COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION CHESAPEAKE BAY OFFICE



Growing Greener Watershed Protection and AMD Set-Aside Goals & Accomplishments Form

| This form represents (choose one, |): |
|--|--------------------------------------|
| ☐ Project Goals | |
| | e submitted with final report) |
| Project Title WIP Implementation Phase V South Brand | ch Plum Creek |
| Application ID # 202006070809 | Contract # <u>C990001234</u> |
| Grantee Indiana County Conservation District | Grant Amount \$280,000 |
| County Indiana | Municipality South Mahoning Township |
| Is this project located within the Chesapeake Bay w | ratershed? ☐ Yes ⊠ No |

Partners:

| Partner Name* | Role | Organization Type | Match | Cash or |
|--------------------------------------|--------------|---------------------------|----------|---------|
| (Add additional rows if needed) | | | Amount | In-Kind |
| Indiana County Conservation District | Grant Admin. | County/Municipal Agencies | \$10,000 | cash |
| Americorps | Education | Non-Government Org. (NGO) | \$1,000 | In-kind |
| Contractor X | Materials | Private Sector | \$5,000 | cash |
| landowners | Assistance | Private Landowner | \$1,700 | In-kind |
| | | Choose an item | \$ | |

^{*}Do not list individual volunteer or private landowner names.

grant) Organization of a Watershed Group (*fill out Sheet A**) Watershed Assessment and Development of Watershed Plan (check the applicable project subtype and **fill out sheet B***) ☐ Assessment Development of Watershed Restoration Plan Development of Watershed Protection Plan Mind Implementation of Restoration and/or Protection Project (check the applicable project subtype) Restoration (check all that apply) □ Design ⊠ Permit ☐ Construction (*must complete Sheet H**) Protection Operation, Maintenance, or Repair of existing Best Management Practices Check any applicable implementation categories and (fill out Sheets C, D, E, F, and/or G*): ☐ AMD/AML (fill out sheet C*) ☐ Oil and Gas (fill out sheet C*) Agriculture (fill out sheet D*) Stormwater/Other (fill out sheet E*) Stream/Riparian (fill out sheet F*) Wetland (fill out sheet G*) Demonstration (fill out Sheet I*) ☑ Education/Outreach (*fill out Sheet J**)

Project Type (check all that apply to the portion of the project being funded through this Growing Greener

^{*}Please fill out all the appropriate information on the sheets corresponding to the project type. Leave blank any sheets or information on the sheets that do not apply to the specific project. If you have any questions, contact your DEP Project Advisor.

Organization of a Watershed Group

| | | Square M | 1iles |
|--------------|---|--|--|
| | | Number | |
| | | Number l | ⊣eld |
| | | Attendan | ce (Average) |
| ☐ Yes | ☐ No | | |
| Yes | | | Date |
| ☐ Applied | | | _ Date |
| ☐ No | | | |
| Yes | | | Date |
| ☐ Applied | | | _ Date |
| ☐ No | | | |
| Yes | □No | | |
| ☐ Yes | □ No | | _ Date |
| | | Number Printed | |
| | | _ Number Printed | |
| | | | Web Address |
| ☐ Describe | e in Narrative | | |
| d completely | by above selection | ons: | |
| | | | |
| | ☐ Yes ☐ Applied ☐ No ☐ Yes ☐ Applied ☐ No ☐ Yes ☐ Yes ☐ Yes ☐ Yes ☐ Yes ☐ Yes | Yes Applied No Yes Applied No Yes No Yes No Describe in Narrative | Number Nu |

Watershed Assessment and Development

Watershed Plan for Restoration and/or Protection

| Latitude Longitude (attach map detailing targeted water | , |
|---|--------------------------------|
| 303(d) Listed Yes No Chapter 93 designation Aquatic Life | |
| Special Protecti | on Designation: Choose an item |
| Problems Identified: AMD Trash Point Source Pollutants | |
| ☐ Erosion & Sedimentation ☐ Stormwater | ☐ Temperature |
| | |
| ☐ Data Gathered | briefly describe |
| ☐ Monitoring Measurements | type |
| Stations Monitored: Chemistry | #/frequency |
| Biology | #/frequency |
| | species |
| | type |
| Fish Identified | species |
| | list below |
| Maps Developed | number/type |
| | |
| _ | feet planned |
| Stream Corridors Protected | |
| | acres planned |
| ☐ Riparian Buffers Protected | acres planned |
| | |
| Education/Outreach | |
| Public Input | describe |
| TMDL Completed | describe |
| Describe activities not defined completely by above selections: | |
| | |

| Implementation - AMD Treatment / AML Practices / Oil and Gas | | | | | | | |
|--|--|--|----------------------|-------|------------------------|-----------------------|------------------------------------|
| Re | Receiving Stream Name ATTAINS ID | | | | | | |
| Ch | Chapter 93 designation Aquatic Life Protected Use: Choose an item. Special Protection Designation: Choose an item. | | | | | | |
| GF | PS Coordinates (decimal of | degrees, <i>ex. 41.025</i> | 58, -78.6556) | Latit | tude | Longitude | |
| _ | | Receiving | g Stream Be | nefit | s | | |
| | | Upstream G | Quality | | Dov | vnstream Qua | lity |
| | Parameters | Before | After | | Befo | re | After |
| | Fe (mg/L) | | | | | | |
| | pH (S.U.) | | | | | | |
| 4 | Acid (mg/L as CaCO₃) | | | | | | |
| | Alk (mg/L as CaCO₃) | | | P | | | |
| | AI (mg/L) | | | | | | |
| | Mn (mg/L) | | | | | | |
| (| Best Check all that apply and at | t Management Pra tach location map a | | | | | in the site(s): |
| | AMD Treatment / AML Pra | actices | Planned On (date) | | olemented on (date) | Implemented Amount | Implemented Units of Measure |
| | AMD treatment system, | subtype active | | | | | quantity |
| | anoxic intake | | | | | | quantity |
| | intake | | | | | | quantity |
| | chemical doser | | | | | | quantity |
| | chemical plant | | | | | | quantity |
| | channel | | | | | | quantity |
| | settling pond | | | | | | quantity |
| $\overline{}$ | dam intake | Taubtuna nagajua | | | | | quantity |
| Ш | AMD treatment system, Constructed wetland | subtype passive | | | | | quantity quantity |
| | aerobic | | | | | | quantity |
| | anaerobic | | | | | | quantity |
| | ☐ limestone pond | | | | | | quantity |
| | alkalinity injection | | | | | | quantity |
| | anoxic intake | | | | | | quantity |

☐ intake

☐ bioswale

channel

anoxic limestone bed

oxic limestone bed

chemical doser

☐ autoflushing limestone SAPS

quantity

quantity

quantity

quantity

quantity

quantity

quantity

quantity

| | imesione diversion tank | | | | | quantity |
|---|--|-----------------|------|--------------------------|-----------------------|------------------------------------|
| | ☐ limestone downflow bioreactor | | | | | quantity |
| | ☐ limestone downflow bed | | | | | quantity |
| | ☐ flush pond | | | | | quantity |
| | forebay | | | | | quantity |
| | ☐ limestone horizontal flow bed | | | | | quantity |
| | ☐ horizontal SAPS | | | | | quantity |
| | ☐ limestone inclined bed | | | | _ | quantity |
| | ☐ limestone bed | | | | | quantity |
| | ☐ limestone diversion tank | | | | | quantity |
| | ☐ limestone sand dosing | | | | | quantity |
| | ☐ limestone open channel | | | | | quantity |
| - | oxidation channel | | | | | quantity |
| | ☐ Mn removal | | | | | quantity |
| - | successive alkalinity producing system (SAPS) | | | | | quantity |
| | settling pond | | | | | quantity |
| | steel slag diversion tank | | | | | quantity |
| | steel slag pond | | | | | quantity |
| | sulfur reducing bioreactor | | | | | quantity |
| | ☐ dam intake | | | | | quantity |
| | ☐ limestone upflow bed | | | | | quantity |
| | upflow SAPS | | | | | quantity |
| | downflow SAPS | | | | | quantity |
| | abandoned mine land reclamation | | | | | acres |
| | capping | | | | | quantity |
| | ☐ limestone land applied | | | | | cubic feet |
| | ☐ limestone sand dosing | | | | | cubic feet |
| | alkalinity injection | | | | | gallons |
| | Oil and Gas | Plann On (da | | Implemented On (date) | Implemented Amount | Implemented Units of Measure |
| | wells plugged | | | | | quantity |
| | Total Flow: | Before | | _ gpm | After gpm | n |
| | Contaminants Removed/Prevented: | Fe | pp | od | Acidity pp | pd |
| | Excess Alkalinity Added: | | ppd | | | |
| | wildlife habitat planting | | | | | acres |
| | | | | | | |
| | AMD Treatmeter Total Treated Flow Rate (average) gpm | | | | to (bigh) | n m |
| | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | | | | te (high) gr | JIII |
| | Predicted Life Span of System years | | | e Capacity | _ years | |
| | Contaminants Removed/Contained by System (a | average | load | reduction): | | |
| | Fe ppd | I | Mn | ppd | Acid | opd |
| | Excess Alkalinity Added ppd pH Chang | e: Influe | ent | pH Cha | inge: Effluent | |
| | | | | | | |

Implementation - Agriculture

Waterbody Name Leisure Run & UNT to S. Br. Plum Creek ATTAINS ID PA-SCR-1238851636 & PA-SCR-123861204

Chapter 93 designation Aquatic Life Protected Use: CWF

Special Protection Designation: HQ

303(d) Listed ⊠ Yes (Leisure Run) ⊠ No (UNT to S. Branch Plum Creek)

GPS Coordinates (decimal degrees, *ex. 41.0258*, *-78.6556*) Latitude <u>40.770727</u> Longitude -<u>79.129633</u> Latitude <u>40.772580</u> Longitude -<u>79.109377</u>

Best Management Practices (BMPs)

Check all that apply and attach location map and site map(s) detailing BMP locations within the site(s):

| | Agricultural Practices (Farmstead/Barnyard) | Planned On (date) | Implemented On (date) | Implemented Amount | Implemented Units of Measure |
|-------------|--|----------------------|--------------------------|-----------------------|------------------------------|
| | access road (NRCS 560) | | | | feet |
| | comprehensive nutrient management plan – written (NRCS 102) | | | | quantity |
| | comprehensive nutrient management plan – applied (NRCS 103) | | | | quantity |
| | cover crop (NRCS 340) | | | | acres |
| \boxtimes | critical area planting (NRCS 342) | 4/1/2023 | 5/1/2023 | 0.50 | acres |
| | diversion (NRCS 362) | | | | feet |
| \boxtimes | fence (NRCS 382) | 9/1/2022 | 10/1/2022 | 15,500 | feet |
| | heavy use area protection (NRCS 561) | 10/1/2022 | 10/1/2022 | 4,950 | square feet |
| | improve the plant diversity & structure of non-cropped areas for wildlife food and habitat | | | | acres |
| | integrated pest management (NRCS 595) | | | | acres |
| | lined waterway or outlet (NRCS 468) | | | | feet |
| | nutrient management (NRCS 590) | | | | acres |
| \boxtimes | prescribed grazing (NRCS 528) | 10/1/2022 | 10/1/2022 | 50 | acres |
| | residue and tillage management, no-till/strip till/direct seed (NRCS 329) | | | | acres |
| | roof runoff structure (NRCS 558) | | | | quantity |
| | roofs and covers (NRCS 367) | | | | quantity |
| | stormwater runoff control (NRCS 570) | | | | acres |
| | stream crossing (NRCS 578) | 8/1/2022 | 11/1/2022 | 1 | quantity |
| | terrace (NRCS 600) | | | | feet |
| | trails and walkways (NRCS 575) | 8/1/2022 | 10/1/2022 | 60 | feet |
| | underground outlet (NRCS 620) | | | | feet |
| | waste storage facility (NRCS 313) | | | | quantity |
| \boxtimes | watering facility (NRCS 614) | 10/1/2022 | 10/1/2022 | 13 | quantity |

Implementation – Stormwater / Other

| Waterbody Name | ATTAINS ID | | | | | |
|--|---|--|--|--|--|--|
| Chapter 93 designation Aquatic Life Protected Use: Choose an item. | | | | | | |
| <u> </u> | Special Protection Designation: Choose an item. | | | | | |
| 303(d) Listed Yes N | lo | | | | | |
| GPS Coordinates (decima | al degrees, ex. 41.0258, -78.6556) Latitude Longitude | | | | | |

Best Management Practices (BMPs)

Check all that apply and attach location map and site map(s) detailing BMP locations within the site(s):

| Stormwater Practices | Planned On (date) | Implemented On (date) | Implemented Amount | Implemented Units of Measure |
|---|----------------------|--------------------------|-----------------------|------------------------------------|
| constructed filter | < | | | quantity |
| constructed wetland (NRCS 656) (subtype): ☐ aerobic ☐ anaerobic | | | | acres |
| conversion of dry retention to wet | | | | acres |
| dry extended detention basin | | | | acres |
| infiltration basin | | | | acres |
| infiltration berm/retentive grading | | | | acres |
| infiltration trench | | | | feet |
| level spreader | | | | feet |
| pervious pavement | | | | square feet |
| rain garden/bio-retention | | | | square feet |
| rooftop disconnection | | | | acres |
| sediment fore bay | | | | square feet |
| subsurface infiltration bed | | | | acres |
| vegetated roof | | | | square feet |
| vegetated swale | | | | feet |
| water quality inserts/inlets | | | | quantity |
| wet pond | | | | acres |
| Other Practices | Planned On (date) | Implemented On (date) | Implemented Amount | Implemented Units of Measure |
| dirt/gravel road maintenance | | | | feet |
| home septic denitrification installed | | | | quantity |
| nutrient management (NRCS 590) | | | | acres |
| road bank stabilized | | | | feet |
| sediment basin (NRCS 350) | | | | quantity |
| septic pumping | | | | gallons |
| septic systems connected to WWTP POTW | | | | quantity |

Implementation - Stream/Riparian

| Waterbody Name South Branch Plum Creek | ATTAINS ID PA | -SCR-123861195 |
|--|------------------|--------------------|
| Chapter 93 designation Aquatic Life Protected Use: CWF | | |
| Special Protection Designation: HQ | | |
| 303(d) Listed ☐ Yes ⊠ No | | |
| GPS Coordinates (decimal degrees, ex. 41.0258, -78.6556) | Latitude 40.7757 | Longitude -79.0898 |

Best Management Practices (BMPs)

Check all that apply and attach location map and site map(s) detailing BMP locations within the site(s):

| Stream/Riparian Practices | Planned On (date) | Implemented On (date) | Implemented Amount | Implemented Units of Measure |
|--|----------------------|--------------------------|-----------------------|------------------------------|
| channel bed stabilization (NRCS 584) | | | | feet |
| channel floodplain restoration | | | | feet |
| dam removal | | | | quantity |
| filter strip (NRCS 393) | | | | acres |
| herbaceous weed control (NRCS 315) | | | | acres |
| invasive species removal | | | | square feet |
| lake aeration | | | | acres |
| native planting (subtype): | | | | acres |
| ☐ bareroot | | | | quantity |
| ☐ container grown | | | | quantity |
| protected root stock | | | | quantity |
| ☐ live stakes | | | | quantity |
| riparian forest buffer (NRCS 391) | | | | acres |
| riparian herbaceous cover (NRCS 390) | | | | acres |
| streambank and shoreline protection (NRCS 580) | 6/30/2023 | 6/15/2023 | 2,500 | feet |
| fish habitat structure(s) (Provide total stream length. Select structure type(s) & quantity.) | | | | feet |
| ☐ brush mattress | | | | quantity |
| cross vane (stone or log) | | | | quantity |
| ☐deflector (stone or log) | | | | quantity |
| ☐ j-hook | | | | quantity |
| ☐ log vane | | | | quantity |
| mud sill | | | | quantity |
| random boulders | | | | quantity |
| ☐ rock vane | | | | quantity |
| ☐ root wad | | | | quantity |
| toe crib structure | | | | quantity |
| toe rock | | | | quantity |
| trash removed | | | | pounds |

Implementation - Wetlands

| Waterbody Name | ATTAINS ID _ | | | | |
|---|--------------|--|--|--|--|
| Chapter 93 designation Aquatic Life Protected Use: Choose an item. | | | | | |
| Special Protection Designation: Choose an item. | | | | | |
| 303(d) Listed ☐ Yes ☐ No | | | | | |
| GPS Coordinates (decimal degrees, ex. 41.0258, -78.6556) Latitude Longitude - | | | | | |

Best Management Practices (BMPs)
Check all that apply and attach location map and site map(s) detailing BMP locations within the site(s):

| Wetland Practices | Planned On (date) | Implemented On (date) | Implemented Amount | Implemented Units of Measure |
|---|----------------------|--------------------------|-----------------------|------------------------------------|
| wetland creation (NRCS 658) | | | | acres |
| wetland enhancement (NRCS 659) (subtype): ☐ fencing ☐ hydrologic manipulation ☐ invasive species control ☐ native planting | | | | acres |
| wetland protection | | | | acres |
| wetland restoration (NRCS 657) | | | | acres |

Pollutants and Load Reductions

| (0 | (Construction/installation projects only. Check all that apply and complete required items.) | | | | | |
|-------------|--|--------------------------------|--------------------|----------------------------|---------------------------|--|
| | Pollutant (Common pollutants are listed first.) | Estimated Load Reduction | Unit of Measure | Load Reduction Model | Load Reduction Date | |
| | Acidity | | LBS/DAY | | | |
| | Metals (Aluminum) | | LBS/DAY | | | |
| | Metals (Iron) | | LBS/DAY | | | |
| | Metals (Manganese) | | LBS/DAY | | | |
| | Nitrogen | | LBS/YR | | | |
| | Phosphorus | | LBS/YR | | | |
| \boxtimes | Sedimentation-Siltation | 4.9 | TONS/YR | Model My Watershed | 6/15/2023 | |
| | Algal Growth/Chlorophyll | | | | | |
| | Ammonia | | | | | |
| | Bacteria | | | | | |
| | Biochemical Oxygen Demand (BOD) | | | | | |
| | Chemical Oxygen Demand (COD) | | | | | |
| | Chlorine | | | | | |
| | Conductivity (mohms/cm @ 25 °C) | | | * | | |
| | Dissolved Oxygen (Low) | | | | | |
| | Fecal coliform | | | | | |
| | Inorganics (Other) | | | | | |
| | Metals (Arsenic) | | | | | |
| | Metals (Cadmium) | | | | | |
| | Metals (Chromium) | | | | | |
| | Metals (Copper) | | | | | |
| | Metals (Lead) | | | | | |
| | Metals (Mercury) | | | | | |
| | Metals (Other) | | | | | |
| | Metals (Selenium) | | | | | |
| | Metals (Zinc) | | | | | |
| | Nitrate | | | | | |
| | Oil and Grease | | | | | |
| | Organics (Other Nonpriority) | | | | | |
| | Organics (Other Priority) | | | | | |
| | PCBs | | | | | |
| | Pathogens (Coliform) | | | | | |
| | Pathogens (E Coli) | | | | | |
| | Pathogens (Other) | | | | | |
| | Pesticides (Chlordane) | | | | | |
| | Pesticides (DDT) | | | | | |
| | Pesticides (Dianzinon) | | | | | |

| (| (Construction/installation projects only. Check all that apply and complete required items.) | | | | | |
|---|--|--------------------------------|--------------------|----------------------------|------------------------------------|--|
| | Pollutant (Common pollutants are listed first.) | Estimated Load Reduction | Unit of Measure | Load Reduction Model | Implementation Load Reduction Date | |
| | Pesticides (Dieldrin) | | | | | |
| | Pesticides (Other) | | | | | |
| | Phosphate | | | | | |
| | Road Salt or Deicer | | | | | |
| | Sulfates | | | | | |
| | Suspended solids | | | | | |
| | Total Kjeldahl Nitrogen | | | | | |
| | Toxics (Total) | | | | | |
| | Treated Wastewater | | | | | |
| П | Turbidity | | | | | |

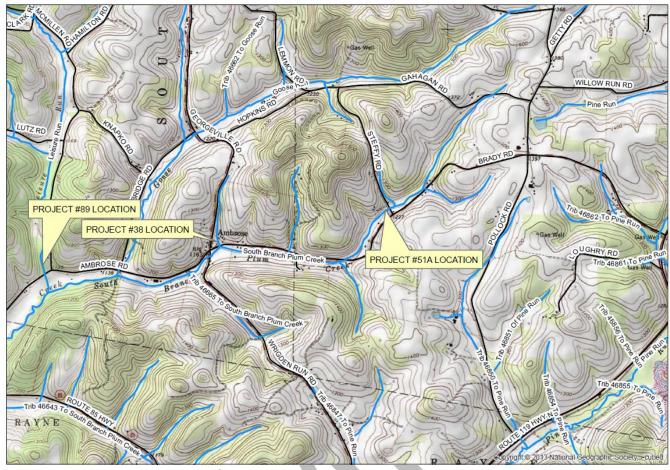


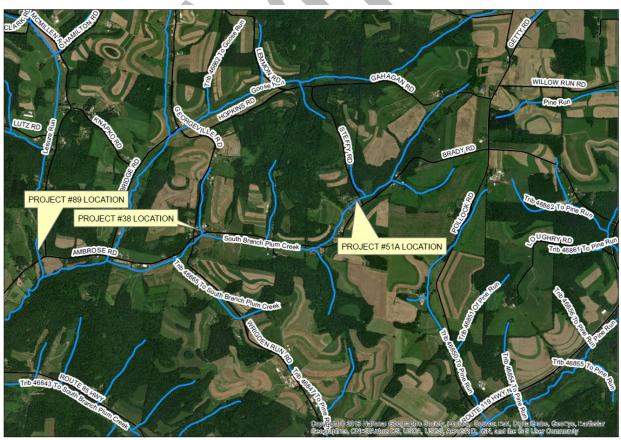
Demonstration Project

| Name of project: | | | |
|-----------------------------|-------------|-------------|------------------|
| Type of project | | | _ |
| Mining Related | | ☐ Yes | □ No |
| Nonpoint Source Pollution I | Related | Yes | □No |
| Demonstrations Held | | | Number |
| Demonstration Attendees | | | Number |
| Publicity _ | | | Number |
| Newspapers _ | | | Number |
| Radio Spots | | | Number |
| TV Spots | | | _ Number |
| Internet _ | | | Number |
| Magazine Articles | | | _ Number |
| Other | | | Number |
| Describe activities not de | fined compl | etely by al | pove selections: |
| | | | |

Education Project/Outreach

| hools reached _ | | number | | | | | |
|---|---|--|--|--|--|--|--|
| nildren reached _ | | number | | | | | |
| lults reached _ | 20 | number | | | | | |
| ochures distributed _ | 100 | number | | | | | |
| ewspaper articles _ | | number | | | | | |
| adio/TV spots _ | | number | | | | | |
| agazines _ | | number | | | | | |
| ebsite hits | | number | | | | | |
| aining sessions held _ | number | | | | | | |
| aining session attendees _ | number | | | | | | |
| orkshops held | number | | | | | | |
| orkshop attendees _ | , | number | | | | | |
| Describe activities not defined completely by above selections: | | | | | | | |
| | | | | | | | |
| | chools reached nildren reached lults reached ochures distributed ewspaper articles adio/TV spots agazines ebsite hits aining sessions held aining session attendees orkshops held orkshop attendees defined completely by abo | lults reached lults reached cochures distributed ewspaper articles adio/TV spots agazines ebsite hits aining sessions held aining session attendees orkshops held orkshop attendees defined completely by above selections: | | | | | |





Planned Hydrant with Trough Planned Temporary Fence Planned Reservoir

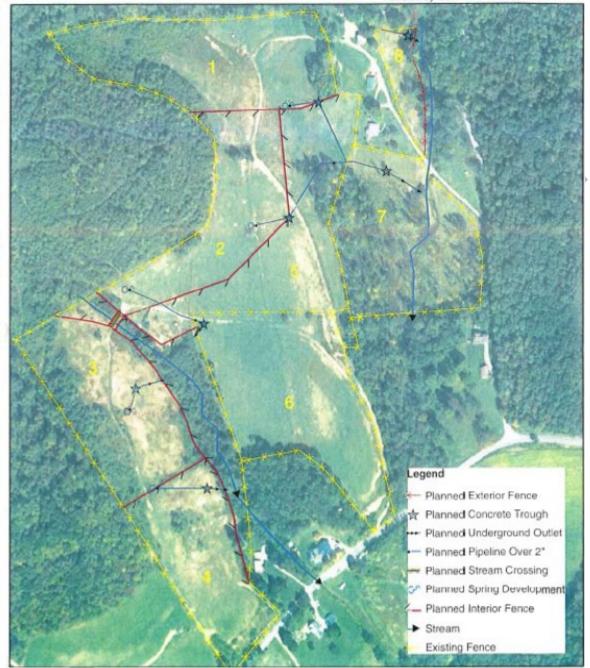
Planned Spring Development Planned Interior Fence

Grazing Layout

Date: 6/3/2019

Customer(s): WIP #89 District: INDIANA CD Field Office: INDIANA FIELD OFFICE Agency: USDA NRCS

Assisted By: JBH



WIP Site 51A

