

Chapter **3**

MONITORING FORMS

- Registration Form
- Watershed Survey and Map Assessment Form

Return form to:

Georgia Adopt-A-Stream
4220 International Parkway
Suite 101
Atlanta, GA 30354

GEORGIA ADOPT-A-STREAM Stream / Wetland / Lake Registration Form

Complete the following form for each stream segment, wetland or lake you monitor. We must have a completed form on file at the state office in order to include your efforts on our web site and database.

This form is to register the monitoring of a: (Circle one)

Stream Freshwater Wetland Saltwater Wetland Lake

Name of stream / wetland / lake
you are monitoring (official name) _____

Lead Coordinator / Contact _____

Complete Mailing Address _____

Phone Number(s) _____

E-mail Address _____

Topographic Map Quadrangle (**include copy of
map**) on which your waterbody can be located _____

Watershed (from 8 digit HUC map) _____

Latitude _____ Longitude _____

County _____ Today's Date _____

Do not send in your registration form without a map. The map must be a copy of a topographic map (see how to obtain maps on page 43) with an X marking your monitoring site. To easily obtain a map and the lat/long for your site from the web go to www.topozone.com (see detailed directions on page 46).

1. Describe the location of your monitoring site (i.e. 25 yards downstream of North Decatur Road crossing in Emory Village).

2. What is the name of your monitoring group? (i.e. Scout Troop 101, Friends of Hayworth Park, Dukes Creek Ducklings)?

3. If associated with a larger group (i.e. Big Creek Watershed Association) please list them here.

4. Who are your partners (partners may contribute equipment, provide skills or services, provide technical support or grant you access across their land)?

5. What are the goals you hope to accomplish with the Adopt-A-Stream (Wetland or Lake) program?

6. What equipment or supplies do you need to achieve your goals?

7. Where will you send the data you collect?

8. Name of the local official or agency that you have informed about your program.

9. Name the QA/QC data collectors in your group.

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GEORGIA ADOPT-A-STREAM

Watershed Survey and Map Assessment

To be conducted at least once a year

| | |
|--|-------------------------------------|
| AAS group name: _____ | Investigator(s): _____ |
| Type of waterbody: stream / wetland / lake _____ | _____ |
| Water body name: _____ | County(ies): _____ |
| Approximate size of drainage/study area: _____ acres | |
| Date: _____ Time: _____ | Picture/photo documentation? Yes/No |

I. CREATE A MAP OF YOUR WATERSHED

A copy of this map should be included in your Registration Form to be filed with the State Georgia Adopt-A-Stream office.

II. LAND USES/ACTIVITIES AND IMPERVIOUS COVER

1. Identify land uses and activities in the watershed, which have the highest potential to impact water bodies:

Check all boxes that apply, describe the location of the activity(ies) under Notes on Location & Frequency of Activities and also mark the locations on your map. If too frequently occurring to record locations, so note. If you don't know some of the information below, write DK under Notes.

Please indicate if you: surveyed only adjacent to the waterbody
 surveyed the whole watershed
Provide notes as necessary

| Land Disturbing Activities & Other Sources of Sediment | Adjacent to Water | In Watershed | Notes on location & frequency of activity |
|---|--------------------------|--------------------------|---|
| Extensive areas disturbed by land development or construction of utilities, roads & bridges | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Large or extensive gullies | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Unpaved roads near or crossing streams | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Croplands | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Pastures with cattle access to water bodies | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Commercial forestry activities including harvesting and site-preparation | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Extensive areas of streambank failure or channel enlargement | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Other Agricultural Activities | | | |
| Confined animal (cattle or swine) feeding operations and concentrations of animals | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Animal waste stabilization ponds | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Poultry houses | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Highways and Parking Areas | | | |
| Shopping centers & commercial areas | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Interstate and controlled access highways and interchanges | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Major highways and arterial streets | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Other extensive vehicle parking areas | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Mining | | | |
| Quarries with sediment basins in live flowing streams | <input type="checkbox"/> | <input type="checkbox"/> | _____ |

Transportation and Motor Vehicle Services**Adjacent to Water****In Watershed****Notes on location & frequency of activity**

Truck cleaning services

Public and private automobile repair facilities

Car washes and large auto dealers

Rail or container transfer yards

Airports with fuel handling/aircraft repair

Business & Industry, General

Activities with exterior storage or exchange of materials.

Activities with poor housekeeping practices indicated by stains leading to streams or storm drains or on-site disposal of waste materials

Heavy industries such as textiles & carpet, pulp & paper, metal, and vehicle production or fabrication

Dry cleaners/outside chemical storage

Food & Kindred Products

Fertilizer production plants

Feed preparation plants

Meat and poultry slaughtering or processing plants

Construction Materials

Wood treatment plants

Concrete and asphalt batch plants

| Waste Recycling, Movement & Disposal | Adjacent to Water | In Watershed | Notes on location & frequency of activity |
|--|--------------------------|--------------------------|--|
| Junk and auto salvage yards | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Solid waste transfer stations | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Landfills and dumps (old & active) | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Recycling centers | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Drum cleaning sites | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Illicit Waste Discharges* | | | |
| Sanitary sewer leaks or failure | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Overflowing sanitary sewer manholes due to clogging or hydraulic overloading | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Bypasses at treatment plants or relief valves in hydraulically overloaded sanitary sewer lines | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Domestic or industrial discharges | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Extensive areas with aged/malfunctioning septic tanks | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Dry-weather flows from pipes (with detectable indications of pollution) | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Streamside areas of illegal dumping | <input type="checkbox"/> | <input type="checkbox"/> | _____ |

* If found (most likely during stream surveys), these activities should be immediately reported to the local government or the EPD regional office. These phone numbers are listed in the Who to Call List on page 55.

Optional

2. Percent impervious surface: acre overlay, example map and acreage calculating grid in Appendix A. Example form in Chapter 5.

| Coverage category for LANDUSE MAP method | impervious quotient | times | percent of... | percent of impervious cover |
|---|---|-------|---------------|-----------------------------|
| Forest/open land/undeveloped land/vacant/land owned by institutions | .005 | x | | % |
| Agriculture/pasture/cropland | .005 | x | | % |
| Single family residential (1.1 - 5 acre lot or no more than 1 dwelling per acre) | .12 | x | | % |
| Single family residential (.5 - 1 acre lot or 0 – 2 dwellings per acre) | .19 | x | | % |
| Low density residential / single family residential (.25 - .5 acre lot or 0 – 4 dwelling units per acre) | .26 | x | | % |
| Low/medium density residential (.25 acre lot or smaller or 0 –8 dwelling units per acre) | .48 | x | | % |
| Medium density residential (0 –12 dwelling units per acre) | .56 | x | | % |
| High density residential (18 – 30 dwelling units per acre) | .65 | x | | % |
| Townhouse/apartment | .48 | x | | % |
| Office/light industrial (assembly, finishing, packaging products) | .70 | x | | % |
| Heavy industrial (timber, chemical, cement, brick plants, lumber mills) | .80 | x | | % |
| Commercial (business districts, commercial strip development, shopping centers, warehouses, parking lots, office buildings) | .85 | x | | % |
| Major roads | .90 | x | | % |
| | Total percent of watershed covered by impervious surfaces | | | % |

Land use categories and quotient provided by the Atlanta Regional Commission

III. GENERAL WATERBODY AND WATERSHED CHARACTERISTICS

This information will be gathered from your wetland, lake or stream segment.

1. Note the number of hydrologic modifications on your waterbody: structures that alter water flow

| | | | |
|------------|-------|---------------|-------|
| None | _____ | Beaver dams | _____ |
| Dams | _____ | Dredge spoils | _____ |
| Bridges | _____ | Pipes | _____ |
| Waterfalls | _____ | Other | _____ |

2. Note the approximate length of the stream that is affected by the following: if assessing a wetland, lake or pond, some of the following may also affect your waterbody

| | |
|--------------------------------|--|
| Stream culvert | _____ feet or _____ mile or _____ % of stream length |
| Stream straightening | _____ feet or _____ mile or _____ % |
| Concrete streambank/bottom | _____ feet or _____ mile or _____ % |
| Dredging/channelization | _____ feet or _____ mile or _____ % |
| Riprap/gabion | _____ feet or _____ mile or _____ % |
| Cattle crossing | _____ # |
| Stream crossing (for vehicles) | _____ # |

3. Note extent of vegetative buffer along the banks: at a minimum of 5 sites, at regular intervals (every 500 ft. in a 1/2 mile. section) note the following

| # | Width in feet | Location (Left bank, Right bank or N, S, E, W side of wetland or lake) | Characteristics and comments |
|----|---------------|--|------------------------------|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |

4. Check the categories that best describe the general appearance of the waterbody:

Litter:

- No litter visible
- Small litter occasionally (i.e., cans, paper)
- Small litter common
- Large litter occasionally (i.e., tires, pallets, shopping carts)
- Large litter common

Special Problems:

- Spills of chemicals, oil, etc.
- Fish kills
- Wildlife, waterfowl kills

Erosion:

- No bank erosion or areas of erosion very rare; no artificial stabilization
- Occasional areas of bank erosion
- Areas of bank erosion common
- Artificial bank stabilization (i.e., riprap) present

5. Comments on general waterbody and watershed characteristics: (e.g. date and size of fish kill, increased rate of erosion evident, litter most evident after storms)

* Fish kills should be immediately reported to DNR Wildlife Resources Division at 770-918-6400

6. Summarize notable changes that have taken place since last year (if this is not your first year conducting the Watershed Survey).

IV. PIPE AND DRAINAGE DITCH INVENTORY

In this section, provide information on pipes and drainage ditches found on the banks or in the waterbody. These pipes/ditches can be abandoned or active. Note the information for each pipe or drainage ditch you observe. *Make additional copies as necessary.*

| Pipe # | Location | Type | Size | Flow | Waterbody condition | Comments |
|--------|----------|------|------|------|---------------------|----------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

1. **Number each pipe/ditch** for mapping/locating purposes
2. **Location of pipe/ditch:** note whether in water, bank, near waterbody or other. Describe location.
3. **Identify type of pipe (list all that apply):** PVC, iron, concrete, galvanized; industrial outfall, sewage treatment plant outfall, storm drain, combined sewer overflow; agricultural field drainage, paddock or feedlot drainage, settlement basin/pond drainage, parking lot drainage, unknown, other
4. **Size: measure approximate diameter of pipe:** inches or centimeters
5. **Describe the discharge flow:** Rate of flow: none, intermittent, trickle, steady, heavy
 Appearance: clear, foamy, turbid, oily sheen, color, other
 Odor: none, rotten eggs/sewage, chemical, chlorine, other
7. **Waterbody condition: describe the bank/waterbody below pipe or drainage ditch:** no problem evident, eroded, sewage litter (e.g. toilet paper), litter (e.g. bottles, cans), lots of algae, other
8. **Comments of pipes and drainage ditches:** Use this space to explain or expand on information provided on pipes and discharges you have identified above. For example, you may want to identify particular facilities, or discuss in more detail the condition of the waterbody below the discharge. Use separate page if necessary.

