OUTFALL RECONNAISSANCE INVENTORY/SAMPLE COLLECTION FIELD SHEET
Adapted for use by the Stormwater Coalition of Albany County (July 10, 2009)

Section 1: Background Data

Subwatershed:		Outfall ID:
Today's date:		Time:
Investigators:		Form completed by:
Temperature (°C)	Rainfall (in.): Last 24 hours:	Last 48 hours:
Latitude:	Longitude:	GPS Unit:
Camera:		Photo #s:

Land Use in Drainage Area (Check all that apply):

- ☐ Industrial
- ☐ Ultra-Urban Residential
- ☐ Suburban Residential
- ☐ Commercial
- ☐ Open Space
- ☐ Institutional
- Other: _____
- Known Industries: _____

Notes

Section 1a: Additional Background Data
(Recommended by NYSDEC and incorporated into the Albany Internet Mapping System)

AIMS Field Name	Write or Check Off	Explanation
MS4Permit	Permit No: NYR_____	Enter the MS4 Permit number of the regulated MS4 for which this outfall information is being collected
Outfall_ID	Already recorded in Section 1	Outfall_ID (When creating AIMS each outfall made available to the system by participating MS4s was assigned a unique id number. The first two digits are coded for each municipality, and the remaining four digits describe all of the outfalls within that MS4. New outfalls can be added, but to benefit from the AIMS system, they need to conform to the AIMS labeling protocol.
XY_Source		Method of data collection used to locate utfall (Enter GPS unit, hard copy of map, CAD derived)
HUC_No		Hydrologic Unit Code number, use most recent HUC available (Enter 11 digits)
Water_Name		Waters of NY name; Stream name, From NHD Dataset, if not available reference local names or note as, unnamed stream
Water_ID		Waters of NY ID; NHD rch-code (Enter best guess of stream segment(s) receiving stormwater discharge at outfall location.) This info is from the Waterbody Inventory/Priority Waterbodies List. Also known as Waterbody Index Number or WIN
Rec_MS4	o None	Rec_MS4 (Receiving MS4) None=Outfall discharges within the MS4
	o Permit No: NYR_____	Outfall Discharges to another regulated MS4 (Enter Permit No of receiving MS4)
	o SWIS code no: _____	Outfall discharges to a non-regulated MS4 (Enter SWIS code of non-regulated MS4-5 digits)
OF_Type		OF_Type =Outfall Type (Enter Open Drainage, Closed Pipe, Culvert, Catch Basin, Manhole, Swale)
MOE	o Direct	MOE (Mode of Entry) Check off one. Direct=Discharge to identified NY water
	o MS4	MS4=Discharge to another regulaterd MS4
	o Indirect	Indirect=Discharge via overland flow, intermittent/unidentified stream (no WIN), no obvious hydraulic connection such as wetlands
Confidence	o Verified	Confidence-Describes degree of confidence in outfall location info. Verified=Verified with field observation
	o Calculated	Calculated= Educated guess or desk calculated
	o Historical data	Historical data=Existing records or previous knowledge
	o None	None=No records of outfall
Photo		Record the location of photo file (if possible) and photo number(s). Attached print of photo to data sheets
Owner		Owner of MS4 (Enter owner name listed on MS4 Permit)
Owner_ID		Each Stormwater Coalition member has been assigned a unique number (Enter 1st two digits of outfall id)

Outfall ID: _____ **Date:** _____

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
☐ **Closed Pipe**	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Eliptical ☐ Box ☐ Other: _____	☐ Single ☐ Double ☐ Triple ☐ Other: _____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
☐ **Open drainage**	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	
☐ **In-Stream**	**(applicable when collecting samples)**				
Flow Present?	☐ Yes ☐ No *If No, Skip to Section 5*				
Flow Description (If present)	☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
☐Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
☐Flow #2	Flow depth		In	Tape measure
	Flow width	_____' _____"	Ft, In	Tape measure
	Measured length	_____' _____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature			°F	Thermometer

Section 3a: Additional Quantitative Characterization
BOXES 1, 2, and 3: Contain DR890 Calorimeter and Multi-Parameter Tester

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
pH	1 to 14		pH Units	Probe
pH	7.5 to 14.0		pH Units	Test strip (Dispenser)
pH	4, 5, 6, 7, 8, 9		pH Units	Test strip (pH bottle)
Total Ammonia	0, 0.25, 0.5, 1.0, 3.0, 6.0		ppm (NH3-N)	Test strip (Ammonia bottle)
Nitrate	0, 1, 2, 5, 10, 20, 50		ppm Nitrate Nitrogen	Test strip (Nitrate bottle)
Nitrite	0, 0.15, 0.3, 1.0, 1.5, 3.0		ppm Nitrite Nitrogen	Test strip (Nitrate bottle)
Phosphate	0, 5, 15, 30, 50		ppm PO_4^-	Test strip (Phosphate bottle)
Nitrogen, Ammonia	0 to .50 mg/L NH3-N		mg/L NH3-N	DR 890 (Method 8155)
Nitrogen, Ammonia	0 to 2.50 mg/L NH3-N		mg/L NH3-N	DR 890 (Method 10023)
Nitrate, Low Range	0 to .50 mg/L NO_3^--N		mg/L NO_3^--N	DR 890 (Method 8192)
Nitrate, Mid Range	0 to 5.0 mg/L NO_3^--N		mg/L NO_3^--N	DR 890 (Method 8171)
Phosphorus, Reactive	0 to 2.50 mg/L PO_4^{3-}		mg/L PO_4^{3-}	DR 890 (Method 8048)
Conductivity			µS/cm	Multi-Parameter Tester
Salinity			ppt	Multi-Parameter Tester
Total Dissolved Solids (TDS)			mg/L	Multi-Parameter Tester
Turbidity			NTU	2100P Portable Turbidity Meter

Outfall ID: _____ Date: _____

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	☐	☐ Sewage ☐ Rancid/sour ☐ Petroleum/gas ☐ Sulfide ☐ Other:	☐ 1 – Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:	☐ 1 – Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1 – Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Suds ☐ Petroleum (oil sheen) ☐ Other:	☐ 1 – Few/slight; origin not obvious	☐ 2 – Some; indications of origin (e.g., possible suds or oil sheen)	☐ 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	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐ Corrosion	
Deposits/Stains	☐	☐ Oily ☐ Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	

Section 6: Overall Outfall Characterization

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

Section 7: Data Collection

1. Sample for the lab?	☐ Yes	☐ No	
2. If yes, collected from:	☐ Flow	☐ Pool	
3. Intermittent flow trap set?	☐ Yes	☐ No	If Yes, type: ☐ OBM ☐ Caulk dam

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

Outfall ID: _____ **Date of Photo(s):** _____

Attach photo #1

Attach photo #2