standards; **NOW, THEREFORE**,

**BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF ABERDEEN:**

**SECTION 1. CODE CHAPTER REPEALED.** Chapter 13.68 of the Aberdeen Municipal Code, being Ordinance 6177 as amended by Ordinances 6238, 6280, 6334, and 6453, is hereby repealed and replaced by a new Chapter 13.70 AMC as adopted in Section 2 of this ordinance.

**SECTION 2. NEW CODE SECTION ADOPTED.** The following Chapter 13.70 – “Storm and Surface Water Management” is hereby added to the Aberdeen Municipal Code:

**Chapter 13.70  
STORM AND SURFACE WATER MANAGEMENT**

Sections:

- 13.70.010 Purpose.
- 13.70.020 Definitions.
- 13.70.030 Utility established.
- 13.70.040 Transfer of property.
- 13.70.050 Storm and surface water fund created.
- 13.70.060 Setting of fees and charges.
- 13.70.070 Applicability.
- 13.70.080 Review and approval of storm and surface water drainage plans.
- 13.70.090 Exemptions.

- 13.70.100 Variances.
- 13.70.110 Permit.
- 13.70.120 Permit conditions.
- 13.70.130 Minimum control and management requirements.
- 13.70.140 Design criteria.
- 13.70.150 Maintenance agreement.
- 13.70.160 Inspection.
- 13.70.170 Preventive maintenance.
- 13.70.180 Penalties.
- 13.70.190 Cross connections prohibited.
- 13.70.200 Illicit discharges prohibited.
- 13.70.210 Easements.
- 13.70.220 Appeals.

**13.70.010 Purpose.**

The purpose of this chapter is to protect, maintain, and enhance the public health, safety, and general welfare by establishing minimum requirements and procedures to control the adverse impacts associated with increased storm and surface water runoff. Proper management of storm and surface water runoff will minimize damage to public and private property, reduce the effects of development on land and stream channel erosion and sedimentation, assist in the attainment and maintenance of water quality standards, reduce local flooding, and maintain post-development, as nearly as possible, the predevelopment runoff characteristics, while meeting the Stormwater Management Manual for Western Washington as adopted by the Department of Ecology. This chapter also establishes a Storm and Surface Water System as a utility service of the city.

**13.70.020 Definitions.**

For the purposes of this chapter, the following definitions describe the meaning of the terms used in this chapter:

A. "Adverse impact" means any deleterious effect on water or wetlands, including their quality, quantity, surface area, species composition, aesthetics or usefulness for human or natural uses which are or may potentially be harmful or injurious to human health, welfare, safety or property, to biological productivity, diversity or stability, or which unreasonably interfere with the enjoyment of life or property, including outdoor recreation.

B. "Agricultural land management practices" means those methods and procedures used in the cultivation of land in order to further crop production and conservation of related soil and water resources.

C. "Applicant" means any person, firm or governmental agency who executes the necessary forms to procure official approval of a project or a permit to carry out construction of a project.

D. "Aquifer" means a porous water-bearing geologic formation generally restricted to materials capable of yielding an appreciable supply of water.

E. "City engineer" means the city of Aberdeen Public Works Director or his or her designee.

F. "Clearing" means the removal of trees and brush from the land, but shall not include the ordinary mowing of grass.

G. "Detention structure" means a permanent structure designed to store runoff for discharge at rates approximating what would have occurred under predevelopment conditions.

H. "Develop land" means to change the runoff characteristics of a parcel of land in conjunction with residential, commercial, industrial or institutional construction or alteration.

I. "Developer" means a person, group or company engaged in land or property development or proposed development.

J. "Director" or "Public Works Director" means the city of Aberdeen Public Works Director or his or her designee.

K. "Drainage area" means that area contributing runoff to a single point measured in a horizontal plane which is enclosed by a ridge line.

L. "Engineer" means a civil engineer or civil engineering firm that has been retained or employed by the city to perform engineering services.

M. "Easement" means a grant or reservation by the owner of land for the use of such land by others for specific purpose(s), and which must be included in the conveyance of land affected by such easement.

N. "Exemption" means those land development activities that are not subject to the storm and surface water management requirements contained in this chapter.

O. "Flow attenuation" means detaining or retaining runoff to reduce the peak discharge.

P. "Grading" means any act by which soil is cleared, stripped, stockpiled, excavated, scarified, filled or any combination thereof.

Q. "Infiltration" means the passage or movement of water into the soil surface.

R. "Off-site storm and surface water management" means the design and construction of a facility necessary to control storm and surface water from more than one development.

S. "On-site storm and surface water management" means the design and construction of systems necessary to control storm and surface water within an immediate development.

T. "Retention structure" means a permanent structure that provides for the storage of runoff by means of a permanent pool of water or infiltration.

U. "Sediment" means soils or other surficial materials transported or deposited by the action of wind, water, ice or gravity as a product of erosion.

V. "Site" means any tract, lot or parcel of land or combination of tracts, lots or parcels of land which are in one ownership, or are contiguous and in diverse ownership where development is to be performed as part of a unit, subdivision or project.

W. "Stabilization" means the prevention of soil movement by any of various vegetative and/or structural means.

X. "Storm and surface water management" means:

1. For quantitative control, a system of vegetative and structural measures that control the increased volume and rate of surface runoff caused by manmade changes to the land; and

2. For qualitative control, a system of vegetative, structural and other measures that reduce or eliminate pollutants that might otherwise be carried by surface runoff.

Y. "Storm drainage plan" means a set of drawings or other documents submitted by a person as a prerequisite to obtaining a storm drainage permit, which contains all of the information and specifications pertaining to storm and surface water management.

Z. "Stripping" means any activity which removes the vegetative surface cover, including tree removal, clearing, grubbing and storage, or removal of topsoil.

AA. "Variance" means the modification of the minimum storm and surface water management requirements for specific circumstances where strict adherence of the requirements would result in unnecessary hardship and not fulfill the intent of this chapter.

BB. "Watercourse" means any natural or artificial stream, river, creek, ditch, channel, swale, conduit, culvert, drain, or ravine, in and including any area adjacent thereto which is subject to inundation by reason of overflow or flood water.

CC. "Watershed" means the total drainage area contributing runoff to a single point.

DD. "Wetlands" means an area that has saturated soils or periodic high groundwater levels and vegetation adapted to wet conditions and periodic flooding.

#### **13.70.030 Utility established.**

For the purpose of carrying out the provisions of this chapter there is created and established a storm and surface water drainage utility for the city of Aberdeen pursuant to chapters 35.67, 35.92, 90.03, and 90.54 RCW, and by Article 11, Section 11, of the constitution of the state of Washington. The primary purpose of this utility shall be the planning, design, construction, maintenance, administration, and operation of all city storm and surface water facilities and for overseeing the design, construction, and maintenance of improvements on private property where these may affect storm and surface water management. The utility shall be administered by the public works director. The city council is authorized to make funds available to the utility by appropriation, borrowing, or by other means in accordance with laws of Washington state, for the establishment maintenance, and operation of this utility.

#### **13.70.040 Transfer of property.**

All properties, property rights, and interests of every kind or nature owned or held by the city, however acquired, insofar as they relate to or concern storm or surface water facilities, are hereby transferred to the Storm and Surface Water Utility, including by way of examples and not limitation, all properties, rights and interest acquired by adverse possession or by

prescription in and to the drainage and storage of storm or surface waters over and under lands, watercourses, streams, ponds, and estuaries to the full extent of inundation caused by the largest storm or flood condition.

**13.70.050 Storm and surface water fund created.**

A. Pursuant to state law, the city hereby declares its intention to designate the city's storm and surface water system as a utility and enterprise activity of the city to be supported all or in part by the imposition of user charges on all parcels of property within the city which discharge stormwater to the city's storm drainage facilities or are otherwise served by the city's storm drainage facilities.

B. The city hereby establishes a special fund within the city's fiscal system to be known as "The Storm and Surface Water Fund", hereinafter referred to as the fund.

C. All revenues from storm drainage user charges and other storm drainage related fees and charges as may be adopted by resolution shall be deposited to the fund.

D. Expenditures from the Fund shall be limited to those expenditures for the improvement, repair, operation, maintenance, and administration of the storm drainage facility as defined by the public works director of the city of Aberdeen. The fund may also transfer funds to the general fund of the city that represent the reasonable and proportionate share of the cost of general city government support of the utility not covered by direct payments from the fund.

**13.70.060 Setting of fees and charges.**

A. The city council shall by resolution establish a system of user charges for all parcels in the city.

B. To the extent practicable, user charges shall be based on each parcel's expected rate and volume of stormwater runoff from a parcel.

C. The city council may by resolution establish a charge for the connection of any parcel to the city's storm drainage facilities to reflect that parcel's fair share of the cost of the existing city storm drainage facilities serving the parcel.

D. The public works director shall establish appropriate fees for the review and inspection of storm drainage facilities proposed and constructed by private development.

**13.70.070 Applicability.**

It is not intended that this chapter repeal, abrogate, or impair any existing regulations, easements, covenants, or deed restrictions. The provisions of this chapter shall be held to be minimum requirements in their interpretation and application and shall be liberally construed to serve the purposes of this chapter. When any provision of any other chapter of the city regulations conflicts with this chapter, that which provides more environmental protection shall apply unless specifically provided otherwise in this chapter.

**13.70.080 Review and approval of storm and surface water drainage plans.**

A storm and surface water drainage plan or application for a variance shall be submitted to the city engineer by the developer for review and approval for any proposed development, unless otherwise exempted. The storm and surface water drainage plan shall be accompanied by supporting computations, drawings and sufficient information describing the manner, location and type of measures in which storm and surface water runoff will be managed from the entire development. The information supplied by the developer shall be in conformance with the Stormwater Management Manual for Western Washington as prepared by the Department of Ecology. The developer is responsible for submitting a storm and surface water management plan which meets the design requirements provided by this chapter. No person shall develop any land for residential, commercial, industrial or institutional uses without having provided for appropriate storm and surface water management measures that control or manage runoff from such developments.

**13.70.090 Exemptions.**

A. The following development activities are exempt from the provisions of this chapter and the requirements of providing storm and surface water management.

1. Agricultural land management activities;
2. Additions or modifications to existing single-family detached residential structures;
3. Developments that do not disturb over five thousand square feet of land area; or
4. City of Aberdeen owned facilities and streets.

**13.70.100 Variances.**

The city engineer may grant a written variance from any requirement of this chapter if there are exceptional circumstances applicable to the site such that strict adherence to the provisions of this chapter will result in unnecessary hardship and not fulfill the intent of this chapter. A written request for variance shall be provided to the city engineer and shall state the specific variances sought and reasons for their granting. The city shall not grant a variance unless and until sufficient specific reasons justifying the variance are provided by the person developing land.

**13.70.110 Permits – plan approval required.**

A grading/fill permit, building permit, or other development permit may not be issued for any parcel or lot unless a storm and surface water drainage plan has been approved by the city engineer. The approved plan shall become part of the permit and be enforced as an element of any development permit issued by the city.

**13.70.120 Plan approval - conditions.**

In granting the plan approval, the city engineer may impose such conditions thereto as may be deemed necessary to ensure compliance with the provisions of this chapter and the

preservation of public health and safety. Any grading/filling permit, building permit, or other development permit issued by the city may be suspended or revoked, after written notice is given to the permittee, for any violations of the approved storm and surface water drainage plan.

**13.70.130 Minimum control and management requirements.**

The minimum storm and surface water control and management requirements shall be in accordance with standards adopted by the city and included in the Stormwater Management Manual for Western Washington.

**13.70.140 Design criteria.**

Storm and surface water systems shall be designed and constructed in accordance with the standards and specifications as set forth in the Standard Specifications for Road, Bridge and Municipal Construction published by the American Public Works Association (APWA) and the Washington State Department of Transportation, and Stormwater Management Manual for Western Washington published by the Washington State Department of Ecology.

**13.70.150 Maintenance agreement.**

Prior to issuance of a storm and surface water utility permit, the city shall require the applicant to execute an inspection and maintenance agreement binding on all subsequent owners of land served by the private storm and surface water drainage system. The maintenance agreement shall be recorded by the city. Such agreement shall provide for access to the system at reasonable times for regular inspection by the city or its authorized representative to ensure that the facility is maintained in proper working condition to meet design standards and any provisions established. The agreements shall include the right of the city to access the system to take such action as necessary to protect the public safety and health in any instance where the owner fails to make the appropriate correction. Such agreement may contain provisions for regular or special assessments.

**13.70.160 Inspection.**

A. The developer will submit to the city a proposed construction schedule ten days prior to commencing construction. The city engineer shall conduct inspections and file reports for periodic inspections necessary during construction of storm and surface water management systems to ensure compliance with the approved plans. The developer shall notify the city upon completion of the project when a final inspection will be conducted.

B. Any portion of the work which does not comply with city regulations will be promptly corrected by the developer, after written notice from the city. The notice shall set forth the nature of corrections required and the time within which corrections will be made.

C. A final inspection shall be conducted by the city upon completion of the elements of the storm and surface water drainage plan to determine if the completed work is constructed in accordance with approved plan and this chapter. The developer shall supply an

“as-built” certification by a registered professional engineer licensed in the state of Washington to certify that the facility has been constructed as shown in the “as-built” plans and meets approved plans and specifications. The city will provide the developer with a written notification of the results of the final inspection.

**13.70.170 Preventive maintenance.**

A. It shall be the responsibility of the developer or property owner to maintain all infiltration systems, retention, detention or other storm and surface water drainage structures as contained in the storm and surface water utility permit.

B. The city shall annually inspect all infiltration systems, retention, detention or other storm and surface water drainage structures.

C. If the inspection indicates improper maintenance, unsafe conditions, or danger to public health or safety, the city shall so inform the developer or property owner of those conditions as well as a schedule for remediation. The cost of such remediation is the cost of the developer or property owner. In any instance where the developer or property owner fails to make the appropriate correction, the city will take such action as necessary to protect the public health and safety. Any cost incurred by the city shall be recovered from the developer or property owner.

**13.70.180 Penalties.**

A. Any person convicted of violating the provisions of this chapter shall be guilty of a gross misdemeanor. Each day that the violation continues shall be a separate offense.

B. In addition to, or as an alternative to any criminal prosecution or other penalty or billable cost of abatement or inspection as provided by ordinance or statute, any responsible person who violates a provision of this chapter, or order of the director issued pursuant to this chapter, may be assessed a civil penalty under chapter 1.12 AMC.

C. In addition to imposition of a civil penalty, the director shall have the authority to order any responsible person to stop work if the work does not conform to the permit requirements and the severity is determined to be sufficient to warrant such action. The stop work order shall be issued in accordance with the procedures set forth in 1.12 AMC for notices and orders. Failure to comply with the terms of a stop work order shall result in enforcement actions including, but not limited to, the issuance of a civil penalty.

C. In addition, the city may institute injunctive, mandamus or other appropriate action or proceedings at law or equity for the enforcement of this chapter or to correct violations of this chapter, and any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent, injunctions or other appropriate forms of remedy or relief.

D. Any person who, through an act of commission or omission, aids or abets in the violation shall be considered to have committed a violation.

**13.70.190 Cross connections prohibited.**

The installation or maintenance of any cross connection, meaning a connection between any storm and surface water drainage system and any sanitary sewer system, is prohibited. Any such cross connections now existing, or hereafter installed, are declared to be public nuisances and shall be abated by the Director in the manner provided by chapter 8.08 AMC.

**13.70.200 Illicit discharges prohibited – certain discharges allowed – conditions.**

A. The stormwater system of the city of Aberdeen, natural and artificial, may only be used to convey stormwater runoff and discharges meeting the permit conditions within a current National Pollutant Discharge Elimination System Permit approved by the Washington State Department of Ecology. Except as provided in subsections B and C below, no person shall throw, drain or otherwise discharge, cause or allow others under its control to throw, drain or otherwise discharge into the stormwater system any materials other than stormwater.

B. The following discharges into the stormwater system are permitted provided the following conditions are met:

1. Discharges from potable water sources, including waterline flushing, hyper chlorinated waterline flushing, fire hydrant system flushing and pipeline hydrostatic test water. Planned discharges shall be dechlorinated to a concentration of 0.1 ppm or less, pH adjusted, if necessary (to meet water quality standards) and volumetrically and velocity controlled to prevent re-suspension of sediments in the stormwater system. As an option to dechlorinating, planned discharges from potable water sources may be discharged directly to the municipal sanitary sewer system in a manner approved by the Director. Planned discharges of waterline and hydrant system flushing need not be dechlorinated at the point of discharge if the discharge methods, location, or dilution will result in a pH concentration less than 0.1 ppm at the point the water would enter a natural drainage channel.

2. Discharges from lawn watering and other irrigation runoff. Reasonable steps shall be taken to minimize runoff including limiting duration and over-spray.

3. Dechlorinated swimming pool discharges. The discharges shall be dechlorinated to a concentration of 0.1 ppm or less, pH adjusted, and re-oxygenized if necessary, and volumetrically and velocity controlled to prevent re-suspension of sediments in the stormwater system and the property owner shall obtain permission from the Director. Swimming pool cleaning waste water and filter backwash shall not be discharged to the stormwater system.

4. Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents. To avoid washing pollutants into the stormwater system, the discharge must minimize the amount of street wash and dust control water used. At active construction sites, street sweeping must be performed prior to washing the street.

5. Other non-stormwater discharges. The discharges shall be in compliance with the requirements of the stormwater pollution prevention plan for the discharges as reviewed and approved by the City.

6. Any discharges from a construction site. Discharges must be in conformance with the stormwater pollution prevention plan (SWPPP) reviewed by the City.

7. Combined sewer overflow (CSO) discharges. This discharge must be in conformance with a current National Pollution Discharge Elimination System Permit, approved by the Washington State Department of Ecology.

C. The following categories of non stormwater discharges are specifically allowed:

1. Diverted stream flows;
2. Rising ground waters;
3. Uncontaminated ground water infiltration (as defined at AMC 13.52.390);
4. Uncontaminated pumped ground water;
5. Foundation drains;
6. Air conditioning condensation;
7. Irrigation water from agricultural sources that is commingled with urban stormwater;
8. Springs;
9. Water from crawl space pumps;
10. Footing drains;
11. Flows from riparian habitats and wetlands;
12. Non stormwater discharges covered by another NPDES permit;
13. Discharges from emergency fire fighting activities in accordance with the city of Aberdeen Stormwater NPDES Phase II Permit Section S2 Authorized Discharges. The city's Stormwater NPDES Phase II Permit is available to view in the office of the Director.

D. Except as provided in this section, no person shall use the stormwater system, directly or indirectly, to dispose of any solid or liquid matter other than stormwater. No person shall make or allow any connection to the stormwater system which could result in the discharge of polluting matter. Connections to the stormwater system from the interiors of structures are prohibited. Connections to the stormwater system for any purpose other than to convey stormwater or groundwater are prohibited and shall be eliminated.

E. Stormwater discharge into the sanitary system is prohibited - exceptions.

1. No person shall discharge or cause to be discharged any stormwater, surface water, ground water, roof runoff, subsurface drainage, uncontaminated cooling water, or unpolluted industrial process waters into any sanitary sewer, unless otherwise approved by the Director based on lack of feasible alternatives or unless the discharge meets the condition outlined in AMC 13.52.390.

2. No person shall make connection of roof downspouts, exterior foundation drains, area drains, or other sources of stormwater surface runoff or groundwater to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer, unless such connection is otherwise approved in writing by the Director based on lack of feasible alternatives or other appropriate factors.

F. Stormwater shall be discharged to such sewers as are specifically designated as combined sewers or storm sewers, or to a natural outlet approved by the Director. Storm

drainage from hard-surfaced or graded areas, such as parking lots, service station yards, and storage yards, shall enter the public storm sewer system or other outlet approved by the Director and as required by this Chapter and as such facilities are available. Such storm drainage shall not be connected to or allowed to enter a sanitary sewer, unless otherwise approved in writing by the Director based on lack of feasible alternatives or other appropriate factors

**13.70.210 Easements.**

All public storm drainage systems shall be required to be located within a recorded public storm drainage easement or public right-of-way. An unobstructed ingress/egress maintenance easement shall be provided for city access to said storm drainage facilities. The minimum width of the required drainage easement shall be adequate to encompass all facilities and include room for access and maintenance, as determined by the city.

**13.70.220 Appeals – filing deadlines.**

A. Any billing statement, charge, or other fee assessed under this chapter may be appealed to the Director. The appeal may be decided informally, without a hearing, or in the sole discretion of the Director an informal hearing may be held. The Director's decision shall be in writing. The Director's decision shall be the final determination unless a written notice of appeal is filed with the Finance Director within fourteen days of the Director's decision. Appeals from the Director's decision shall be heard by the city council. The city council's decision on appeal shall be the final determination of the city.

B. Any appeal from the refusal to approve a storm and surface water drainage plan shall be considered in the same manner as an appeal from the denial of the development permit being applied for.

C. Any civil enforcement action taken under this chapter, that does not fall within subsections A or B of this section, may be appealed to the Director in the same manner as provided for appeals under chapter 1.12 AMC.

**SECTION 3. CODE SECTION AMENDED.** Ordinance 5971, in part, codified as AMC 1.12.050E, is amended to read as follows:

Appeal to Superior Court. An appeal of the decision of the board must be filed with Superior Court within ~~ten~~ twenty-one calendar days of the date of mailing of the decision of the board to the appellant or is thereafter barred.

**SECTION 4. SAVINGS CLAUSE.** Ordinance 6177, as amended, which is repealed by this ordinance, shall remain in force and effect until the effective date of this ordinance.

**SECTION 5. SEVERABILITY.** Should any section, subsection, paragraph, sentence, clause or phrase of this ordinance or its application to any person or situation be declared unconstitutional or invalid for any reason, such decision shall not affect the validity of the remaining portions of this ordinance or its application to any other person or situation.

**SECTION 6. PUBLICATION BY SUMMARY.** The Finance Director is authorized and directed to publish the attached summary in lieu of this ordinance.

**SECTION 7. EFFECTIVE DATE.** This ordinance shall take effect immediately upon its passage, signing, and publication.

**PASSED and APPROVED** this \_\_\_\_ day of \_\_\_\_\_, 2010.

\_\_\_\_\_  
Bill Simpson, Mayor

ATTESTED:

\_\_\_\_\_  
Kathryn Skolrood, Finance Director

## Appendix B – Illicit Discharge Incident Reporting Forms

Illicit Discharge Incident Investigation / Resolution Sheet

2012

Incident Number	Problem	Location	Resolution
1. 1.1.22.2012	Engine Coolant on the ground	In McDonalds parking lot near Dairy Queen	Vectored coolant and disposed of at vector waste facility
2. 2.2.29.2012	Oil leaking into ditch	Junction City	Called responsible agency
3. 3.4.24.2012	gas sheen on wet pavement	200 Blk W. Heron Street	Placed absorbent socks - cleaned up as required
4. 4.4.26.2012	HYDRAIC SEWER ON PAVEMENT	BAY AVE. / RITE AIDE	PLACED ABSORBENT SOCKS, DEGREASERS & PADS
5. 5.5.8.2012	Turbid water w/ some oil floatables	Boone Street / Fordney Quick lube parking lot	Cleaned up
6. 6.6.20-2012	HYDRAIC LEAK FROM LEMMA TRUCK	Tilden & Cushing to Lawrence & Cushing	Henry contacted C.C.S. for Clean up. Spread absorbent & pads used sweepers to clean absorbent
7. 7.6.29-2012	gas leak	B St 7-11	Cleaned with absorbent & dye
8. 8.7.24-2012	hydraulic spill	Park & State St.	Cleaned with absorbent & dye
9. 9-10-27-2012	SEWER overflow	539 Westley Dr.	Overlaid away from storm drain referred to sewer dept. who were on site.
10. 10-11-13-2012	SEWER SPILL	1920 Rammer Dr.	Spread lime & HAY over area. Contacted Sewer Dept.

11-11-19-2012 oil spill  
 12-11-20 2012 Antifreeze spill  
 13-12-14-2012 Sewer  
 Chehalis Bridge  
 Sideway log Pavilion  
 Spread dye & absorbent pads in area and cleaned  
 Clean storm drain N/A

## Illicit Discharge Incident Report Sheet

**Responder Information** (for hotline incidents only)

 Call Taken By: SPRINGER Call Date: 12-15-2012 Call Time: 1:30 P.M.
**Reporter Information**

 Incident Time: 12-14-2012 (Evening) Incident Date: 12-14-2012

 Caller Contact Information: Kyle Scott Organization: SEWER DEPT.

 Precipitation (inches) past 24 / 48 hours: N/A
**Incident Location**

 Stream Address or Outfall #: 29 Morrison Park Latitude and Longitude:

 Closest Street Address: Log Pavilion Nearby Landmark:

<input type="checkbox"/> Stream Corridor (In or adjacent to stream)	<input checked="" type="checkbox"/> Outfall	<input type="checkbox"/> In-stream Flow	<input type="checkbox"/> Along banks
<input type="checkbox"/> Upland Area (Land not adjacent to stream)	<input type="checkbox"/> Near storm drain	<input type="checkbox"/> Near other water source (Stormwater pond, wetland, ect.)	

 Narrative description of location: Morrison Park
**Upland Problem Indicator Description**

<input type="checkbox"/> Dumping	<input type="checkbox"/> Oil / solvents / chemicals	<input checked="" type="checkbox"/> Sewage
<input type="checkbox"/> Wash water, suds, ect.	<input type="checkbox"/> Other:	

**Stream Corridor Problem Indicator Description**

Odor	<input type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Rancid / Sour	<input type="checkbox"/> Petroleum (gas)
	<input type="checkbox"/> Sulfide	<input type="checkbox"/> Musky	<input type="checkbox"/> Other: Describe in "Narrative" section	
Appearance	<input type="checkbox"/> Normal	<input type="checkbox"/> Oil Sheen	<input type="checkbox"/> Cloudy	<input type="checkbox"/> Turbid
	<input type="checkbox"/> Other: Describe in "Narrative" section			
Floatables	<input type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Litter	<input type="checkbox"/> Dead Fish
	<input type="checkbox"/> Algae	<input type="checkbox"/> Suds	<input type="checkbox"/> Other: Describe in "Narrative" section	

 Narrative description of problem indicators: Sewer Main Over flow

 Suspected Violator (name, personal or vehicle description, license plate number, ect.): City of Aberdeen
**Required Notifications** (Record in correspondence section of sheet two)

Spill Type	Examples	Call / Notify All Listed
Emergency Situation  An immediate and severe threat to human health or the environment  Spills of gas, oil and hazardous substances in any amount	Sewage Main Break Gasoline Tank Rupture Spill with overwhelming chemical odor Gas / Oil spill in a stream, lake or river Gas / Oil spill flowing into a catch basin Gas / Oil spill into a ditch Motor oil spill flowing into a catch basin	911
		Ecology SW Regional Office 360-407-6300 Department of Health - Sewage 360-236-3330 Aberdeen Public Works 360-537-3393
Non Emergency Situation  Small / Medium amount of known substance (generally 1 drop to 5 gallons and the responder is able to handle the situation)	Leaking septic system broken side sewer Oil or vehicle fluids on pavement or gravel Concrete washout Muddy construction site runoff Suds Paint	Aberdeen Street Department 360-537-3241 Aberdeen Sewer Department 360-537-3285 Department of Health - Sewage 360-236-3330

## Illicit Discharge Incident Investigation / Resolution Sheet

Tracking Number (Assign tracking numbers according to sequential order for year and date of occurrence)  
 # 13-12-14-2012 Example: 1.1.20.2011 first incident of 2011 occurring Jan. 20, 2011

**Site Assessment / Investigation**

Site Investigated by: Sewer Dept. Employees

Date: 12-14-2012 Time: \_\_\_\_\_

**Investigation Results:**

- No Investigation Made  
Reason: \_\_\_\_\_
- Referred to different department or agency  
Contact information: Ryle Scott  
Reason: Sewer Problem
- Investigated - No Action Required  
Reason: \_\_\_\_\_
- Investigated - Action Required  
Complete next section

Narrative description of site assessment: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Environmental Remediation Action Plan**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Enforcement Actions (if any)**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Correspondence**

Agency	Contact Person	Date / Time	Phone Number
1 <u>Sewer Dept.</u>	<u>Ryle Scott</u>	<u>12/14/2012</u>	<u>537-3276 / or Cell</u>
2			
3			
4			
5			
6			
7			
8			
9			
10			

## Illicit Discharge Incident Report Sheet

### Responder Information (for hotline incidents only)

Call Taken By: Springer Call Date: 11-20-2012 Call Time: 4:30 P.M.

### Reporter Information

Incident Time: 4:00 P.M. Incident Date: 11-20-12

Caller Contact Information: Fire Dept. Organization: City of Aberdeen

Precipitation (inches) past 24 / 48 hours

### Incident Location

Stream Address or Outfall #: R St Latitude and Longitude

Closest Street Address: Sateway Nearby Landmark:

Primary Location Description Secondary Location Description

Stream Corridor (In or adjacent to stream)  Outfall  In-stream Flow  Along banks

Upland Area (Land not adjacent to stream)  Near storm drain  Near other water source (Stormwater pond, wetland, ect.)

Narrative description of location: State & R St @ Sateway Parking lot

### Upland Problem Indicator Description

Dumping  Oil / solvents / chemicals  Sewage  
 Wash water, suds, ect.  Other: Anti freeze

### Stream Corridor Problem Indicator Description

Odor	<input type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Rancid / Sour	<input type="checkbox"/> Petroleum (gas)
	<input type="checkbox"/> Sulfide	<input type="checkbox"/> Musky	<input type="checkbox"/> Other: Describe in "Narrative" section	
Appearance	<input type="checkbox"/> Normal	<input type="checkbox"/> Oil Sheen	<input type="checkbox"/> Cloudy	<input type="checkbox"/> Turbid
	<input type="checkbox"/> Other: Describe in "Narrative" section			
Floatables	<input type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Litter	<input type="checkbox"/> Dead Fish
	<input type="checkbox"/> Algae	<input type="checkbox"/> Suds	<input type="checkbox"/> Other: Describe in "Narrative" section	

Narrative description of problem indicators: Anti freeze leak from accident

Suspected Violator (name, personal or vehicle description, license plate number, ect.)

### Required Notifications (Record in correspondence section of sheet two)

Spill Type	Examples	Call / Notify All Listed
Emergency Situation  An immediate and severe threat to human health or the environment  Spills of gas, oil and hazardous substances in any amount	Sewage Main Break	911
	Gasoline Tank Rupture Spill with overwhelming chemical odor Gas / Oil spill in a stream, lake or river Gas / Oil spill flowing into a catch basin	Ecology SW Regional Office 360-407-6300 Department of Health - Sewage 360-236-3330
Non Emergency Situation  Small / Medium amount of known substance (generally 1 drop to 5 gallons and the responder is able to handle the situation)	Motor oil spill flowing into a catch basin	Aberdeen Public Works 360-537-3393
	Leaking septic system broken side sewer	Aberdeen Street Department 360-537-3241
	Oil or vehicle fluids on pavement or gravel Concrete washout	Aberdeen Sewer Department 360-537-3285
	Muddy construction site runoff Suds Paint	Department of Health - Sewage 360-236-3330

## Illicit Discharge Incident Investigation / Resolution Sheet

Tracking Number (Assign tracking numbers according to sequential order for year and date of occurrence)  
 # 12-11-20-2012 Example: 1.1.20.2011 first incident of 2011 occurring Jan. 20, 2011

Site Assessment / Investigation Bowers / Pellegrino  
 Site Investigated by: 11

Date: 11-20-2012 Time: 4:30

**Investigation Results:**

- No Investigation Made  
Reason:
- Referred to different department or agency  
Contact information  
Reason:
- Investigated - No Action Required  
Reason:
- Investigated - Action Required  
Complete next section

Narrative description of site assessment: Cleaned area & storm drains

**Environmental Remediation Action Plan**

**Enforcement Actions (if any)**

**Correspondence**

Agency	Contact Person	Date / Time	Phone Number
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

## Illicit Discharge Incident Report Sheet

**Responder Information** (for hotline incidents only)

 Call Taken By: Steve Renschick Call Date: 11-19-12 Call Time: 12:00 P.M.
**Reporter Information**

 Incident Time: 11:30 P.M. Incident Date: 11-19-12

 Caller Contact Information: \_\_\_\_\_ Organization: City of Aberdeen

Precipitation (inches) past 24 / 48 hours \_\_\_\_\_

**Incident Location**

 Stream Address or Outfall #: Chelalis River Latitude and Longitude \_\_\_\_\_

Closest Street Address: \_\_\_\_\_ Nearby Landmark: \_\_\_\_\_

**Primary Location Description**
 Stream Corridor  
(In or adjacent to stream)

**Secondary Location Description**
 Outfall

 In-stream Flow

 Along banks

 Upland Area  
(Land not adjacent to stream)

 Near storm drain

 Near other water source  
(Stormwater pond, wetland, ect.)

 Narrative description of location: Chip Truck Wreck on Bridge
**Upland Problem Indicator Description**
 Dumping

 Oil / solvents / chemicals

 Sewage

 Wash water, suds, ect.

 Other: N/A
**Stream Corridor Problem Indicator Description**

Odor

 None

 Sewage

 Rancid / Sour

 Petroleum (gas)

 Sulfide

 Musky

 Other: Describe in "Narrative" section

Appearance

 Normal

 Oil Sheen

 Cloudy

 Turbid

 Other: Describe in "Narrative" section

Floatables

 None

 Sewage

 Litter

 Dead Fish

 Algae

 Suds

 Other: Describe in "Narrative" section

Narrative description of problem indicators: \_\_\_\_\_

Suspected Violator (name, personal or vehicle description, license plate number, ect.) \_\_\_\_\_

**Required Notifications** (Record in correspondence section of sheet two)

Spill Type	Examples	Call / Notify All Listed
<b>Emergency Situation</b>  An immediate and severe threat to human health or the environment  Spills of gas, oil and hazardous substances in any amount	Sewage Main Break	911
	Gasoline Tank Rupture	Ecology SW Regional Office 360-407-6300
	Spill with overwhelming chemical odor	Department of Health - Sewage 360-236-3330
	Gas / Oil spill in a stream, lake or river	Aberdeen Public Works 360-537-3393
<b>Non Emergency Situation</b>  Small / Medium amount of known substance (generally 1 drop to 5 gallons and the responder is able to handle the situation)	Gas / Oil spill flowing into a catch basin	Aberdeen Street Department 360-537-3241
	Gas / Oil spill into a ditch	Aberdeen Sewer Department 360-537-3285
	Motor oil spill flowing into a catch basin	Department of Health - Sewage 360-236-3330
	Leaking septic system	
	broken side sewer	
	Oil or vehicle fluids on pavement or gravel	
	Concrete washout	
	Muddy construction site runoff	
	Suds	
	Paint	

## Illicit Discharge Incident Investigation / Resolution Sheet

**Tracking Number** (Assign tracking numbers according to sequential order for year and date of occurrence)  
 # 11-11-19-2012 Example: 1.1.20.2011 first incident of 2011 occurring Jan. 20, 2011

**Site Assessment / Investigation**

Site Investigated by: Springer / Wintrie

Date: 11-19-2012 Time: 12:00 P.M.

**Investigation Results:**

- No Investigation Made  
Reason:
- Referred to different department or agency  
Contact information  
Reason:
- Investigated - No Action Required  
Reason:
- Investigated - Action Required  
Complete next section

Narrative description of site assessment: Spread absorbent & cleaned up area

**Environmental Remediation Action Plan**

**Enforcement Actions (if any)**

**Correspondence**

Agency	Contact Person	Date / Time	Phone Number
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

## Illicit Discharge Incident Report Sheet

**Responder Information** (for hotline incidents only)

 Call Taken By: Springer Call Date: 11-13-12 Call Time: 9:30
**Reporter Information**

 Incident Time: N/A Incident Date: 11-13-12

 Caller Contact Information: Steve Pandich Organization: City of Aberdeen

 Precipitation (inches) past 24 / 48 hours: 1/2
**Incident Location**

 Stream Address or Outfall #: 21 Latitude and Longitude:

 Closest Street Address: 1920 Penner Nearby Landmark:

**Primary Location Description**
**Secondary Location Description**

- |                                                                                  |                                           |                                                                                      |                                      |
|----------------------------------------------------------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------|
| <input type="checkbox"/> Stream Corridor<br>(In or adjacent to stream)           | <input type="checkbox"/> Outfall          | <input type="checkbox"/> In-stream Flow                                              | <input type="checkbox"/> Along banks |
| <input checked="" type="checkbox"/> Upland Area<br>(Land not adjacent to stream) | <input type="checkbox"/> Near storm drain | <input type="checkbox"/> Near other water source<br>(Stormwater pond, wetland, ect.) |                                      |

 Narrative description of location: Home sits on corner of Forsyth & Penner
**Upland Problem Indicator Description**

- |                                                 |                                                     |                                            |
|-------------------------------------------------|-----------------------------------------------------|--------------------------------------------|
| <input type="checkbox"/> Dumping                | <input type="checkbox"/> Oil / solvents / chemicals | <input checked="" type="checkbox"/> Sewage |
| <input type="checkbox"/> Wash water, suds, ect. | <input type="checkbox"/> Other:                     |                                            |

**Stream Corridor Problem Indicator Description**

- |            |                                                                            |                                            |                                                                 |                                          |
|------------|----------------------------------------------------------------------------|--------------------------------------------|-----------------------------------------------------------------|------------------------------------------|
| Odor       | <input checked="" type="checkbox"/> None                                   | <input type="checkbox"/> Sewage            | <input type="checkbox"/> Rancid / Sour                          | <input type="checkbox"/> Petroleum (gas) |
|            | <input type="checkbox"/> Sulfide                                           | <input type="checkbox"/> Musky             | <input type="checkbox"/> Other: Describe in "Narrative" section |                                          |
| Appearance | <input type="checkbox"/> Normal                                            | <input type="checkbox"/> Oil Sheen         | <input type="checkbox"/> Cloudy                                 | <input type="checkbox"/> Turbid          |
|            | <input checked="" type="checkbox"/> Other: Describe in "Narrative" section |                                            |                                                                 |                                          |
| Floatables | <input type="checkbox"/> None                                              | <input checked="" type="checkbox"/> Sewage | <input type="checkbox"/> Litter                                 | <input type="checkbox"/> Dead Fish       |
|            | <input type="checkbox"/> Algae                                             | <input checked="" type="checkbox"/> Suds   | <input type="checkbox"/> Other: Describe in "Narrative" section |                                          |

 Narrative description of problem indicators: looked like shower suds

 Suspected Violator (name, personal or vehicle description, license plate number, ect.): Home owner @ 1920 Penner
**Required Notifications** (Record in correspondence section of sheet two)

Spill Type	Examples	Call / Notify All Listed
<b>Emergency Situation</b>  An immediate and severe threat to human health or the environment  Spills of gas, oil and hazardous substances in any amount	Sewage Main Break	911
	Gasoline Tank Rupture	Ecology SW Regional Office 360-407-6300
	Spill with overwhelming chemical odor	Department of Health - Sewage 360-236-3330
	Gas / Oil spill in a stream, lake or river	Aberdeen Public Works 360-537-3393
<b>Non Emergency Situation</b>  Small / Medium amount of known substance (generally 1 drop to 5 gallons and the responder is able to handle the situation)	Gas / Oil spill flowing into a catch basin	Aberdeen Street Department 360-537-3241
	Gas / Oil spill into a ditch	Aberdeen Sewer Department 360-537-3285
	Motor oil spill flowing into a catch basin	Department of Health - Sewage 360-236-3330
	Leaking septic system	
	broken side sewer	
	Oil or vehicle fluids on pavement or gravel	
	Concrete washout	
	Muddy construction site runoff	
	Suds	
	Paint	

## Illicit Discharge Incident Investigation / Resolution Sheet

Tracking Number (Assign tracking numbers according to sequential order for year and date of occurrence)  
 # 10-11-13-2012 Example: 1.1.20.2011 first incident of 2011 occurring Jan. 20, 2011

Site Assessment / Investigation

Site Investigated by: Springer / Mentore

Date: 11-13-12 Time: 10:00 A.M.

Investigation Results:

- No Investigation Made  
Reason:
- Referred to different department or agency  
Contact information  
Reason:
- Investigated - No Action Required  
Reason:
- Investigated - Action Required  
Complete next section

Narrative description of site assessment: Spread lime & rug around area. Bryan Mentore notified Kyle Scott W.W. Systems Manager who contacted all appropriate parties.

Environmental Remediation Action Plan

Clean up affected area

Enforcement Actions (if any)

disconnect bathroom from drain line & hook up to sanitary sewer.

Correspondence

Agency	Contact Person	Date / Time	Phone Number
1 <u>City of Aberdeen</u>	<u>Kyle Scott</u>	<u>11-13-12</u>	<u>360-537-3285</u>
2			
3			
4			
5			
6			
7			
8			
9			
10			

## Illicit Discharge Incident Report Sheet

**Responder Information** (for hotline incidents only)

 Call Taken By: SPRUNGER Call Date: 10-27-12 Call Time: 7:30 P.M.
**Reporter Information**

 Incident Time: 7:00 P.M. Incident Date 10-27-12

 Caller Contact Information: N/A Organization: City of Aberdeen

 Precipitation (inches) past 24 / 48 hours 1.51
**Incident Location**

 Stream Address or Outfall #: 539 Westlly Dr. Latitude and Longitude

 Closest Street Address: Nearby Landmark: Sherwood PARK
**Primary Location Description**
 Stream Corridor  
(In or adjacent to stream)

**Secondary Location Description**
 Outfall

 In-stream Flow

 Along banks

 Upland Area  
(Land not adjacent to stream)

 Near storm drain

 Near other water source  
(Stormwater pond, wetland, ect.)

Narrative description of location:

**Upland Problem Indicator Description**
 Dumping

 Oil / solvents / chemicals

 Sewage

 Wash water, suds, ect.

 Other:

**Stream Corridor Problem Indicator Description**

Odor

 None

 Sewage

 Rancid / Sour

 Petroleum (gas)

 Sulfide

 Musky

 Other: Describe in "Narrative" section

Appearance

 Normal

 Oil Sheen

 Cloudy

 Turbid

 Other: Describe in "Narrative" section

Floatables

 None

 Sewage

 Litter

 Dead Fish

 Algae

 Suds

 Other: Describe in "Narrative" section

 Narrative description of problem indicators: SEWER MAIN PLUGGED CAUSING BACK UP IN HOME OWNERS BASEMENT

 Suspected Violator (name, personal or vehicle description, license plate number, ect.) N/A
**Required Notifications** (Record in correspondence section of sheet two)

Spill Type	Examples	Call / Notify All Listed
Emergency Situation  An immediate and severe threat to human health or the environment  Spills of gas, oil and hazardous substances in any amount	Sewage Main Break	911
	Gasoline Tank Rupture	Ecology SW Regional Office 360-407-6300
	Spill with overwhelming chemical odor Gas / Oil spill in a stream, lake or river Gas / Oil spill flowing into a catch basin	Department of Health - Sewage 360-236-3330
	Gas / Oil spill into a ditch Motor oil spill flowing into a catch basin	Aberdeen Public Works 360-537-3393
Non Emergency Situation  Small / Medium amount of known substance (generally 1 drop to 5 gallons and the responder is able to handle the situation)	Leaking septic system broken side sewer	Aberdeen Street Department 360-537-3241
	Oil or vehicle fluids on pavement or gravel Concrete washout	Aberdeen Sewer Department 360-537-3285
	Muddy construction site runoff Suds	Department of Health - Sewage 360-236-3330
	Paint	

## Illicit Discharge Incident Investigation / Resolution Sheet

**Tracking Number** (Assign tracking numbers according to sequential order for year and date of occurrence)

# 9-10-27-2012 Example: 1.1.20.2011 first incident of 2011 occurring Jan. 20, 2011

**Site Assessment / Investigation**

Site Investigated by: SAPINGER

Date: 10-27-12 Time: 7:45 P.M. - 10:00 P.M.

**Investigation Results:**

No Investigation Made

Reason:

Referred to different department or agency

Contact information Ron Covall 580-3078

Reason:

Investigated - No Action Required

Reason:

Investigated - Action Required

Complete next section

Narrative description of site assessment: Diverted Sewer away from stormdrain into  
near by grassy area

**Environmental Remediation Action Plan**

Referred to sewer Dept. Kyle Scott Contracted  
Ecology, Dept. Health on Sat. 10-12 and notified them of situation

**Enforcement Actions (if any)**

N/A

**Correspondence**

Agency	Contact Person	Date / Time	Phone Number
1 <u>City of Aberdeen</u>	<u>Ron Covall</u>		<u>580-3078</u>
2	<u>Kyle Scott</u>		<u>580-1191</u>
3			
4			
5			
6			
7			
8			
9			
10			

## Illicit Discharge Incident Report Sheet

### Responder Information (for hotline incidents only)

Call Taken By: \_\_\_\_\_ Call Date: \_\_\_\_\_ Call Time: \_\_\_\_\_

### Reporter Information

Incident Time: 9:00 A.M. Incident Date 7-24-12

Caller Contact Information: \_\_\_\_\_ Organization: City of Aberdeen

Precipitation (inches) past 24 / 48 hours ∅

### Incident Location

Stream Address or Outfall #: Chetahis River Latitude and Longitude \_\_\_\_\_

Closest Street Address: Park & State St. Nearby Landmark: A.M. P.M.

Primary Location Description	Secondary Location Description		
<input type="checkbox"/> Stream Corridor (In or adjacent to stream)	<input type="checkbox"/> Outfall	<input type="checkbox"/> In-stream Flow	<input type="checkbox"/> Along banks
<input type="checkbox"/> Upland Area (Land not adjacent to stream)	<input type="checkbox"/> Near storm drain	<input type="checkbox"/> Near other water source (Stormwater pond, wetland, ect.)	

Narrative description of location: Corner of Park & State St.

### Upland Problem Indicator Description

<input type="checkbox"/> Dumping	<input type="checkbox"/> Oil / solvents / chemicals	<input type="checkbox"/> Sewage
<input type="checkbox"/> Wash water, suds, ect.	<input type="checkbox"/> Other:	

### Stream Corridor Problem Indicator Description

Odor	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Rancid / Sour	<input type="checkbox"/> Petroleum (gas)
	<input type="checkbox"/> Sulfide	<input type="checkbox"/> Musky	<input type="checkbox"/> Other: Describe in "Narrative" section	
Appearance	<input checked="" type="checkbox"/> Normal	<input type="checkbox"/> Oil Sheen	<input type="checkbox"/> Cloudy	<input type="checkbox"/> Turbid
	<input type="checkbox"/> Other: Describe in "Narrative" section			
Floatables	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Litter	<input type="checkbox"/> Dead Fish
	<input type="checkbox"/> Algae	<input type="checkbox"/> Suds	<input type="checkbox"/> Other: Describe in "Narrative" section	

Narrative description of problem indicators: \_\_\_\_\_

Suspected Violator (name, personal or vehicle description, license plate number, ect.) City of Aberdeen

### Required Notifications (Record in correspondence section of sheet two)

Spill Type	Examples	Call / Notify All Listed
Emergency Situation  An immediate and severe threat to human health or the environment  Spills of gas, oil and hazardous substances in any amount	Sewage Main Break	911
	Gasoline Tank Rupture	Ecology SW Regional Office 360-407-6300
Non Emergency Situation  Small / Medium amount of known substance (generally 1 drop to 5 gallons and the responder is able to handle the situation)	Spill with overwhelming chemical odor	Department of Health - Sewage 360-236-3330
	Gas / Oil spill in a stream, lake or river	Aberdeen Public Works 360-537-3393
	Gas / Oil spill flowing into a catch basin	Aberdeen Street Department 360-537-3241
	Gas / Oil spill into a ditch	Aberdeen Sewer Department 360-537-3285
	Motor oil spill flowing into a catch basin	Department of Health - Sewage 360-236-3330
	Leaking septic system	
	broken side sewer	
	Oil or vehicle fluids on pavement or gravel	
	Concrete washout	
	Muddy construction site runoff	
	Suds	
	Paint	

## Illicit Discharge Incident Investigation / Resolution Sheet

Tracking Number (Assign tracking numbers according to sequential order for year and date of occurrence)  
 # 7.7.24-2012 Example: 1.1.20.2011 first incident of 2011 occurring Jan. 20, 2011

**Site Assessment / Investigation**

Site Investigated by: *SPRINGER/WINTZUP*

Date: *7-24-12* Time: \_\_\_\_\_

**Investigation Results:**

- No Investigation Made  
Reason:
- Referred to different department or agency  
Contact information  
Reason:
- Investigated - No Action Required  
Reason:
- Investigated - Action Required  
Complete next section

Narrative description of site assessment: *Vector brake hydraulic line. Used absorbent pads and dryer contained site with booms.*

**Environmental Remediation Action Plan**

**Enforcement Actions (if any)**

**Correspondence**

Agency	Contact Person	Date / Time	Phone Number
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

## Illicit Discharge Incident Report Sheet

### Responder Information (for hotline incidents only)

Call Taken By: Rick Sangder Call Date: 6-29-12 Call Time: 8:00 P.M.

### Reporter Information

Incident Time: 7:50 P.M. Incident Date 6-29-12

Caller Contact Information: Call out Service Organization:

Precipitation (inches) past 24 / 48 hours 0 - trace

### Incident Location

Stream Address or Outfall #: Chehalis River Latitude and Longitude

Closest Street Address: 1st & B St Nearby Landmark: 7-11

Primary Location Description Secondary Location Description

Stream Corridor (In or adjacent to stream)  Outfall  In-stream Flow  Along banks

Upland Area (Land not adjacent to stream)  Near storm drain  Near other water source (Stormwater pond, wetland, ect.)

Narrative description of location: Parking lot @ 7-11

### Upland Problem Indicator Description

Dumping  Oil / solvents / chemicals  Sewage  
 Wash water, suds, ect.  Other:

### Stream Corridor Problem Indicator Description

Odor	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Rancid / Sour	<input type="checkbox"/> Petroleum (gas)
	<input type="checkbox"/> Sulfide	<input type="checkbox"/> Musky	<input type="checkbox"/> Other: Describe in "Narrative" section	
Appearance	<input checked="" type="checkbox"/> Normal	<input type="checkbox"/> Oil Sheen	<input type="checkbox"/> Cloudy	<input type="checkbox"/> Turbid
	<input type="checkbox"/> Other: Describe in "Narrative" section			
Floatables	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Litter	<input type="checkbox"/> Dead Fish
	<input type="checkbox"/> Algae	<input type="checkbox"/> Suds	<input type="checkbox"/> Other: Describe in "Narrative" section	

Narrative description of problem indicators: call from call out service stating gas leak @ 7-11

Suspected Violator (name, personal or vehicle description, license plate number, ect.) N/A

### Required Notifications (Record in correspondence section of sheet two)

Spill Type	Examples	Call / Notify All Listed
Emergency Situation  An immediate and severe threat to human health or the environment	Sewage Main Break	911
	Gasoline Tank Rupture	Ecology SW Regional Office 360-407-6300
	Spill with overwhelming chemical odor	Department of Health - Sewage 360-236-3330
	Gas / Oil spill in a stream, lake or river	Aberdeen Public Works 360-537-3393
Non Emergency Situation  Spills of gas, oil and hazardous substances in any amount	Gas / Oil spill flowing into a catch basin	Aberdeen Street Department 360-537-3241
	Gas / Oil spill into a ditch	Aberdeen Sewer Department 360-537-3285
	Motor oil spill flowing into a catch basin	Department of Health - Sewage 360-236-3330
	Leaking septic system	
	broken side sewer	
Small / Medium amount of known substance (generally 1 drop to 5 gallons and the responder is able to handle the situation)	Oil or vehicle fluids on pavement or gravel	
	Concrete washout	
	Muddy construction site runoff	
	Suds	
Paint		

## Illicit Discharge Incident Investigation / Resolution Sheet

Tracking Number (Assign tracking numbers according to sequential order for year and date of occurrence)  
 # 6.6.29.2012 Example: 1.1.20.2011 first incident of 2011 occurring Jan. 20, 2011

**Site Assessment / Investigation**

Site Investigated by: SPRINGEL / BUIERS

Date: 6-29-12 Time: 8:00 P.M.

**Investigation Results:**

- No Investigation Made  
Reason:
- Referred to different department or agency  
Contact information  
Reason:
- Investigated - No Action Required  
Reason:
- Investigated - Action Required  
Complete next section

Narrative description of site assessment: Small amount of what appeared to be a skreen in parking lot. contained and cleaned using dryer and absorbant pads placed down in nearby C.B. Contacted business owner

**Environmental Remediation Action Plan**

N/A

**Enforcement Actions (if any)**

N/A

**Correspondence**

Agency	Contact Person	Date / Time	Phone Number
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

## Illicit Discharge Incident Report Sheet

### Responder Information

Call Taken By: Rick Sangder Call Date: 6-20-12 Call Time: 2:15 P.M.  
 Hotline Call  
 Reported by other Department or Agency

### Reporter Information

Incident Time: \_\_\_\_\_ Incident Date: \_\_\_\_\_  
 Caller Contact Information: \_\_\_\_\_  
 Organization: \_\_\_\_\_  
 Precipitation (inches) ∅ 24 / 48 hours ∅

### Incident Location

Stream Address or Outfall #: 36 Latitude and Longitude: \_\_\_\_\_  
 Closest Street Address: Cushing St. Nearby Landmark: \_\_\_\_\_  

Primary Location Description	Secondary Location Description		
<input type="checkbox"/> Stream Corridor (In or adjacent to stream)	<input type="checkbox"/> Outfall	<input type="checkbox"/> In-stream Flow	<input type="checkbox"/> Along banks
<input type="checkbox"/> Upland Area (Land not adjacent to stream)	<input checked="" type="checkbox"/> Near storm drain	<input type="checkbox"/> Near other water source (Stormwater pond, wetland, ect.)	

Narrative description of location:  
Lemay Truck broke hydraulic line and traveled between Tilden and Lawrence st. on Cushing. Oil had been covered with absorbant when city was notified.

### Upland Problem Indicator Description

Dumping  Oil / solvents / chemicals  Sewage  
 Wash water, suds, ect.  Other: hydraulic oil

### Stream Corridor Problem Indicator Description

Odor	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Rancid / Sour	<input type="checkbox"/> Petroleum (gas)
	<input type="checkbox"/> Sulfide	<input type="checkbox"/> Musky	<input type="checkbox"/> Other: Describe in "Narrative" section	
Appearance	<input type="checkbox"/> Normal	<input type="checkbox"/> Oil Sheen	<input type="checkbox"/> Cloudy	<input type="checkbox"/> Turbid
	<input checked="" type="checkbox"/> Other: Describe in "Narrative" section			
Floatables	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Litter	<input type="checkbox"/> Dead Fish
	<input type="checkbox"/> Algae	<input type="checkbox"/> Suds	<input type="checkbox"/> Other: Describe in "Narrative" section	

Narrative description of problem indicators: hydraulic oil present in street & surrounding shoulder. C.C.S. will conduct soil samples.

Suspected Violator (name, personal or vehicle description, license plate number, ect.)  
Lemay Interprise

## Illicit Discharge Incident Investigation / Resolution Sheet

Tracking Number (Assign tracking numbers according to sequential order for year and date of occurrence)

# 6.6.20.2012 Example: 1.1.20.2011 first incident of 2011 occurring Jan. 20, 2011

Site Assessment / Investigation Jeff Springer / Steve Landiet

Site Investigated by:

Date: 6-20-12 Time: 2:30 P.M.

Investigation Results:

No Investigation Made

Reason:

Referred to different department or agency

Contact information

Reason:

Investigated - No Action Required

Reason: C.C.S. was already in the clean up process with a full

Investigated - Action Required report to follow

Complete next section

Narrative description of site assessment:

Environmental Remediation Action Plan

Enforcement Actions (if any)

Correspondence

Agency	Contact Person	Date / Time	Phone Number
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

**Required Notifications** (Record in correspondence section of sheet two)

Spill Type	Examples	Call / Notify All Listed
<p><b>Emergency Situation</b></p> <p>An immediate and severe threat to human health or the environment</p> <p>Spills of gas, oil and hazardous substances in any amount</p>	<p>Sewage Main Break</p> <p>Gasoline Tank Rupture</p> <p>Spill with overwhelming chemical odor</p> <p>Gas / Oil spill in a stream, lake or river</p> <p>Gas / Oil spill flowing into a catch basin</p> <p>Gas / Oil spill into a ditch</p> <p>Motor oil spill flowing into a catch basin</p>	<p>911</p> <p>National Response Center 800-424-8802</p> <p>WA. Emergency Management 800-OILS-911</p> <p>Ecology SW Regional Office 360-407-6300</p> <p>Department of Health - Sewage 360-236-3330</p> <p>Aberdeen Public Works 360-537-3393</p>
<p><b>Non Emergency Situation</b></p> <p>Small / Medium amount of known substance (generally 1 drop to 5 gallons and the responder is able to handle the situation)</p>	<p>Leaking septic system broken side sewer</p> <p>Oil or vehicle fluids on pavement or gravel</p> <p>Concrete washout</p> <p>Muddy construction site runoff</p> <p>Suds</p> <p>Paint</p>	<p>Aberdeen Street Department 360-537-3241</p> <p>Aberdeen Sewer Department 360-537-3285</p> <p>Department of Health - Sewage 360-236-3330</p>

## Illicit Discharge Incident Report Sheet

### Responder Information

Call Taken By: Rick Sangder Call Date: 5/8/12 Call Time: 10:30 AM  
 Hotline Call  
 Reported by other Department or Agency

### Reporter Information

Incident Time: \_\_\_\_\_ Incident Date: \_\_\_\_\_  
 Caller Contact Information: Jeremy Wuntrip  
 Organization: City of Aberdeen  
 Precipitation (inches) 0 24 / 48 hours

### Incident Location

Stream Address or Outfall #: 42 Latitude and Longitude \_\_\_\_\_  
 Closest Street Address: Boone Street Nearby Landmark: Quick lube  

Primary Location Description	Secondary Location Description		
<input type="checkbox"/> Stream Corridor (In or adjacent to stream)	<input type="checkbox"/> Outfall	<input type="checkbox"/> In-stream Flow	<input type="checkbox"/> Along banks
<input type="checkbox"/> Upland Area (Land not adjacent to stream)	<input checked="" type="checkbox"/> Near storm drain	<input type="checkbox"/> Near other water source (Stormwater pond, wetland, ect.)	

### Narrative description of location:

Parking lot of the quick lube

### Upland Problem Indicator Description

Dumping  Oil / solvents / chemicals  Sewage  
 Wash water, suds, ect.  Other: \_\_\_\_\_

### Stream Corridor Problem Indicator Description

Odor	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Rancid / Sour	<input type="checkbox"/> Petroleum (gas)
	<input type="checkbox"/> Sulfide	<input type="checkbox"/> Musky	<input type="checkbox"/> Other: Describe in "Narrative" section	
Appearance	<input type="checkbox"/> Normal	<input checked="" type="checkbox"/> Oil Sheen	<input type="checkbox"/> Cloudy	<input checked="" type="checkbox"/> Turbid
	<input type="checkbox"/> Other: Describe in "Narrative" section			
Floatables	<input type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Litter	<input type="checkbox"/> Dead Fish
	<input type="checkbox"/> Algae	<input type="checkbox"/> Suds	<input type="checkbox"/> Other: Describe in "Narrative" section	

### Narrative description of problem indicators:

Very turbid water w/ floating oil running into CB

### Suspected Violator (name, personal or vehicle description, license plate number, ect.)

DBC Paving

## Illicit Discharge Incident Investigation / Resolution Sheet

Tracking Number (Assign tracking numbers according to sequential order for year and date of occurrence)

# 5.5.8.2012 Example: 1.1.20.2011 first incident of 2011 occurring Jan. 20, 2011

Site Assessment / Investigation

Site Investigated by: Rick Sangder

Date: 5/8/12 Time: 10:40 AM

Investigation Results:

- No Investigation Made  
Reason:
- Referred to different department or agency  
Contact information  
Reason:
- Investigated - No Action Required  
Reason:
- Investigated - Action Required  
Complete next section

Narrative description of site assessment: arrived onsite and contractor had blocked flow to CB by putting a shirt and sandbags over it. Contractor was saw cutting the HC w/ water and was causing turbid water and oil floatables

Environmental Remediation Action Plan

Shot contractor down and explained the rules. Owner was not on site. (out looking for absorbants). City placed brooms & pads to absorb oil floatables. Contractor said that he blocked the flows before / just as the illicit discharge was to the CB. Contractor appears to want to do a good job and is accommodating. I called the city vacuum truck to pick up the water. Checked downstream for oil or turbid water and saw nothing. Appears that we got there just as the water was about to discharge

Enforcement Actions (if any) to Alder Creek

Spoke w/ contractor about corrective actions and proper BMPs. Told him we would not charge him for our time this time but that it was a first and last chance. Told him he needed a CESL on staff and that he needed to follow BMPs in the future. Contractor was very receptive.

Correspondence

Agency	Contact Person	Date / Time	Phone Number
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

**Required Notifications** (Record in correspondence section of sheet two)

Spill Type	Examples	Call / Notify All Listed
<p><b>Emergency Situation</b></p> <p>An immediate and severe threat to human health or the environment</p> <p>Spills of gas, oil and hazardous substances in any amount</p>	<p>Sewage Main Break</p> <p>Gasoline Tank Rupture</p> <p>Spill with overwhelming chemical odor</p> <p>Gas / Oil spill in a stream, lake or river</p> <p>Gas / Oil spill flowing into a catch basin</p> <p>Gas / Oil spill into a ditch</p> <p>Motor oil spill flowing into a catch basin</p>	<p>911</p> <p>National Response Center 800-424-8802</p> <p>WA. Emergency Management 800-OILS-911</p> <p>Ecology SW Regional Office 360-407-6300</p> <p>Department of Health - Sewage 360-236-3330</p> <p>Aberdeen Public Works 360-537-3393</p>
<p><b>Non Emergency Situation</b></p> <p>Small / Medium amount of known substance (generally 1 drop to 5 gallons and the responder is able to handle the situation)</p>	<p>Leaking septic system</p> <p>broken side sewer</p> <p>Oil or vehicle fluids on pavement or gravel</p> <p>Concrete washout</p> <p>Muddy construction site runoff</p> <p>Suds</p> <p>Paint</p>	<p>Aberdeen Street Department 360-537-3241</p> <p>Aberdeen Sewer Department 360-537-3285</p> <p>Department of Health - Sewage 360-236-3330</p>

## Illicit Discharge Incident Report Sheet

### Responder Information

Call Taken By: RICK SAWYER Call Date: 4-26-12 Call Time: 8:15 A.M.  
 Hotline Call  
 Reported by other Department or Agency 911

### Reporter Information

Incident Time: 8:15 Incident Date 4-26-12  
 Caller Contact Information: WENDY @ 911  
 Organization: 911  
 Precipitation (inches) 24 / 48 hours

### Incident Location

Stream Address or Outfall #: # 1 FRY CREEK Latitude and Longitude 46° 58' 9" N 123° 49' 4" W  
 Closest Street Address: BAY AVE. Nearby Landmark: CAN FOOD OUTLET  

Primary Location Description	Secondary Location Description		
<input checked="" type="checkbox"/> Stream Corridor (In or adjacent to stream)	<input type="checkbox"/> Outfall	<input type="checkbox"/> In-stream Flow	<input type="checkbox"/> Along banks
<input type="checkbox"/> Upland Area (Land not adjacent to stream)	<input checked="" type="checkbox"/> Near storm drain	<input type="checkbox"/> Near other water source (Stormwater pond, wetland, ect.)	

Narrative description of location: AREA IS WEST OF CANNED FOOD OUTLET @ RITE AIDE STORE @ END OF BAY AVE.

### Upland Problem Indicator Description

Dumping  Oil / solvents / chemicals  Sewage  
 Wash water, suds, ect.  Other: BROKEN HYDRAULIC LINE ON GARBAGE TRUCK

### Stream Corridor Problem Indicator Description

Odor	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Rancid / Sour	<input type="checkbox"/> Petroleum (gas)
	<input type="checkbox"/> Sulfide	<input type="checkbox"/> Musky	<input type="checkbox"/> Other: Describe in "Narrative" section	
Appearance	<input checked="" type="checkbox"/> Normal	<input type="checkbox"/> Oil Sheen	<input type="checkbox"/> Cloudy	<input type="checkbox"/> Turbid
	<input type="checkbox"/> Other: Describe in "Narrative" section			
Floatables	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Litter	<input type="checkbox"/> Dead Fish
	<input type="checkbox"/> Algae	<input type="checkbox"/> Suds	<input type="checkbox"/> Other: Describe in "Narrative" section	

Narrative description of problem indicators: GARBAGE TRUCK WAS LEAKING HYDRAULIC FLUID FROM A BROKEN LINE. CITY RESPONDED BY SPREADING DRYER & ABSORBANT PADS ON AREA ALSO INSTALLED SOCKS AROUND CATCH BASIN @ FRY CREEK.

Suspected Violator (name, personal or vehicle description, license plate number, ect.) LEMMY INTERPRESE

Tracking Number (from top of sheet 2) \_\_\_\_\_

## Illicit Discharge Incident Report Sheet

### Responder Information

Call Taken By: Rick Sangden Call Date: 4/24/12 Call Time: 3:30 PM

- Hotline Call  
 Reported by other Department or Agency

### Reporter Information

Incident Time: unknown Incident Date 4/24/12

Caller Contact Information: Carol

Organization: Aberdeen Liquor Store

Precipitation (inches) Trace 24 / 48 hours

### Incident Location

Stream Address or Outfall #: \_\_\_\_\_ Latitude and Longitude \_\_\_\_\_

Closest Street Address: \_\_\_\_\_ Nearby Landmark: Aberdeen Liquor Store

Primary Location Description		Secondary Location Description	
<input type="checkbox"/> Stream Corridor (In or adjacent to stream)	<input type="checkbox"/> Outfall	<input type="checkbox"/> In-stream Flow	<input type="checkbox"/> Along banks
<input type="checkbox"/> Upland Area (Land not adjacent to stream)	<input checked="" type="checkbox"/> Near storm drain	<input type="checkbox"/> Near other water source (Stormwater pond, wetland, ect.)	

Narrative description of location:

Sheen showing up in gutter and on Street. appears to be a spill from a gas can.

### Upland Problem Indicator Description

- Dumping  Oil / solvents / chemicals  Sewage  
 Wash water, suds, ect.  Other:

### Stream Corridor Problem Indicator Description

Odor	<input type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Rancid / Sour	<input checked="" type="checkbox"/> Petroleum (gas)
	<input type="checkbox"/> Sulfide	<input type="checkbox"/> Musky	<input type="checkbox"/> Other: Describe in "Narrative" section	
Appearance	<input type="checkbox"/> Normal	<input checked="" type="checkbox"/> Oil Sheen	<input type="checkbox"/> Cloudy	<input type="checkbox"/> Turbid
	<input checked="" type="checkbox"/> Other: Describe in "Narrative" section			
Floatables	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Litter	<input type="checkbox"/> Dead Fish
	<input type="checkbox"/> Algae	<input type="checkbox"/> Suds	<input type="checkbox"/> Other: Describe in "Narrative" section	

Narrative description of problem indicators:

Sheen on wet pavement

Suspected Violator (name, personal or vehicle description, license plate number, ect.) \_\_\_\_\_

Unknown

Tracking Number (from top of sheet 2)

3.4.24.2012

## Illicit Discharge Incident Investigation / Resolution Sheet

Tracking Number (Assign tracking numbers according to sequential order for year and date of occurrence)  
 #3.4.24.2012 Example: 1.1.20.2011 first incident of 2011 occurring Jan. 20, 2011

**Site Assessment / Investigation**

Site Investigated by: Jeremy Winthrop - City of Aberdeen Leadman

Date: 4/24/12 Time: 3:30 pm

**Investigation Results:**

- No Investigation Made  
Reason:
- Referred to different department or agency  
Contact information  
Reason:
- Investigated - No Action Required  
Reason:
- Investigated - Action Required  
Complete next section

Narrative description of site assessment: Sheen was spreading over the wet pavement  
 no concentrated flows to be contained

**Environmental Remediation Action Plan**

placed oil/hydrocarbon absorbant socks in gutter like were  
 the spill looks to have happened. placed and tied off oil absorbant  
 sock in the catchbasin downstream from the spill area  
 will check booms/socks on 4/25/12 and remove or replace  
 as needed

**Enforcement Actions (if any)**

None

**Correspondence**

Agency	Contact Person	Date / Time	Phone Number
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

**Required Notifications** (Record in correspondence section of sheet two)

Spill Type	Examples	Call / Notify All Listed
<p><b>Emergency Situation</b></p> <p>An immediate and severe threat to human health or the environment</p> <p>Spills of gas, oil and hazardous substances in any amount</p>	<p>Sewage Main Break</p> <p>Gasoline Tank Rupture</p> <p>Spill with overwhelming chemical odor</p> <p>Gas / Oil spill in a stream, lake or river</p> <p>Gas / Oil spill flowing into a catch basin</p> <p>Gas / Oil spill into a ditch</p> <p>Motor oil spill flowing into a catch basin</p>	<p>911</p> <p>National Response Center 800-424-8802</p> <p>WA. Emergency Management 800-OILS-911</p> <p>Ecology SW Regional Office 360-407-6300</p> <p>Department of Health - Sewage 360-236-3330</p> <p>Aberdeen Public Works 360-537-3393</p>
<p><b>Non Emergency Situation</b></p> <p>Small / Medium amount of known substance (generally 1 drop to 5 gallons and the responder is able to handle the situation)</p>	<p>Leaking septic system</p> <p>broken side sewer</p> <p>Oil or vehicle fluids on pavement or gravel</p> <p>Concrete washout</p> <p>Muddy construction site runoff</p> <p>Suds</p> <p>Paint</p>	<p>Aberdeen Street Department 360-537-3241</p> <p>Aberdeen Sewer Department 360-537-3285</p> <p>Department of Health - Sewage 360-236-3330</p>

## Illicit Discharge Incident Report Sheet

### Responder Information

Call Taken By: Jeff Springer Call Date: 2/29/2012 Call Time: \_\_\_\_\_

Hotline Call

Reported by other Department or Agency

### Reporter Information

Incident Time: \_\_\_\_\_ Incident Date: \_\_\_\_\_

Caller Contact Information: Anonymous

Organization: WA

Precipitation (inches) \_\_\_\_\_ 24 / 48 hours

### Incident Location

Stream Address or Outfall #: \_\_\_\_\_ Latitude and Longitude: \_\_\_\_\_

Closest Street Address: Junction City Nearby Landmark: \_\_\_\_\_

Primary Location Description Secondary Location Description

Stream Corridor (In or adjacent to stream)  Outfall  In-stream Flow  Along banks

Upland Area (Land not adjacent to stream)  Near storm drain  Near other water source (Stormwater pond, wetland, ect.)

Narrative description of location:

Vehicle accident at Junction City. Junction City is not in the City of Aberdeen. Passed the info along to County and WSDOE

### Upland Problem Indicator Description

Dumping  Oil / solvents / chemicals  Sewage

Wash water, suds, ect.  Other: \_\_\_\_\_

### Stream Corridor Problem Indicator Description

Odor  None  Sewage  Rancid / Sour  Petroleum (gas)  
 Sulfide  Musky  Other: Describe in "Narrative" section

Appearance  Normal  Oil Sheen  Cloudy  Turbid  
 Other: Describe in "Narrative" section

Floatables  None  Sewage  Litter  Dead Fish  
 Algae  Suds  Other: Describe in "Narrative" section

Narrative description of problem indicators:

Oil leaking from damaged vehicle into ditch.

Suspected Violator (name, personal or vehicle description, license plate number, ect.) \_\_\_\_\_

Tracking Number (from top of sheet 2) 2.2.29.2012

## Illicit Discharge Incident Investigation / Resolution Sheet

Tracking Number (Assign tracking numbers according to sequential order for year and date of occurrence)  
 # 2.2.29.2012 Example: 1.1.20.2011 first incident of 2011 occurring Jan. 20, 2011

**Site Assessment / Investigation**

Site Investigated by:

Date: \_\_\_\_\_ Time: \_\_\_\_\_

**Investigation Results:**

- No Investigation Made  
Reason:
- Referred to different department or agency  
Contact information  
Reason: Not in the City of Aberdeen
- Investigated - No Action Required  
Reason:
- Investigated - Action Required  
Complete next section

Narrative description of site assessment: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Environmental Remediation Action Plan**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Enforcement Actions (if any)**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Correspondence**

Agency	Contact Person	Date / Time	Phone Number
1 WSDOE	Kathy Armstrong		
2 GHC	Mark Cox		
3 GHC	Jim Celich		
4			
5			
6			
7			
8			
9			
10			

## Illicit Discharge Incident Report Sheet

### Responder Information

Call Taken By: SPRINGER / LAIRD Call Date: 1-22 Call Time: 1:00 P.M.  
 Hotline Call  
 Reported by other Department or Agency

### Reporter Information

Incident Time: 12:45 P.M. Incident Date 1-22

Caller Contact Information:

Organization:

Precipitation (inches) 24 / 48 hours

### Incident Location

Stream Address or Outfall #: #27 BENN ST. Latitude and Longitude 46° 58' 30" N 125° 48' 19" W  
 Closest Street Address: McDonald Nearby Landmark: Dairy Queen

#### Primary Location Description

#### Secondary Location Description

<input type="checkbox"/> Stream Corridor (In or adjacent to stream)	<input type="checkbox"/> Outfall	<input type="checkbox"/> In-stream Flow	<input type="checkbox"/> Along banks
<input type="checkbox"/> Upland Area (Land not adjacent to stream)	<input checked="" type="checkbox"/> Near storm drain	<input type="checkbox"/> Near other water source (Stormwater pond, wetland, ect.)	

Narrative description of location: A van was parked near a storm drain that was leaking engine coolant. Creating a green sheen around catch basin and near vehicle

### Upland Problem Indicator Description

Dumping  Oil / solvents / chemicals  Sewage  
 Wash water, suds, ect.  Other:

### Stream Corridor Problem Indicator Description

Odor	<input type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Rancid / Sour	<input type="checkbox"/> Petroleum (gas)
	<input type="checkbox"/> Sulfide	<input type="checkbox"/> Musky	<input checked="" type="checkbox"/> Other: Describe in "Narrative" section	
Appearance	<input type="checkbox"/> Normal	<input type="checkbox"/> Oil Sheen	<input type="checkbox"/> Cloudy	<input type="checkbox"/> Turbid
	<input checked="" type="checkbox"/> Other: Describe in "Narrative" section			
Floatables	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Sewage	<input type="checkbox"/> Litter	<input type="checkbox"/> Dead Fish
	<input type="checkbox"/> Algae	<input type="checkbox"/> Suds	<input type="checkbox"/> Other: Describe in "Narrative" section	

Narrative description of problem indicators: green sheen around storm drain

Suspected Violator (name, personal or vehicle description, license plate number, ect.)

Van had left the area no contact information.

Van had

Tracking Number (from top of sheet 2)

1.1.22.2012

## Illicit Discharge Incident Investigation / Resolution Sheet

Tracking Number (Assign tracking numbers according to sequential order for year and date of occurrence)

# 1.1.22.2012 Example: 1.1.20.2011 first incident of 2011 occurring Jan. 20, 2011

Site Assessment / Investigation

Site Investigated by: Jeff Springer / Dale Laird

Date: 1/22/2012 Time: 12:45 PM

Investigation Results:

- No Investigation Made  
Reason:
- Referred to different department or agency  
Contact information  
Reason:
- Investigated - No Action Required  
Reason:
- Investigated - Action Required  
Complete next section

Narrative description of site assessment: Pool of engine coolant on ground draining to catch basin

Environmental Remediation Action Plan

Put down pads to block flow to catch basin. Used vacuum truck to pick up coolant and clean catch basin.

Enforcement Actions (if any)

Correspondence

Agency	Contact Person	Date / Time	Phone Number
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Appendix C – Outfall Reconnaissance Inventory Field Sheet

1. Fry Creek
2. Division St.
3. Treatment Plant
4. Lincoln St.
5. Washington St.
6. Jefferson St.
7. K St.
8. H St.
9. River St.
10. State St.
11. Heron St. W
12. Wishkah St.
13. E St.
14. D St.
15. B St.
16. Chicago St.
17. Stanton St.
18. Arthur St.
19. 5<sup>th</sup> Ave.
20. 6<sup>th</sup> Ave.
21. Young St.
22. Newell St.
23. Harbor St.
24. Kansas St.
25. Heron St.
26. R/R Ditch
27. Benn St.
28. Gateway Mall
29. Morrison Park
30. Sargent Blvd. 1
31. Sargent Blvd. 2
32. Sargent Blvd. 3
33. Huntley St.
34. Saginaw
35. Front St.
36. Shannon Slough
37. Wood St.
38. Decatur St.
39. Taylor St.
40. Lee St.
41. Wilson Creek

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 1

Subwatershed: Chehalis River		Outfall ID: #1 Fry Creek	
Today's date: 12-10-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by: Springer	
Temperature (°F): 50		Rainfall (in.) – Last 24hrs: Last 48hrs:	
Latitude: 46°48'9"N	Longitude: 123°51'6"W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other:	
<input type="checkbox"/> Commercial		Known industries:	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 1

Location	Material	Shape		Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 72"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:		Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)				
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<i>If No, Skip to Section 5</i>		
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

## Section 3: Quantitative Characterization 1

Field Data for Flowing Outfalls				
Parameter		Result	Unit	Equipment
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely (severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Obvious	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)
--------------------------------------------------------------	-------------------------------------------------------------------------	----------------------------------	--------------------------------------------------------------------------------

### Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
2. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
3. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 2

Subwatershed: Chehalis River		Outfall ID: #2 Division Street	
Today's date: 12-10-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by:	
Temperature (°F): 50		Rainfall (in.) – Last 24hrs: Last 48hrs:	
Latitude: 46°57'51"	Longitude: 123°49'44" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other:	
<input type="checkbox"/> Commercial		Known industries:	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 2

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: <input type="checkbox"/> Other:	Diameter/Dimensions: 42"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 2

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1- Faint	<input type="checkbox"/> 2 – Easily Detected	<input type="checkbox"/> 3 – Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Faint colors in sample bottle	<input type="checkbox"/> 2 – Clearly visible in sample bottle	<input type="checkbox"/> 3 – Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 – Slight cloudiness	<input type="checkbox"/> 2 – Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 – Few/slight; origin not obvious	<input type="checkbox"/> 2 – Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae Other	
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Obvious	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)
----------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------

### Section 7: Data Collection

4. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
5. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
6. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 3

Subwatershed: Chehalis River		Outfall ID: #3 Treatment Plant	
Today's date: 12-10-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by: Springer	
Temperature (°F): 50		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°57'50"	Longitude: 123°49'44" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other:	
<input type="checkbox"/> Commercial		Known industries:	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 3

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: <input type="checkbox"/> Other:	Diameter/Dimensions: 18"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 3

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)     
  Potential (presence of two or more indicators)     
  Obvious     
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

7. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
8. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
9. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 4

Subwatershed: Chehalis River		Outfall ID: #4 Lincoln Street	
Today's date: 12-10-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by: Springer	
Temperature (°F): 50		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°57'56" N	Longitude: 123°49'29" W	GPS Unit: _____	GPS LMK #: _____
Camera: _____		Photo #'s: _____	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known): _____			

## Section 2: Outfall Description 4

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 48"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 4

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)     
  Potential (presence of two or more indicators)     
  Obvious     
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

10. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
11. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
12. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 5

Subwatershed: Chehalis River		Outfall ID: #5 Washington St	
Today's date: 12-10-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by: Springer	
Temperature (°F): 50		Rainfall (in.) – Last 24hrs: Last 48hrs:	
Latitude: 46°57'59" N	Longitude: 123°49'21" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other:	
<input type="checkbox"/> Commercial		Known industries:	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 5

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: <input type="checkbox"/> Other:	Diameter/Dimensions: 30"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 5

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae Other:	
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely (severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)
	<input type="checkbox"/> Obvious	

### Section 7: Data Collection

13. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
14. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
15. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 6

Subwatershed: Chehalis River		Outfall ID: #6 Jefferson St	
Today's date: 12-10-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by:	
Temperature (°F): 50		Rainfall (in.) – Last 24hrs: Last 48hrs:	
Latitude: 46°58'10" N	Longitude: 123°49'7" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other:	
<input type="checkbox"/> Commercial		Known industries:	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 6

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other:	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: <input type="checkbox"/> Other:	Diameter/Dimensions: 24"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 6

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae Other	
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely (severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Obvious	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)
--------------------------------------------------------------	-------------------------------------------------------------------------	----------------------------------	--------------------------------------------------------------------------------

### Section 7: Data Collection

16. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
17. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
18. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 7

Subwatershed: Chehalis River		Outfall ID: #7 K St	
Today's date: 12-10-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by: Springer	
Temperature (°F): 50		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'14" N	Longitude: 123°48'57" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other:	
<input checked="" type="checkbox"/> Commercial		Known industries:	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 7

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other:	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: <input type="checkbox"/> Other:	Diameter/Dimensions: 24"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 7

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)     
  Potential (presence of two or more indicators)     
  Obvious     
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

19. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
20. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
21. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 8

Subwatershed: Chehalis River		Outfall ID: #8 H St	
Today's date: 12-10-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by: Springer	
Temperature (°F): 50		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'20" N	Longitude: 123°48'43" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other:	
<input checked="" type="checkbox"/> Commercial		Known industries:	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 8

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: <input type="checkbox"/> Other:	Diameter/Dimensions: 36"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 8

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae Other:	
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Obvious	<input type="checkbox"/> Suspect (one or more indicators with a
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### Section 7: Data Collection

22. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
23. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
24. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 9

Subwatershed: Chehalis River		Outfall ID: #9 River St	
Today's date: 12-11-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by: Springer	
Temperature (°F): 50		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'78" N	Longitude: 123°48'37" W	GPS Unit: _____	GPS LMK #: _____
Camera: _____		Photo #'s: _____	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known): _____			

## Section 2: Outfall Description 9

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 8"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 9

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae Other	
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely (severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Obvious	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)
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### Section 7: Data Collection

25. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
26. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
27. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 10

Subwatershed: Chehalis River		Outfall ID: #10 State St	
Today's date: 12-11-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by: Springer	
Temperature (°F): 50		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'31" N	Longitude: 123°48'40" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other:	
<input checked="" type="checkbox"/> Commercial		Known industries:	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 10

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: <input type="checkbox"/> Other:	Diameter/Dimensions: 12"	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 10

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae Other	
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely (severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Obvious	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)
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### Section 7: Data Collection

28. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
29. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
30. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 11

Subwatershed: Chehalis River		Outfall ID: #11 Heron St (West)	
Today's date: 12-11-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by: Springer	
Temperature (°F): 50		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'36" N	Longitude: 123°48'44" W	GPS Unit: _____	GPS LMK #: _____
Camera: _____		Photo #'s: _____	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known): _____			

## Section 2: Outfall Description 11

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 12"	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 11

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)     
  Potential (presence of two or more indicators)     
  Obvious     
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

31. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
32. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
33. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 1: Background Data 12

Subwatershed: Chehalis River		Outfall ID: #12 Wishkah St	
Today's date: 12-11-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by: Springer	
Temperature (°F): 50		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'37" N	Longitude: 123°48'44" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description 12

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: 12"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization 12

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)     
  Potential (presence of two or more indicators)     
  Obvious     
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

34. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
35. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
36. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 13

Subwatershed: Chehalis River		Outfall ID: #13 E St	
Today's date: 12-11-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by: Springer	
Temperature (°F): 50		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'40" N	Longitude: 123°48'43" W	GPS Unit: _____	GPS LMK #: _____
Camera: _____		Photo #'s: _____	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known): _____			

## Section 2: Outfall Description 13

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 30"	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 13

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae Other	
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Obvious	<input type="checkbox"/> Suspect (one or more indicators with a
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### Section 7: Data Collection

37. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
38. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
39. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 14

Subwatershed: Chehalis River		Outfall ID: #14 D St	
Today's date: 12-11-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by: Springer	
Temperature (°F): 55		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'42" N	Longitude: 123°48'41" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 14

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 24"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 14

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely (severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Obvious	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)
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### Section 7: Data Collection

40. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
41. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
42. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 15

Subwatershed: Chehalis River		Outfall ID: #15 B St	
Today's date: 12-12-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'46" N	Longitude: 123°48'33" W	GPS Unit: _____	GPS LMK #: _____
Camera: _____		Photo #'s: _____	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known): _____			

## Section 2: Outfall Description 15

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: 10"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 15

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)    
  Potential (presence of two or more indicators)    
  Obvious    
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

43. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
44. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
45. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 16

Subwatershed: Chehalis River		Outfall ID: #16 Chicago St	
Today's date: 12-12-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'54" N	Longitude: 123°48'22" W	GPS Unit: _____	GPS LMK #: _____
Camera: _____		Photo #'s: _____	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known): _____			

## Section 2: Outfall Description 16

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 8"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 16

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)     
  Potential (presence of two or more indicators)     
  Obvious     
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

46. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
47. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
48. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 17

Subwatershed: Chehalis River		Outfall ID: #17 Stanton St	
Today's date: 12-12-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: Last 48hrs:	
Latitude: 46°58'57" N	Longitude: 123°48'18" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other:	
<input type="checkbox"/> Commercial		Known industries:	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 17

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: <input type="checkbox"/> Other:	Diameter/Dimensions: 18"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 17

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Seconds	Stopwatch	
<input type="checkbox"/> Flow #2	Flow depth	Inches	Tape measure	
	Flow width	Feet, inches	Tape measure	
	Measured length	Feet, inches	Tape measure	
	Time of travel	Seconds	Stopwatch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae Other:	
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely (severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Obvious	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)
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### Section 7: Data Collection

49. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
50. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
51. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 18

Subwatershed: Chehalis River		Outfall ID: #18 Arthur St	
Today's date: 12-12-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°59'5" N	Longitude: 123°48'32" W	GPS Unit: _____	GPS LMK #: _____
Camera: _____		Photo #'s: _____	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known): _____			

## Section 2: Outfall Description 18

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input checked="" type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 2 – 18" 1 – 24"	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input checked="" type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 18

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)     
  Potential (presence of two or more indicators)     
  Obvious     
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

52. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
53. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
54. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 19

Subwatershed: Chehalis River		Outfall ID: #19 5 <sup>th</sup> Ave	
Today's date: 12-12-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°59'18" N	Longitude: 123°48'47" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other:	
<input type="checkbox"/> Commercial		Known industries:	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 19

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: <input type="checkbox"/> Other:	Diameter/Dimensions: 36"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 19

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae Other	
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely (severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Obvious	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)
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### Section 7: Data Collection

55. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
56. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
57. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 1: Background Data 20

Subwatershed: Chehalis River		Outfall ID: #20 6 <sup>th</sup> Ave	
Today's date: 12-12-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: Last 48hrs:	
Latitude: 46°59'20" N	Longitude: 123°48'47" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other:	
<input type="checkbox"/> Commercial		Known industries:	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description 20

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: <input type="checkbox"/> Other:	Diameter/Dimensions: 12"	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input checked="" type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization 20

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Seconds	Stopwatch	
<input type="checkbox"/> Flow #2	Flow depth	Inches	Tape measure	
	Flow width	Feet, inches	Tape measure	
	Measured length	Feet, inches	Tape measure	
	Time of travel	Seconds	Stopwatch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)     
  Potential (presence of two or more indicators)     
  Obvious     
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

58. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
59. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
60. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 21

Subwatershed: Chehalis River		Outfall ID: #21 Young St	
Today's date: 12-12-12		Time (Military): 1500	
Investigators: Randich/Melton		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°59'6" N	Longitude: 123°48'18" W	GPS Unit: _____	GPS LMK #: _____
Camera: _____		Photo #'s: _____	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known): _____			

## Section 2: Outfall Description 21

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 24"	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input checked="" type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 21

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)     
  Potential (presence of two or more indicators)     
  Obvious     
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

61. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
62. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
63. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 22

Subwatershed: Chehalis River		Outfall ID: #22 Newell St	
Today's date: 12-10-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: Last 48hrs:	
Latitude: 46°58'45" N	Longitude: 123°48'28" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other:	
<input type="checkbox"/> Commercial		Known industries:	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 22

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: <input type="checkbox"/> Other:	Diameter/Dimensions: 12"	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 22

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Seconds	Stopwatch	
<input type="checkbox"/> Flow #2	Flow depth	Inches	Tape measure	
	Flow width	Feet, inches	Tape measure	
	Measured length	Feet, inches	Tape measure	
	Time of travel	Seconds	Stopwatch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)     
  Potential (presence of two or more indicators)     
  Obvious     
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

64. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
65. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
66. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 23

Subwatershed: Chehalis River		Outfall ID: #23 Harbor St	
Today's date: 12-10-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: Last 48hrs:	
Latitude: 46°58'44" N	Longitude: 123°48'33" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other:	
<input type="checkbox"/> Commercial		Known industries:	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 23

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: <input type="checkbox"/> Other:	Diameter/Dimensions: 12"	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 23

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)     
  Potential (presence of two or more indicators)     
  Obvious     
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

67. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
68. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
69. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 24

Subwatershed: Chehalis River		Outfall ID: #24 Kansas St	
Today's date: 12-10-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'37" N	Longitude: 123°48'41" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 24

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 15"	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input checked="" type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 24

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Obvious	<input type="checkbox"/> Suspect (one or more indicators with a
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### Section 7: Data Collection

70. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
71. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool
72. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

If Yes, type:

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 25

Subwatershed: Chehalis River		Outfall ID: #25 Heron St (East)	
Today's date: 12-10-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'36" N	Longitude: 123°48'41" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 25

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 18"	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input checked="" type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 25

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)     
  Potential (presence of two or more indicators)     
  Obvious     
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

73. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
74. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
75. Intermittent flow trap set?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>
OBM <input type="checkbox"/> Caulk damn			

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 26

Subwatershed: Chehalis River		Outfall ID: #26 R/R Ditch	
Today's date: 12-10-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'31" N	Longitude: 123°48'34" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 26

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 12"	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input checked="" type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 26

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae Other:	
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Obvious	<input type="checkbox"/> Suspect (one or more indicators with a
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### Section 7: Data Collection

76. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
77. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
78. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 27

Subwatershed: Chehalis River		Outfall ID: #27 Benn St	
Today's date: 12-10-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: _____	Longitude: _____	GPS Unit: _____	GPS LMK #: _____
Camera: _____		Photo #'s: _____	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known): _____			

## Section 2: Outfall Description 27

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 15"	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input checked="" type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 27

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)     
  Potential (presence of two or more indicators)     
  Obvious     
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

79. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
80. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
81. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 28

Subwatershed: Chehalis River		Outfall ID: #28 Gateway Mall	
Today's date: 12-10-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: Last 48hrs:	
Latitude: 46°58'33" N	Longitude: 123°48'6" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other:	
<input checked="" type="checkbox"/> Commercial		Known industries:	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 28

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other:	<input type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: <input type="checkbox"/> Other:	Diameter/Dimensions: 18"	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 28

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Seconds	Stopwatch	
<input type="checkbox"/> Flow #2	Flow depth	Inches	Tape measure	
	Flow width	Feet, inches	Tape measure	
	Measured length	Feet, inches	Tape measure	
	Time of travel	Seconds	Stopwatch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae Other	
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely (severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Obvious	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)
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### Section 7: Data Collection

82. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
83. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool
84. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

If Yes, type:

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 29

Subwatershed: Chehalis River		Outfall ID: #29 Morrison Park	
Today's date: 12-11-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'33" N	Longitude: 123°48'6" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 29

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 24"	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input checked="" type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 29

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae Other	
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Obvious	<input type="checkbox"/> Suspect (one or more indicators with a
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### Section 7: Data Collection

85. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
86. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
87. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 30

Subwatershed: Chehalis River		Outfall ID: #30 Sargent Blvd #1	
Today's date: 12-11-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'37" N	Longitude: 123°47'56" W	GPS Unit: _____	GPS LMK #: _____
Camera: _____		Photo #'s: _____	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known): _____			

## Section 2: Outfall Description 30

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 12"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 30

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae Other	
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely (severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Obvious	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)
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### Section 7: Data Collection

88. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
89. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
90. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 31

Subwatershed: Chehalis River		Outfall ID: #31 Sargent Blvd #2	
Today's date: 12-11-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'37" N	Longitude: 123°47'47" W	GPS Unit: _____	GPS LMK #: _____
Camera: _____		Photo #'s: _____	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known): _____			

## Section 2: Outfall Description 31

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 18"	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 31

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae Other	
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely (severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Obvious	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)
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### Section 7: Data Collection

91. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
92. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool
93. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

If Yes, type:

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 1: Background Data 32

Subwatershed: Chehalis River		Outfall ID: #32 Sargent Blvd #3	
Today's date: 12-11-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'38" N	Longitude: 123°47'43"	GPS Unit: _____	GPS LMK #: _____
Camera: _____		Photo #'s: _____	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known): _____			

### Section 2: Outfall Description 32

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 24"	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input checked="" type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization 32

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae Other	
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)     
  Potential (presence of two or more indicators)     
  Obvious     
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

94. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
95. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
96. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 33

Subwatershed: Chehalis River		Outfall ID: #33 Huntley St	
Today's date: 12-11-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: Last 48hrs:	
Latitude: 46°57'33" N	Longitude: 123°49'5" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other:	
<input type="checkbox"/> Commercial		Known industries:	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 33

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: Allum	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: <input type="checkbox"/> Other:	Diameter/Dimensions: 30"	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 33

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae Other	
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely (severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Obvious	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)
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### Section 7: Data Collection

97. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
98. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
99. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 34

Subwatershed: Chehalis River		Outfall ID: #34 Saginaw	
Today's date: 12-11-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 35		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°57'58" N	Longitude: 123°48'46" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 34

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 36"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 34

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)     
  Potential (presence of two or more indicators)     
  Obvious     
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

100. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
101. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
102. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 35

Subwatershed: Chehalis River		Outfall ID: #35 Front St	
Today's date: 12-12-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 35		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°57'9" N	Longitude: 123°48'32" W	GPS Unit: _____	GPS LMK #: _____
Camera: _____		Photo #'s: _____	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known): _____			

## Section 2: Outfall Description 35

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 24"	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 35

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatingables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)    
  Potential (presence of two or more indicators)    
  Obvious    
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

103. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
104. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
105. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 36

Subwatershed: Chehalis River		Outfall ID: #36 Shannon Slough	
Today's date: 12-12-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 35		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'26" N	Longitude: 123°47'42" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 36

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 54"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 36

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)     
  Potential (presence of two or more indicators)     
  Obvious     
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

106. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
107. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool
108. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

If Yes, type:

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 37

Subwatershed: Chehalis River		Outfall ID: #37 Wood St	
Today's date: 12-12-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 35		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'22" N	Longitude: 123°46'59" W	GPS Unit: _____	GPS LMK #: _____
Camera: _____		Photo #'s: _____	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known): _____			

## Section 2: Outfall Description 37

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 18"	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 37

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)     
  Potential (presence of two or more indicators)     
  Obvious     
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

109. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
110. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool
111. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

If Yes, type:

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 38

Subwatershed: Chehalis River		Outfall ID: #38 Decatur St	
Today's date: 12-12-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 35		Rainfall (in.) – Last 24hrs: Last 48hrs:	
Latitude: 46°58'9" N	Longitude: 123°46'54" W	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other:	
<input type="checkbox"/> Commercial		Known industries:	
Notes (e.g., origin of outfall, if known):			

## Section 2: Outfall Description 38

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: <input type="checkbox"/> Other:	Diameter/Dimensions: 60"	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input checked="" type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 38

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Suds Other:	<input type="checkbox"/> Colors <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Green	<input type="checkbox"/> Orange <input type="checkbox"/> Other:

### Section 6: Overall Outfall Characterization

Unlikely (severity of 3)     
  Potential (presence of two or more indicators)     
  Obvious     
  Suspect (one or more indicators with a severity of 3)

### Section 7: Data Collection

112. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
113. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
114. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 39

Subwatershed: Chehalis River		Outfall ID: #39 Taylor St	
Today's date: 12-12-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°57'49" N	Longitude: 123°46'43" W	GPS Unit: _____	GPS LMK #: _____
Camera: _____		Photo #'s: _____	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known): _____			

## Section 2: Outfall Description 39

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 12"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 39

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae Other	
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely (severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Obvious	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)
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### Section 7: Data Collection

115. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
116. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
117. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 40

Subwatershed: Chehalis River		Outfall ID: #40 Lee St	
Today's date: 12-12-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°57'49" N	Longitude: 123°46'43" W	GPS Unit: _____	GPS LMK #: _____
Camera: _____		Photo #'s: _____	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known): _____			

## Section 2: Outfall Description 40

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 24"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 40

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily Detected	<input type="checkbox"/> 3 - Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae Other	
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely (severity of 3)	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Obvious	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)
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### Section 7: Data Collection

118. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
119. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool
120. Intermittent flow trap set? OBM <input type="checkbox"/> Caulk damn	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

If Yes, type:

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Outfall Reconnaissance Inventory/Sample Collection Field Sheet

## Section 1: Background Data 41

Subwatershed: Chehalis River		Outfall ID: #41 Wilson Creek	
Today's date: 12-12-12		Time (Military): 1500	
Investigators: Springer/Wintrip		Form completed by: Springer	
Temperature (°F): 40		Rainfall (in.) – Last 24hrs: _____ Last 48hrs: _____	
Latitude: 46°58'33" N	Longitude: 123°48'6" W	GPS Unit: _____	GPS LMK #: _____
Camera: _____		Photo #'s: _____	
Land Use in Drainage Area (check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known industries: _____	
Notes (e.g., origin of outfall, if known): _____			

## Section 2: Outfall Description 41

Location	Material	Shape	Dimensions (in.)	Submerged
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input checked="" type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: 72" x 72"	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-stream	(applicable when collecting samples)			
Flow present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

## Section 3: Quantitative Characterization 41

Field Data for Flowing Outfalls				
Parameter	Result	Unit	Equipment	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	Stopwatch
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Feet, inches	Tape measure
	Measured length		Feet, inches	Tape measure
	Time of travel		Seconds	Stopwatch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory/Sample Collection Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical indicators present in the flow?  Yes  No (If No, skip to Section 5)

Indicator	Check if Present	Description	Relative Severity Index (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Other	<input type="checkbox"/> 1- Faint	<input type="checkbox"/> 2 – Easily Detected	<input type="checkbox"/> 3 – Noticeable from a Distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Faint colors in sample bottle	<input type="checkbox"/> 2 – Clearly visible in sample bottle	<input type="checkbox"/> 3 – Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 – Slight cloudiness	<input type="checkbox"/> 2 – Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables (does not include trash)	<input type="checkbox"/>	<input type="checkbox"/> Sewage (toilet paper, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/> 1 – Few/slight; origin not obvious	<input type="checkbox"/> 2 – Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for both Flowing and Non-Flowing Outfalls

Are any physical indicators that are not related to flow present?  Yes  No (If No, skip to Section 6)

Indicator	Check if Present	Description	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other	
Pipe Benthic Growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely <input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
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### Section 7: Data Collection

121. Sample for the lab?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
122. If Yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	
123. Intermittent flow trap set?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk damn

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?