

## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Today's date:	Time (Military):	Subwatershed:	Outfall ID:
Investigators:	Form completed by:	Temperature (°F):	
Camera:	Photo #s:	Rainfall (in.): Last 24 hours:	Last 48 hours:
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Open Space <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Institutional			
Other: _____ Known Industries: _____			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP	<input type="checkbox"/> Circular <input type="checkbox"/> Single	Diameter, circular: _____	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially* <input type="checkbox"/> Fully*
	<input type="checkbox"/> PVC <input type="checkbox"/> HDPE	<input type="checkbox"/> Elliptical <input type="checkbox"/> Double	Box: h - _____ w - _____	
<input type="checkbox"/> Manhole	<input type="checkbox"/> Steel	<input type="checkbox"/> Box <input type="checkbox"/> Triple	Elliptical: h - _____ w - _____	With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____		
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> rip-rap <input type="checkbox"/> Earthen	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Other: _____	Depth: _____	Bottom Width: _____
	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Parabolic	Top Width: _____	
<input type="checkbox"/> In-Stream	<b>Complete Stream Discharge form</b>			
Flow Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>If No, Skip to Section 5</i> Flow Description <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial		

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	Stopwatch
<input type="checkbox"/> Flow #2	Flow width	_____ ' _____ "	Ft, In	Tape measure
	Flow depth	1. _____ 2. _____ 3. _____	In	Tape measure
	Time of travel (thalweg)	1. _____ 2. _____ 3. _____	Sec	Stop watch
	Measured length	_____ ' _____ "	Ft, In	Tape measure
<input type="checkbox"/> Flow #3 <small>(only for free-flowing outfalls)</small>	Flow depth		In	Tape measure
	Wetted width		ft	Tape measure
Ammonia		mg/L	Colorimeter	
Temperature		°F	--	
pH			--	
Potassium		Ppm	Ion probe	
Detergents		Ppm	Chemets kits	
Fluoride		Mg/L	Photometer	
Conductivity		µS	Conductivity probe	

## Outfall Reconnaissance Inventory 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"/> Petroleum/gas <input type="checkbox"/> Sulfide <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 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 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

1. External lab sample (50 ml, plastic)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	2. Internal lab sample (~50 ml, whirlpack)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
3. Sterile sample for bacteria analysis (100 ml, whirlpack)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No			
4. Sample(s) collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool	5. Duplicate collected?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
			If yes, check appropriate: <input type="checkbox"/> External lab <input type="checkbox"/> Internal lab <input type="checkbox"/> Sterile		

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