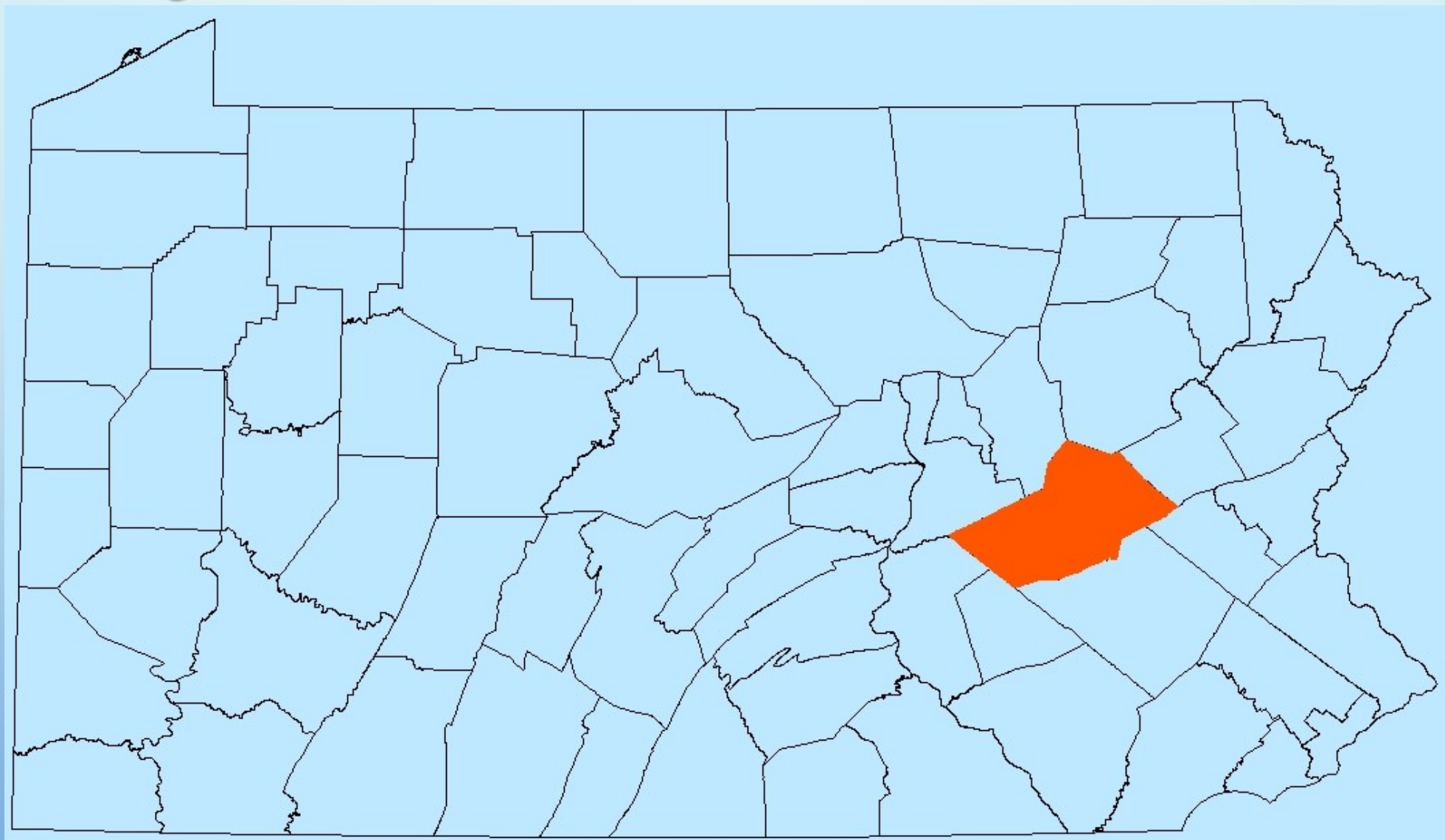


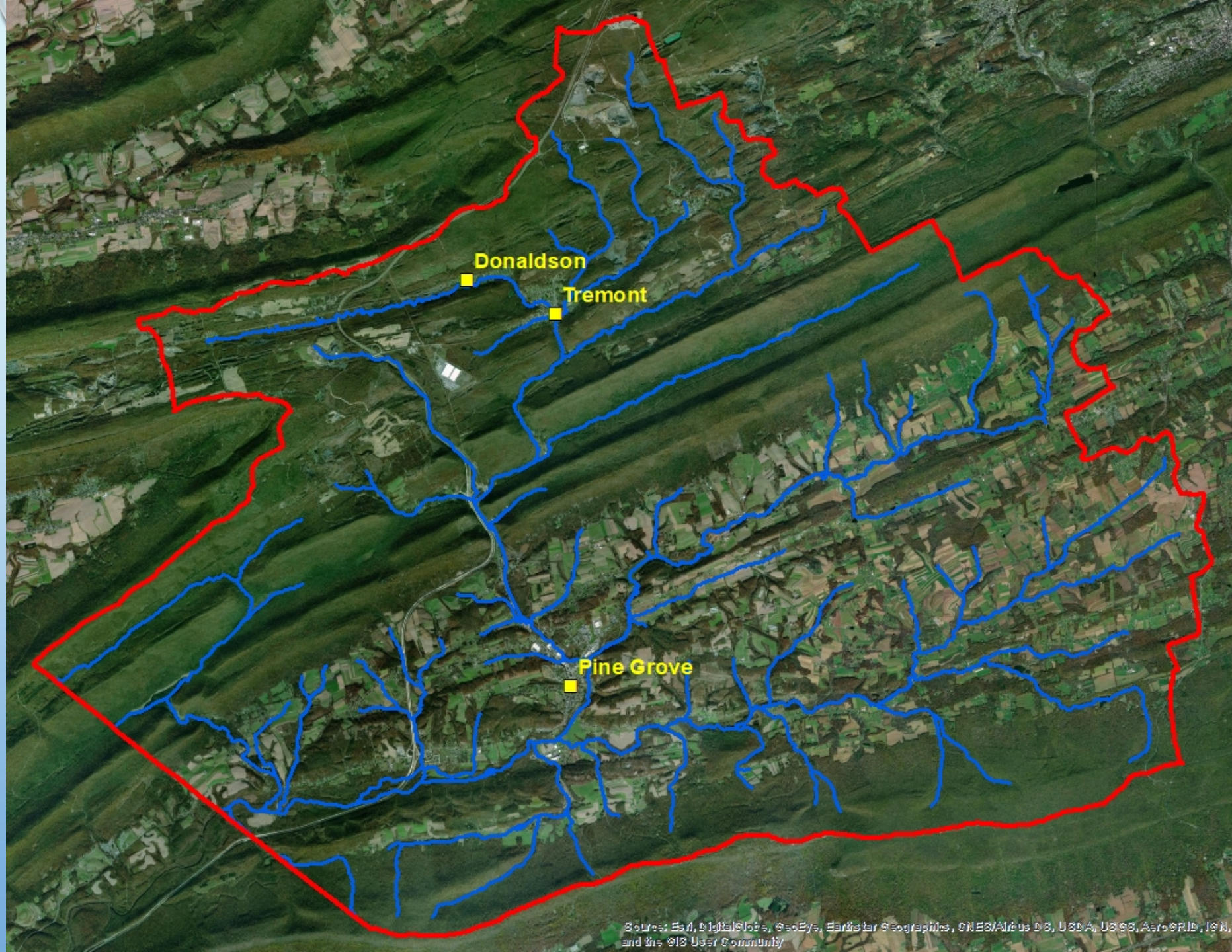
COMMUNITY FLOOD RESILIENCE THROUGH FLOODPLAIN RESTORATION





NORTHERN SWATARA CREEK WATERSHED





“RECENT” FLOODING EVENTS

- 1972 (HURRICANE AGNES)
- 2006
- 2011 (HURRICANE IRENE & TROPICAL STORM LEE)
- 2018

SO I HEAR YOU WERE FLOODED!



Tom Fickinger



Tom Fickinger

NOW WHAT?

- FEMA: WE'RE HERE TO HELP
- LET'S GET TOGETHER AND SOLVE THE PROBLEM
- WATERSHED FLOOD RECOVERY COMMITTEE
- RECOVERY STRATEGY
- FEMA: GOOD LUCK & GOOD BYE



Tom Fickinger

SWATARA CREEK
MINE DRAINAGE
POLLUTION
ABATEMENT PROJECT
PART TWO
OPERATION SCARLIFT



COMMONWEALTH OF PENNSYLVANIA
MILTON J. SHAPP, GOVERNOR
DEPARTMENT OF ENVIRONMENTAL RESOURCES
MAURICE K. GODDARD, SECRETARY

SL-126-2

BERGER ASSOCIATES, INC.
CONSULTING ENGINEERS
HARRISBURG, PENNSYLVANIA

**UPPER SWATARA CREEK TMDL WATERSHED
IMPLEMENTATION PLAN**
Schuylkill County, Pennsylvania

May 2006

Prepared by:

Schuylkill Conservation District
1206 Ag Center Drive
Pottsville, PA 17901

Schuylkill Headwaters Association, Inc.
P.O. Box 1385
Pottsville, PA 17901

RETTEW Associates, Inc.
Union Street Station
101 East Union Street
Pottsville, PA 17901

For submission to:

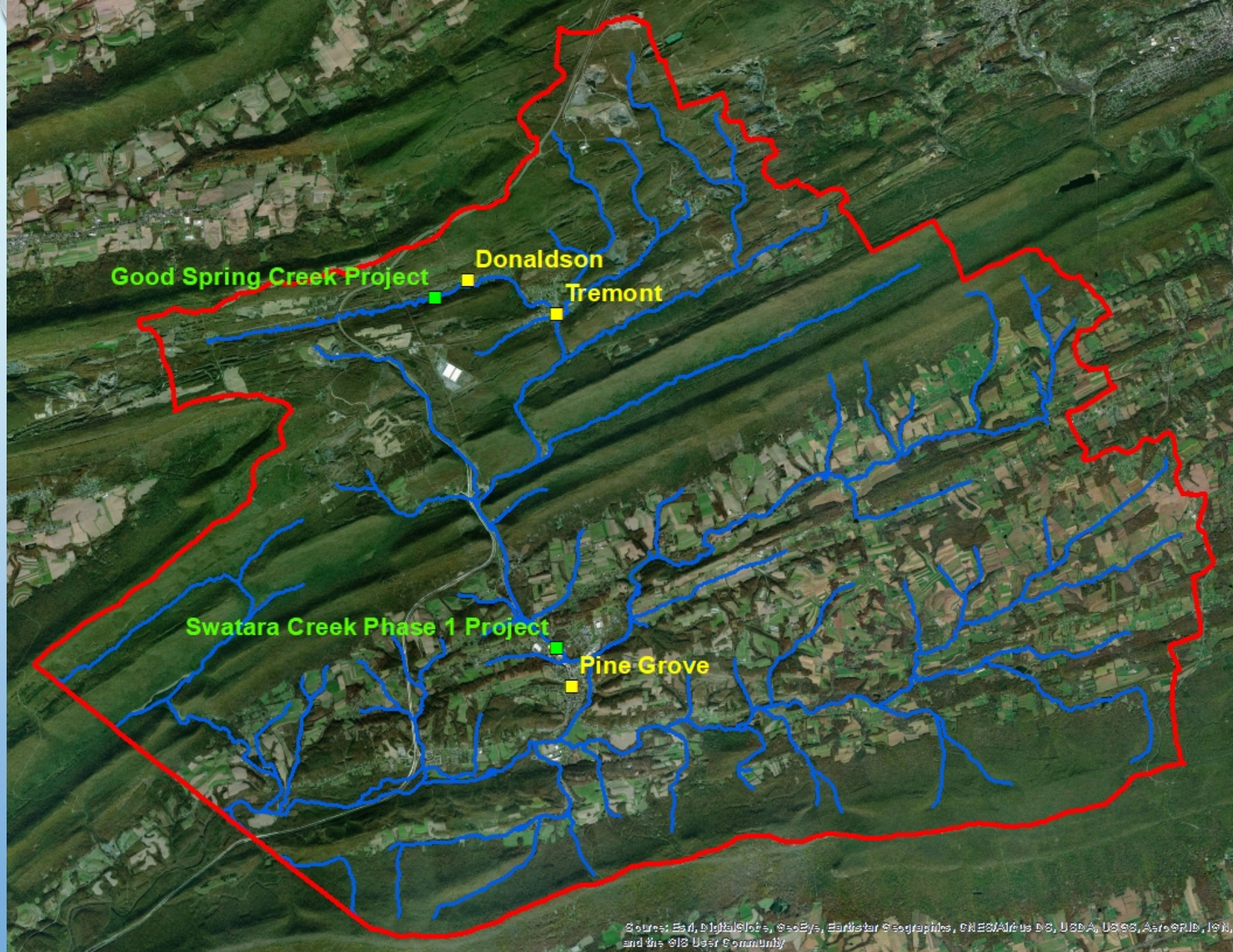
Pennsylvania Department of Environmental Protection
and
United States Environmental Protection Agency

Funding to complete this plan was provided by the Pennsylvania Department of
Environmental Protection through Section 319 of the Federal Clean Water Act administered
by the U. S. Environmental Protection Agency.

2012

Pine Grove Area/Upper Swatara Watershed
Pennsylvania
Recovery Strategy





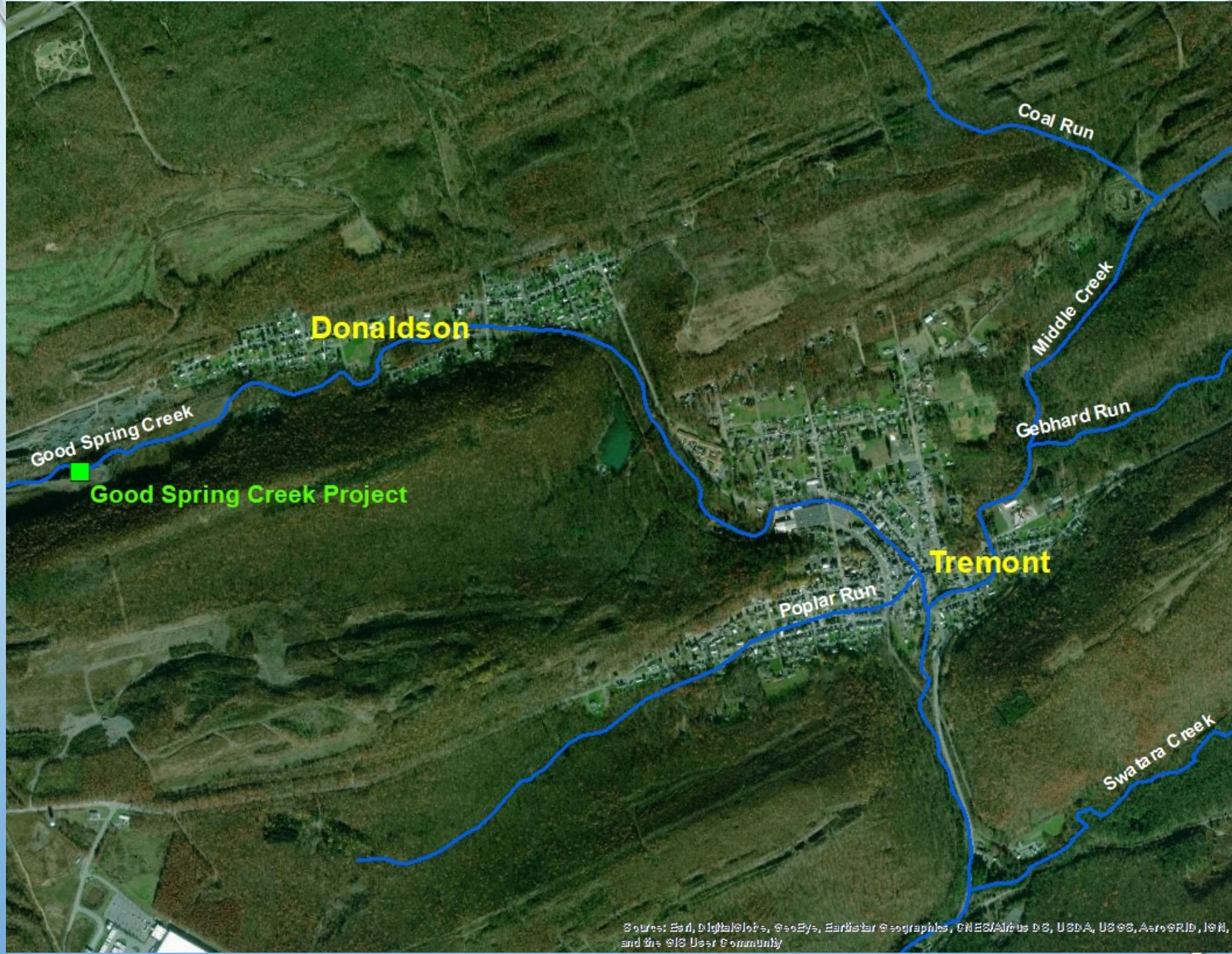
Good Spring Creek Project

Donaldson

Tremont

Swatara Creek Phase 1 Project

Pine Grove







Bill Reichert

GOOD SPRING CREEK FLOODPLAIN PROJECT FUNDING

- DESIGN
 - 2012 SECTION 319 – \$151,022
- CONSTRUCTION
 - 2015 GROWING GREENER - \$449,445
 - 2015 CFA (ACT 13) WRPP - \$300,000
 - 2016 GROWING GREENER - \$230,000
 - 2017 AML PILOT PROJECT - \$6,600,000



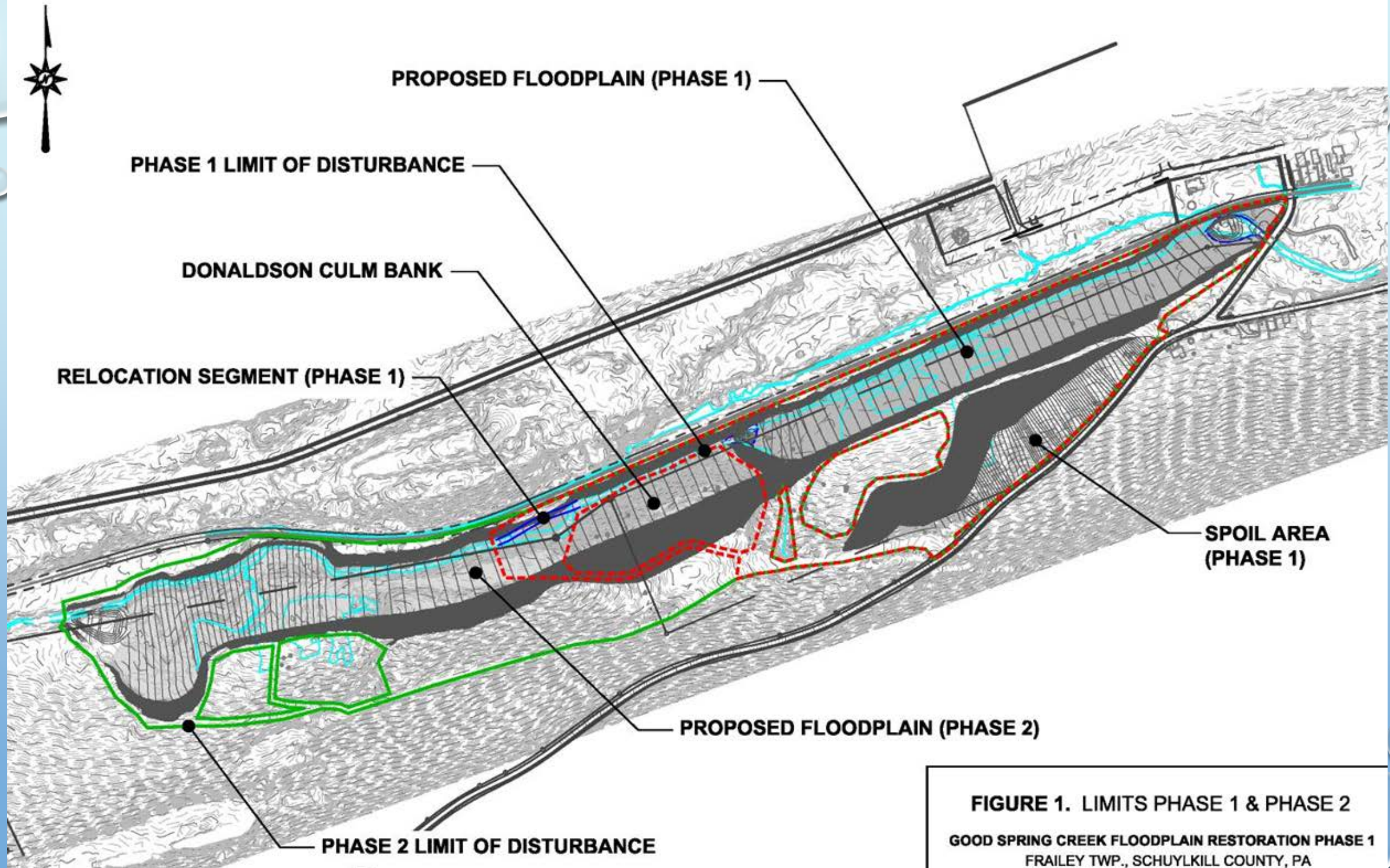


FIGURE 1. LIMITS PHASE 1 & PHASE 2


GOOD SPRING CREEK FLOODPLAIN RESTORATION PHASE 1
FRAILEY TWP., SCHUYLKILL COUNTY, PA

CHALLENGES

- THREE LANDOWNERS
- ~700,000 – 1,000,000 TONS OF MATERIAL TO EXCAVATE
- WHERE TO GO WITH REJECT/EXCESS MATERIAL
- EAST FRANKLIN ROAD & RAUSCH CREEK ROAD BONDING/REPAIRS
- COGENERATION PLANT OWNERSHIP CHANGE



BENEFITS

- CREATION OF APPROXIMATELY 18 ACRES OF FLOODPLAIN & WETLANDS
 - RESTORATION OF APPROXIMATELY 4,600 LINEAR FEET OF ENTRENCHED STREAM CHANNEL
 - REMOVAL OF 700,000 – 1,000,000 TONS OF HIGHLY ERODIBLE SEDIMENT
 - CAPTURE OF UPSTREAM SEDIMENT
 - REDUCED SEDIMENTATION IN GOOD SPRING & SWATARA CREEKS
 - REDUCED FLOOD IMPACTS TO DOWNSTREAM COMMUNITIES
 - FRAILEY TOWNSHIP COMMUNITY PARK
- 













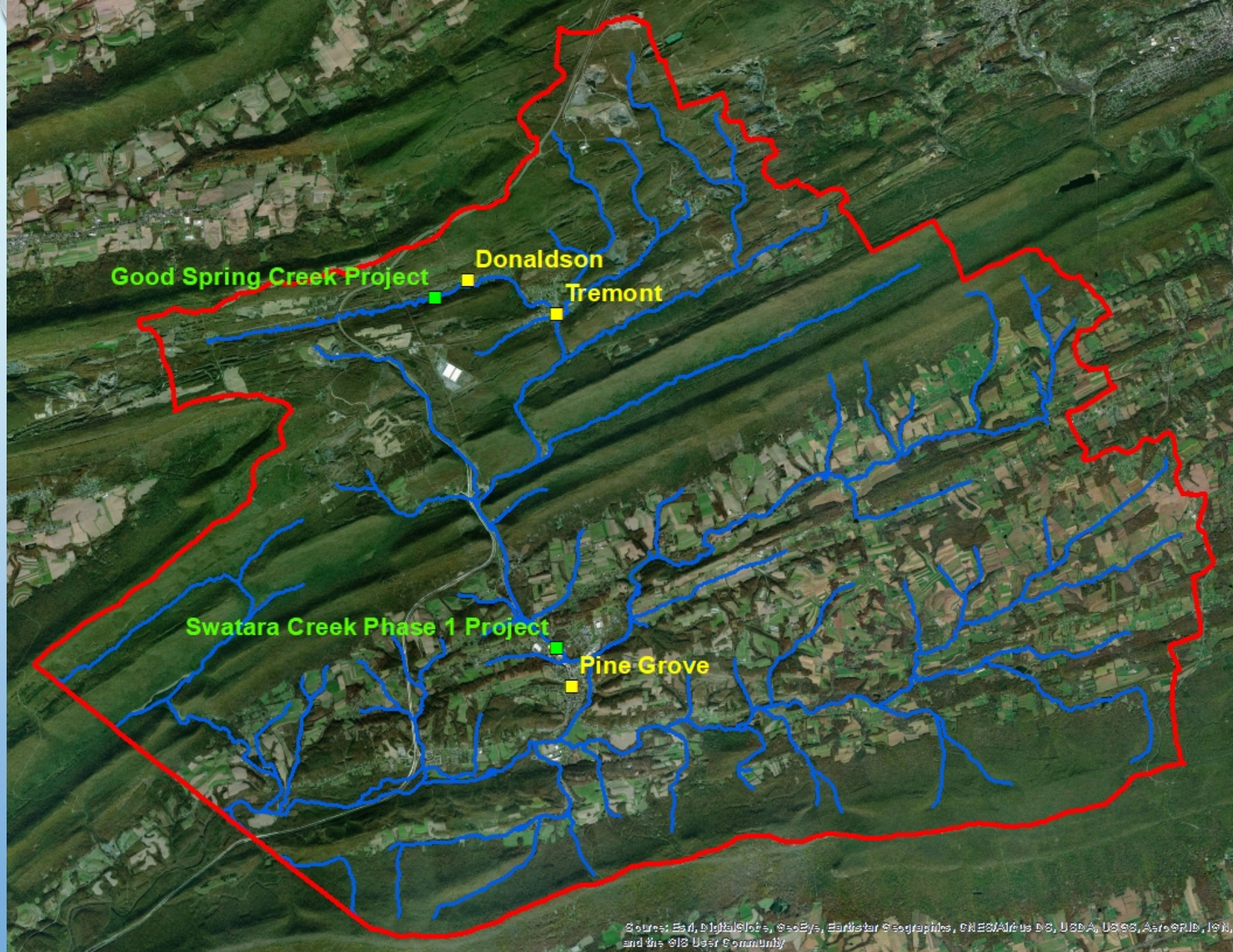


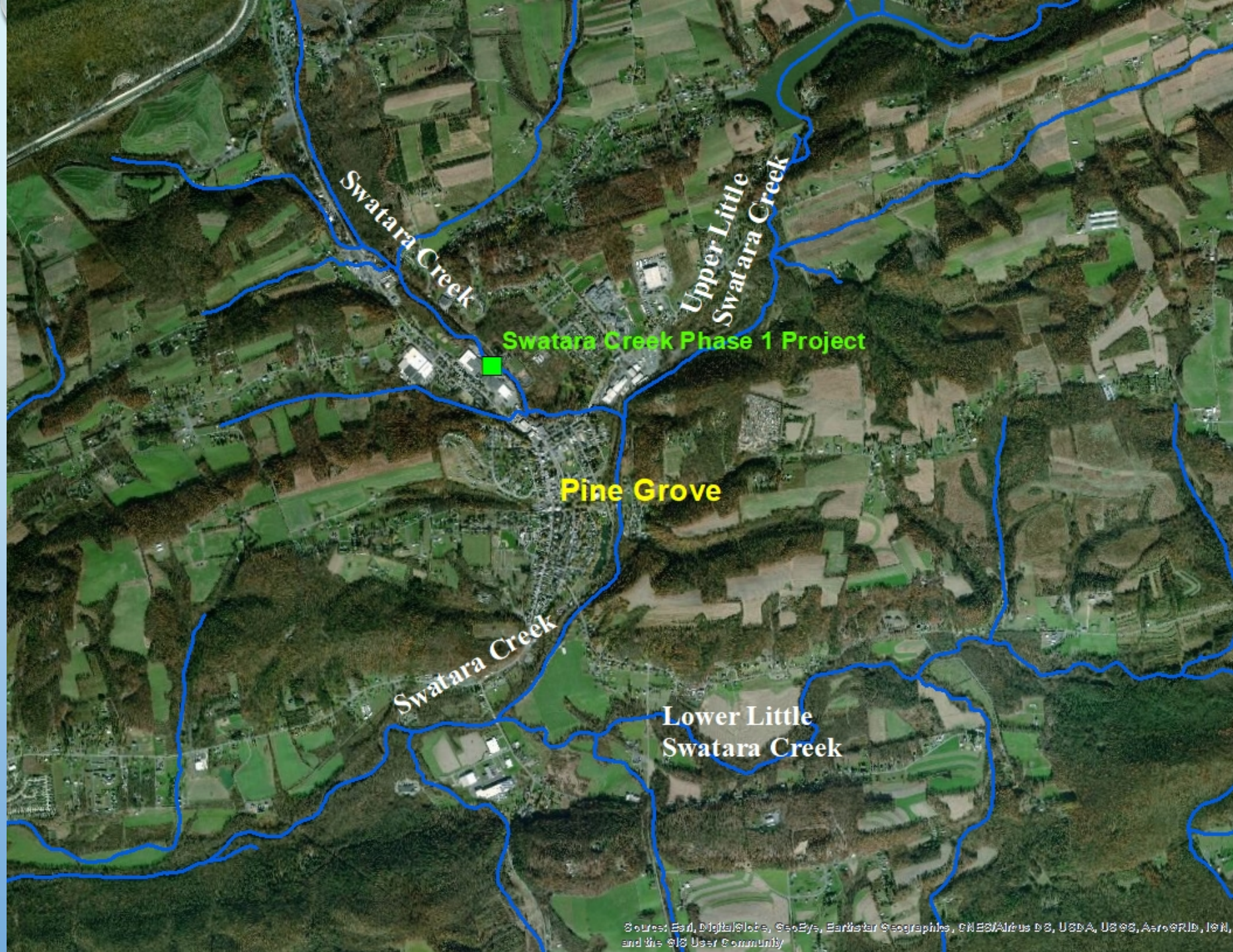




QUESTIONS?

WAYNE G. LEHMAN
COUNTY NATURAL RESOURCE SPECIALIST
SCHUYLKILL CONSERVATION DISTRICT
570-391-3333 (DIRECT)
WLEHMAN@CO.SCHUYLKILL.PA.US





Swatara Creek Phase 1 Project

Pine Grove

Lower Little
Swatara Creek



SWATARA CREEK FLOODPLAIN PHASE 1 PROJECT FUNDING

- DESIGN
 - 2013 GROWING GREENER – \$300,700
- CONSTRUCTION
 - 2016 GROWING GREENER - \$2,991,000
 - 2016 DCED CDBG-DR - \$3,000,000



Kathy Ferguson

CHALLENGES

- TWO LANDOWNERS
- LANDOWNER REQUESTS
- UTILITIES RELOCATION COSTS
- ~100,000 TONS OF MATERIAL TO EXCAVATE
- WHERE TO GO WITH EXCAVATED SOIL MATERIAL
- LOVER'S LANE BONDING/REPAIRS
- TWO GRANTS FUNDING PROJECT

BENEFITS

- CREATION OF APPROXIMATELY 7 ACRES OF NEW WETLANDS
- CREATION OF APPROXIMATELY 10.5 ACRES OF FLOODPLAIN
- REDUCE 1% CHANCE FLOOD HEIGHT ELEVATIONS IN NORTH PINE GROVE BY 28"
- PROJECT BECOMES PART OF OPEN GREEN SPACE FOR POTENTIAL TRAIL CONNECTIVITY