COMMONWEALTH OF PENNSYLVANIA

**DEPARTMENT OF ENVIRONMENTAL PROTECTION**

****

**Growing Greener Watershed Protection and AMD Set-Aside**

# Goals and Accomplishments Worksheets

Project Name

Project Number       County

**This Report is** *(choose one*):

[ ]  Project Goals

[ ]  Project Accomplishments *(to be submitted with final report)*

**Project Type** *(check all that apply)*

[ ]  Organization of a Watershed Group *(fill out Sheet A\*)*

Watershed Assessments and Development of Restoration and/or Protection Plan
*(check all that apply and fill out sheet B\*)*

[ ]  AML/AMD

[ ]  Non-Point Source

[ ]  Assessment

[ ]  Development of Restoration Plan

[ ]  Development of Protection Plan

Implementation of Watershed Restoration and/or Protection Project
*(check all that apply and fill out Sheets C, D, E, F, and G\*)*

[ ]  AML/AMD

*[ ]* Oil and Gas

[ ]  Non-Point Source

[ ]  Restoration

[ ]  Protection

[ ]  Demonstration *(fill out Sheet H\*)*

[ ]  Education/Outreach *(fill out Sheet I\*)*

\*Please fill out all the appropriate information on the sheets corresponding to your project type. Leave blank any sheets or information on the sheets that do not apply to your specific project. If you have any questions call the Grants Center at 717-705-5400.

# Organization of a Watershed Group

**Name of Group**

**Watershed Area**       Acres

**Membership**       Number

**Meetings** **Held**       Number Held

      Attendance

**Mission Defined** [ ]  Yes [ ]  No

**Incorporation** [ ]  Yes       Date

[ ]  Applied       Date

[ ]  No

**Non-Profit Status** [ ]  Yes       Date

[ ]  Applied       Date

[ ]  No

**Officers Elected** [ ]  Yes [ ]  No

**Strategic Plan Developed** [ ]  Yes [ ]  No       Date

**Newsletter**       Number Printed

**Brochures**       Number Printed

**Webpage**       Web Address

**Other Outreach** **[ ]** Describe in Narrative

**Describe Activities to date for your organization:**

|  |
| --- |
|       |

**Watershed Assessments and Development**

**of**

**Watershed Restoration and/or Protection Plans**

Area Assessed       acres Problems Identified: [ ]  AMD [ ]  Trash [ ]  Point Source Pollutants

Stream Reach       feet [ ]  Erosion & Sedimentation [ ]  Stormwater [ ]  Temperature

[ ]  Data Gathered       briefly describe 303D Listed [ ]  Yes [ ]  No

[ ]  Monitoring Measurements       type Chapter 93 designation

[ ]  Maps Developed       number/type [ ]  Nutrient Assessed       list below

[ ]  Surveys Completed       type [ ]  Frequency of Monitoring       describe

[ ]  Fish Identified       species [ ]  Stream Corridors Restored       feet planned

[ ]  Macroinvertebrates Identified       species [ ]  Stream Corridors Protected       feet planned

[ ]  Riparian Buffers Restored       feet planned [ ]  Education/Outreach       describe

[ ]  Riparian Buffers Protected       feet planned [ ]  TMDL Completed       describe

Stations Monitored: Chemistry       #/frequency [ ]  Public Input       describe

Biology       #/frequency

Describe your project activities to date:

|  |
| --- |
|       |

|  |
| --- |
| **Receiving Stream**       name/location |
| **Receiving Stream Benefits** |
| **Upstream Quality** | **Downstream Quality** |
| **Before** | **After** | **Before** | **After** |
| Iron       |        mg/L | Iron       |        mg/L |
| pH       |        S.U. | pH       |        S.U. |
| Acid       |        mg/L as CaCO3 | Acid       |        mg/L as CaCO3 |
| Alk       |        mg/L as CaCO3 | Alk       |        mg/L as CaCO3 |
| Al       |        mg/L | Al       |        mg/L |
| Mn       |        mg/L | Mn       |        Mg/L |
| **AMD Treatment** | **AML** | **Oil and Gas** |
| [ ]  Anoxic Limestone Drain       | [ ]  Openings Closed      # | Wells Plugged       # |
|  tons Limestone(LS) | [ ]  High Walls Removed       Feet | Total Flow Before       gpm |
| [ ]  Successive Alkalinity Producing System (SAP)  | [ ]  Land Remined       Acres | Total Flow After       gpm |
|        tons (LS)       tons organic matter | [ ]  Wildlife Habitat Improved       Acres |  |
| [ ]  Wetlands       aerobic acres  | [ ]  Trees Planted       # | **Contaminants Removed/Prevented** |
|        anaerobic acres | [ ]  Sealing Mine Portals \_\_\_\_\_\_\_\_\_\_\_\_       # | Iron       (ppd) pounds per day |
| [ ]  Diversion Wells       # |        wet or dry seal | Acidity       (ppd) |
|        total LS capacity | [ ]  Revegetation       acres | Alkalinity       (ppd) |
| [ ]  Settling Ponds      #       capacity (gpm)  | [ ]  Grout Injection       tons | Wildlife Habitat Created       acres |
| [ ]  Limestone Channel       ft. OLC       ft. MOLC | [ ]  Mine Capping       acres |  |
| [ ]  Limestone Dosing/Dumping       tons LS | **Describe Activities to Date:**       |
| [ ]  Reverse Alkalinity Producing Systems      # |
| [ ]  Bactericide Remediation       lbs/acre |
| [ ]  Beneficial Use of Dredged Material       tons |
| [ ]  Manganese Oxidizing Bacteria Systems       # |
| **Total Treated Flow Rate** |
|        gpm average       gpm high |
| Predicted lifespan of system       years |
| Sludge Capacity       years |
| Contaminants removed/Contained by system (average) |
| Iron       ppd | Al       ppd |
| Mn       ppd | Acid       ppd |
| Excess Alkalinity added       ppd |
| pH change       influent       effluent |

 **Name of Project:**

|  |  |  |
| --- | --- | --- |
|  | **Non-Point Agricultural** |  |
|  |  |
|  |  |  |  |
|  | **Farmstead/Barnyard** |  | **Upland** |  | **Streams/Wetlands** |
|  |  |  |  |  |
| Manure Storages: |  | Soil Conservation Plans Developed |  | Measures on Separate pages |  |
|  | Number |  | Cubic Feet |  | AEUs |  |  | On conventional cropland       acres |  |  |  |
|  |  |  |  |  |  |  |  | On hayland       acres |  |  |  |
| Dairy |       |  |       |  |       |  |  | On pasture       acres |  |  |  |
| Beef |       |  |       |  |       |  |  |  |  |  |  |
| Swine |       |  |       |  |       |  |  | Grazing land       acres protected |  |  |  |
| Poultry |       |  |       |  |       |  |  | No till       acres implemented |  |  |  |
| Latitude |       |  | Longitude |       |  |  | Cover crops planted       acres planted |  |  |  |
| Barnyard runoff controls: |  |  | Nutrient management plans       acres |  |  |  |
| Built with manure storage       number |  |  | Waterways       feet |  |  |  |
| Built without manure storage       number |  |  | Diversions/Terraces       feet |  |  |  |
| Curbing       feet |  |  | Pesticide management       acres |  |  |  |
| Roof Gutters       feet |  |  | Wildlife land improved       acres |  |  |  |
| Buffer Strips       feet |  |  | Woodland improved       acres |  |  |  |
| Other (Describe)       |  |  | Stream Fencing       feet |  |  |  |
|  |  |  | Stabilized Crossings       # |  |  |  |
|  |  |  | Vegetated Buffer       acres |  |  |  |
|  |  |  | Forest Buffer       acres |  |  |  |
|  |  |  | Latitude |       |  | Longitude |       |  |  |  |  |
| Describe your implementation activities to date: |
|       |

**Name of Project:**

|  |  |  |
| --- | --- | --- |
|  | **Non-Point Other** |  |
|  |  |
|  |  |  |  |
|  | Stormwater |  | Other BMP |  | Streams/Wetlands |
|  |
| Latitude |       |  | Longitude |       |  |  |  | Measures onseparate pages |
| Extended dry detention basin |       | number |       | drainage area | Sediment Ponds |       | number |  |
| Wet detention pond |       | number |       | drainage area | Septic Pumping |       | number |  |
| Conversion of dry retention to wet |       | number |       | drainage area | Home Septic |       | number |  |
| Pond-wetland system |       | number |       | drainage area | Denitrification installed |       | number |  |
| Stormwater wetland |       | number |       | drainage area | Septic systems connected |       | number |  |
| Sand Filter |       | number |       | drainage area | to WWTP POTW |       | number |  |
| Infiltration Swale |       | number |       | drainage area | Nutrient Management |       | acres |  |
| Porous Pavement |       | number |       | drainage area | Dirt/Gravel Road Maintenance |       | feet |  |
| Rain garden |       | number |       | volume addressed | Road Bank Stabilized |       | ft2 |  |
| Roof Water Management |       | number |       | feet |  |  |  |  |
| Operation & Maintenance (describe below) |
| Other (describe below) |

Describe your implementation activities to date: (Advise if your improvements are new construction, replacements, or changes to existing systems)

|  |
| --- |
|       |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Streams** |  |  |
| **Name of Project:**  **303D Listed** [ ]  Yes [ ]  No | **Chapter 93 Designation**[ ]  WWF [ ]  CWF [ ] TSF[ ]  HQ [ ]  EV |
|  |
| Riparian buffers installed |       | length (ft) |       |  |
| avg width (ft) |       |  |       | type (trees, shrubs, grasses) |
|  *(Report both sides of stream if appropriate)* |
| Latitude |       | Longitude |       |  |
| Prior land use where established |       | type |
| Filter Strips installed |       | length (ft) |       | avg width (ft) |
| Land use where established |       | type |
| Stream bank protection with fencing |       | length (ft) |  |       | avg. width (FT) |
| Stream bank protection without fencing |       | length (ft) |  |       | avg. width (FT) |
| Off stream watering systems |  | number |  |  |  |
| Barerooted plantings [ ]  |       | type/species (trees, shrubs, grasses) |
| Container grown plants [ ]  |       | type/species (trees, shrubs, grasses) |
| Protected root stock [ ]  |       | type/species (trees, shrubs, grasses) |
| Weed control [ ]  |       | type/species (trees, shrubs, grasses) |
| Invasive species removed [ ]  |       | type/species (trees, shrubs, grasses) |
| Dams removed |       | number |       | length (ft) |       | height (ft) |  |
| Fluvial Geomorphology (FGM) |       | (ft) |
| Stream channel restoration |       | length (ft) |
| Fish structures |       | number |       | type |
| Rootwads [ ]  |       | length |
| J-hook vanes [ ]  |       | number |
| Other [ ]  |       | units |
| Trash removed |       | tons |       | number of sites |
| Protection Measures Implemented (describe below) |

Please describe activities to date: (include sources of technical assistance)

|  |
| --- |
|       |

|  |  |  |
| --- | --- | --- |
|  | **Wetlands** |  |
|  |  |  |
|  | **Existing Site Conditions** |  |
| Are wetlands present on the site? [ ]  Yes [ ]  No | Are any water course(s) affected by the project? [ ]  Yes [ ]  No |
| If present, what are the types and acreages: |  | If affected, what are the Ch. 93 Classification(s): |
| Type: | Size: |  |  |  [ ]  WWF [ ]  CWF [ ]  TSF [ ]  HQ [ ]  EV |
| [ ]  PEM (palustrine emergent) |       |  |  | (Warm Water Fishery) (Cold Water Fishery) (Trout Stocks) (High Quality) (Exceptional Value) |
| [ ]  PSS (palustrine scrub/shrub) |       |  |  | What is the contributing drainage area to the wetland project (in acres)? |
| [ ]  PFO (palustrine forested) |       |  |  |       | acres |
| [ ]  POW (palustrine open water) |       |  |  |  |
| Total Size: |       |  |  | What is the predominant land use in the contributing drainage area? |
|  |  |       |
| Are prior Converted Wetlands Areas Present? [ ]  Yes [ ]  No |  |
|  |  |  |
| **Wetland Protection/Restoration/Creation Projects** |  | **Enhancement/Functional Gain Projects** |
|  |  |  |
| Hydrogeomorphic Classification of Wetland |  | Hydrogeomorphic Classification of Wetland |
| (stream areas are considered riverine): |  | (stream areas are considered riverine): |
|  | **Existing Wetland** |  | **Acreage Restored** |  |  |  | **Size of area** |  |
|  | **Acreage Impacted (0.0):** |  | **or created (0.0):** |  |  | **Enhancement Activity Type** | **affected (0.0)** |  |
|  | Type |  | Size |  |  | Type |  | Size |  |  |  | [ ]  Streambank Fencing |       |  |
|  | [ ]  PEM |  |       |  |  | [ ]  PEM |  |       |  |  |  | [ ]  Wetland Fencing |       |  |
|  | [ ]  PSS |  |       |  |  | [ ]  PSS |  |       |  |  |  | [ ]  Exotic/Invasive Sp. Cont |       |  |
|  | [ ]  PFO |  |       |  |  | [ ]  PFO |  |       |  |  |  | [ ]  Hydrologic Manipulation |       |  |
|  | [ ]  POW |  |       |  |  | [ ]  POW |  |       |  |  |  | [ ]  Other |       |  |
|  |  |  |  |  |  |  |  |  |  |  |  | Other Desc.:  |        |  |

Latitude       Longitude       Latitude       Longitude       Latitude       Longitude

Please describe activities to date:

|  |
| --- |
|       |

**Demonstration Project**

Name of project:

Type of project

Mining Related [ ]  Yes [ ]  No

Non-point Related [ ]  Yes [ ]  No

Demonstrations Held       Number

        Attendance

Publicity       Number

Newspapers       Number

Radio Spots       Number

TV Spots       Number

Internet       Number

Magazine Articles       Number

Other       Number

Describe activities and technologies developed to date for your demonstration project:

|  |
| --- |
|       |

# Education Project/Outreach

Schools reached       number

Children reached       number

Adults reached       number

Brochures distributed       number

Newspaper articles       number

Radio/TV spots       number

Magazines       number

Web site hits       number

Training sessions held       number

       attendance

Workshops held       number

       attendance

Describe your efforts to date:

|  |
| --- |
|       |