
APPENDIX A. GLOSSARY

Acidity	The capacity of water for neutralizing a basic solution.
Agricultural Preservation Areas	Lands enrolled in a statewide program that has been established to promote the conservation and preservation of agricultural lands and the agricultural community.
Air Pollutant	Any substance in the air that causes damage to life, ecosystems, or property.
Airsheds	Geographic areas responsible for emitting 75 percent of the air pollution reaching a body of water.
All Terrain Vehicle	A small, open motor vehicle having one seat and three or more wheels fitted with large tires. It is designed chiefly for recreational use over roadless, rugged terrain.
Atmospheric Deposition	The process of airborne pollutants falling to the ground.
Basicity	The extent to which a substance is a base, which is defined as having a pH over seven.
Bedrock	The solid rock that underlies the soil and other unconsolidated material, or that is exposed at the surface.
Best Management Practices	Refer to the most environmentally appropriate techniques for agriculture, forestry, mining, development, urban storm water management, and other practices that are potential threats to natural resources.
Biological Diversity	The number and variety of organisms found within a specific geographic region, or a particular habitat; the variability among living organisms on the earth, including the variability within and between species and within and between ecosystems.
Biological Diversity Area	An area of land recognized as supporting populations of state, nationally, or globally significant species or natural communities, high-quality examples of natural communities or ecosystems, or natural exceptional native diversity.
Canal	A man-made waterway that is usually used to connect existing bodies of water.
Carbon Monoxide	A colorless, odorless, poisonous gas that results from the incomplete burning of carbon fuels.

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Comprehensive Plans	A general policy guide for the physical development of a municipality, taking into account many factors including locations, character, and timing of future development.
Concentrated Animal Feeding Operation	A farm where large quantities of livestock or poultry are housed inside buildings or a confined area and all units of production, including feed, wastes and dead animals are concentrated in one area.
Conservation	The maintenance of environmental quality and resources; resources include physical, biological, or cultural. Ecosystem management within given social and economic constraints; producing goods and services for humans without depleting natural ecosystem diversity, and acknowledging the natural character of biological systems.
Conservation Lands	Public or private lands with management plans that include the protection of natural areas as a primary objective.
Dedicated Area	An area of land recognized because of an owner's specific intention to protect it, which could result in the improving to become either a biological diversity area in the future or an even better high-quality area within an already designated biological diversity area.
Degradation	A degeneration to a poorer quality, condition or state.
Direct Deposition	Occurs when pollutants enter a waterway by falling directly into it.
Drainage Pattern	The arrangement of streams in a landscape in response to local topography and subsurface geology.
Easement	A deed restriction that landowners may voluntarily place of their property to protect its future uses.
Eco-region	A geographical unit based on associations of those biotic and environmental factors that directly affect or indirectly express energy, moisture, and nutrients regulating the structure and function of ecosystems.
Ecosystems	An area and its living and non-living components.
Environmental Education	A learning process that increases knowledge and awareness of the environment and associated challenges, develops skills and expertise to address these challenges, and fosters attitudes, motivation, and commitment to make informed decisions and take responsible actions.
Erosion	The processes by which solids are displaced from the earth's surface; includes weathering, dissolution, abrasion, corrosion, and transportation.

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Factory Farms	Larger, corporate-based farms that emphasize high volume and profit.
Family Farms	Smaller farms that have been in operation for several generations.
Floodplain	The level land among the course of a river or stream formed by the deposition of sediment during periodic floods.
Forest Management	The art and science of treating a forest to promote a desired outcome.
Geology	Geology is the science that deals with the study of the earth and its history, and is the name of the natural features of our plant.
Ground-level Ozone	A harmful secondary pollutant formed in the atmosphere when nitrogen oxide (NO _x) combines and reacts with volatile organic compounds in the presence of sunlight and warm temperatures.
Groundwater	Water beneath the earth's surface; found in pore spaces in rock material. Supplies wells and springs as a source of drinking water for many; also
High-Grading	Involves cutting of only the biggest, most profitable trees in a stand; considered a non-sustainable practice.
Hydric Soils	Soils that are adequately moist in the upper section to cultivate anaerobic conditions during the growing season.
Hydrolic Unit Code	A system for organizing watersheds of the United States that divides and subdivides the watershed into successively smaller hydrologic units and is then assigned an identifying number.
Hydrology	The study of movement of water on the earth; includes surface water and groundwater.
Indirect Deposition	Occurs when a pollutant enters a waterway by falling onto land and being washed into waterbodies as runoff.
Invasive species	Environmentally noxious weeds that grow aggressively, spread easily, and displaces other plants.
Karst	An area of limestone marked by irregularities such as sinkholes, fissures, caves, and underground streams, which are created by erosion.
Landscape Conservation Area	A larger area of land that contains minimal human disturbance and allows ecosystems to function on a landscape level.

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Lichens	A symbiosis between a fungal and algal life form that usually grows on trees or rocks.
Major Employers	Companies having a minimum of 200 employees.
Management Recommendations	Non-regulatory suggestions to improve the quality of life.
Methylmercury	A neurotoxin formed by the transformation of mercury by certain microorganisms; it is highly toxic and easily accumulates in fish, shellfish and animals that eat fish.
Natural Heritage Inventories	A method of assessing areas of important plants, animals, and ecological communities.
Natural Resources	A naturally-occurring material with economic value.
Nonpoint Source	Pollutants that have no readily visible source and often require detailed analysis and research to discern the source.
Ozone	A colorless, odorless, gas that forms in the atmosphere.
Ozone Layer	A colorless, odorless, gas located in the upper atmospheric layer that filters the sun's harmful ultraviolet rays.
Particular Matter	Tiny drops of liquid or small particles of dust, metal or other materials that float in the air.
Physiographic Provinces	A region with a particular type of landscape and geology.
Point Source	Pollutants that can be easily traced to their source.
Precipitation	Any form of water that falls from the sky, including, rain, snow, sleet, fog, and hail.
Preservation	The act or process of keeping something safe from harm or injury; the act of maintaining or reserving.
Prime Agricultural Soils	Soils that are extremely well suited for agricultural uses and meet certain physical, chemical, and slope characteristics.
Restoration	Returning to its original state or condition.
Riparian Areas	Areas of protective vegetation next to a body of water that serves as a barrier against polluted runoff and provides habitat corridors for wildlife.

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Runoff	Rainfall or snowmelt not absorbed by soil that flows over the surface of the ground to a receiving waterway.
Secondary Pollutant	A new air pollutant formed when primary pollutants react in the atmosphere.
Sedimentary Rock	Rocks formed by the deposition of sediment.
Sedimentation	The deposit of particles moved by erosion.
Silviculture	The art and science of controlling the establishment, growth, composition, health and quality of forests and woodlands.
Smart Growth Practices	A current movement that focuses on redevelopment of established urban areas and other ways to reduce sprawl pressures on undeveloped countrysides.
Soil Associations	A classification of soil types that comprise two to three major soil types and a few minor soil types.
Stormwater	Water that runs off the land into surface waters during and immediately following periods of precipitation.
Stormwater Management Plan	Planning for surface runoff into streams and river systems during rain and/or snowmelt events.
Streambed	The channel base of a stream or river or creek; it serves as an interchange between groundwater and surface water.
Subsidence	The downward movement of surface material involving little or no horizontal movement.
Sustainable	The ability to provide for the needs of the world's current population without damaging the ability of future generations to provide for themselves. When a process is sustainable, it can be carried out over and over without negative environmental effects or impossibly high costs to anyone involved.
Symbiosis	An alliance between two or more species that benefits each member.
Synthetic Processes	Human-controlled processes, such as burning fossil fuels.
Temperate Continental Climate	A climate without extremes of temperatures or precipitation.
Topography	Describes landscape features of an area.

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Total Maximum Daily Load (TMDL)	A limit for pollutant load placed on a waterway by Department of Environmental Protection. TMDLs are determined for a waterway based on how much pollutant it is determined that the waterway can assimilate and still meet its designated use criteria. TMDLs will be used to regulate the percentage of total pollutant load that each source in a watershed can contribute.
Unemployment Rate	The percentage of people of the total labor force that are actively seeking a job but cannot find employment.
Value Added	The additional value added to a product at a stage of production.
Water Gap	An opening or notch which occurs when a section of a ridge has a weaker geological structure and a stream essentially cuts through a ridge to end up
Water Quality Trading	A program which allows facilities with higher pollution control costs to purchase the right to pollute from facilities that have reduced their pollution output below their required limits.
Watershed	The area of land that drains to a particular point along a stream. Each stream has its own watershed. Topography is the key element affecting this area of land. The boundary of a watershed is defined by the highest elevations surrounding the stream. A drop of water falling outside of the boundary will drain to another watershed.
Wetland	An area that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances support, a prevalence of vegetation typically adapted for life in saturated soil conditions.
Wildlife Management Areas	Areas dedicated to wildlife management activities and low-intensity, wildlife-related recreation, including hunting and wildlife observation.
Zoning	A legal mechanism by which government bodies, for the sake of protecting public health, safety, morals and general welfare, can limit a landowner's right to use privately owned land by dividing land into districts and creating land-use regulations.

APPENDIX B. PLANNING COMMITTEES

Connoquenessing Creek Watershed Conservation Plan Steering Committee

Dave Andrews	Butler Jr. High School Connoquenessing Watershed Alliance
Dave Barenfeld	Business Owner WPC Board Member
Megan Gahring	Lawrence County Conservation District Wildwaterways Conservancy
Heath Gamache	Lutherlyn
Ryan Harr	Butler County Conservation District
Dave Kemp	Connoquenessing Watershed Alliance
Dave Lamperski	Butler County Environmental Advisory Committee Connoquenessing Watershed Alliance Forward Township Supervisor
Matt Montag	AK Steel Corporation Butler Works
John Ruch	Historic Harmony Inc.
Marty Warchol	Beaver County Conservation District

Connoquenessing Creek Watershed Conservation Plan Advisory Committees

Project Area Characteristics

Donelle Andrus	Butler County Planning Department
Margie Davies	Connoquenessing Watershed Alliance
Amy McKinney	Lawrence County Planning Department

Land Resources

Bob Barr	Rock Point Boat Club
Margie Davies	Connoquenessing Watershed Alliance
Sheryl Kelly	Butler County Department of Recycling and Waste Management
Fred Lochner	Wild Waterways Conservancy
Dennis McCandless	Concerned Citizen
Amy McKinney	Lawrence County Planning Department
Gary Pinkerton	Butler County Parks and Recreation Department
Jerry Zona	PA Cleanways - Lawrence/Butler Counties

Water Resources

John Ball	Hereford Mannor Lakes Conservancy
Bob Barr	Rock Point Boat Club
Margie Davies	Connoquenessing Watershed Alliance
Ely Heferle	Pennsylvania Department of Environmental Protection
Fred Lochner	Wild Waterways Conservancy
Dennis McCandless	Concerned Citizen
Natalie Price	Connoquenessing Watershed Alliance Butler County Community College
Denise Sheets	Community Development Corporation of Butler County

Biological Resources

Margie Davies	Connoquenessing Watershed Alliance
Sheree Dougherty	Wild Waterways Conservancy
Fred Lochner	Wild Waterways Conservancy
Natalie Price	Connoquenessing Watershed Alliance Butler County Community College

Cultural Resources

Everett Bleakney	Concerned Citizen
Jack Cohen	Butler County Tourism and Convention Bureau
Margie Davies	Connoquenessing Watershed Alliance
Hannah Hardy	Pennsylvania Environmental Council
Joanne McBride	Lawrence County Tourist Promotion Agency
Dennis McCandless	Concerned Citizen
Amy McKinney	Lawrence County Planning Department
Gary Pinkerton	Butler County Parks and Recreation Department
Carl Robertson	Providence Plantation
Jerry Zona	PA Cleanways - Lawrence/Butler Counties

APPENDIX C. MAJOR EMPLOYERS

Employer	Location	Employees
AK Steel Incorporated	Butler	4,000
Butler Memorial Hospital	Butler	1,200
Three Rivers Aluminum Co. Incorporated	Cranberry Township	900
Butler Area School District	Butler	850
Lutheran Affiliated Services	Cranberry Township	800
Penn United Technology, Incorporated	Saxonburg	675
Spang and Co. Incorporated	Butler	600
Manheims Pennsylvania Auction	Cranberry Township	595
Wal-Mart Supercenter	Cranberry Township	550
Mine Safety Appliance Company	Cranberry Township	500
Veka Incorporated	Fombell	466
II-VI Incorporated	Saxonburg	450
Lifesteps, Incorporated	Butler	425
Ellwood City Health Organization	Ellwood City	425
P, P, H, and K Incorporated	Butler	400
St. John Speciality Care Center	Mars	365
Nationwide Mutual Insurance Company	Butler	350
Passavant Retirement Health Center	Zelienople	308
Healthamerica Pa Incorporated	Cranberry Township	300
Mine Safety Appliance Company	Cranberry Township	300
Mine Safety Appliance Company	Evans City	300
Sysco Food Svs Pittsburgh Limited Liability Company	Harmony	300
Mars Area School District	Mars	280
County of Butler	Butler	256
Spang and Company Incorporated	East Butler	250
Sherwood Oaks	Cranberry Township	245
McClumonds Supply and Transit Company	Portersville	231
VNA Services	Butler	225
Pennfirst Financial Services	Ellwood City	220
Ellwood City Area School District	Ellwood City	214
Modern Transportation Service	Portersville	213
Wal-Mart Stores	Butler	212
Marmon Keystone Corporation	Butler	203
Ado Staffing Incorporated	Butler	200
Butler Community College	Butler	200
Butler Supermarkets, Incorporated	Butler	200
Jsp. International	Butler	200
Giant Eagle	Cranberry Township	200
Kohl's Department Store	Cranberry Township	200
Champ Penn Incorporated	East Butler	200
Spang and Company Incorporated	East Butler	200
Nalco Company	Ellwood City	200
Nalco Company	Fombell	200
University of Pittsburgh Medical Center	Mars	200

APPENDIX D. AGRICULTURAL SOILS

Prime Agricultural Soils

Map Symbol	Soil Name	Slope Character (% slope)	Map Symbol	Soil Name	Slope Character (% slope)
<i>Allegheny County</i>			<i>Butler County (continued)</i>		
CmB	Clymer silt loam	3 to 8	Ph	Philo silt loam	
CuB	Culleoka silt loam	3 to 8	Po	Pope silt loam	
GpB	Gilpin-Upshur complex	3 to 8	RdB	Riverhead Sandy loam	3 to 8
HaB	Hazelton channery loam	3 to 8	TaA	Tilsit silt loam	0 to 3
Ph	Philo silt loam		WaA	Wharton silt loam	0 to 3
RaA	Rainsboro silt loam	0 to 3	WaB	Wharton silt loam	3 to 8
RyB	Rayne silt loam	2 to 8	WhA	Wheeling silt loam	0 to 3
UaB	Upshur silty clay loam	3 to 8	WhB	Wheeling silt loam	3 to 8
WhB	Wharton silt loam	2 to 8	<i>Lawrence County</i>		
<i>Beaver County</i>			AgB	Allegheny silt loam	3 to 8
AgB	Allegheny loam	3 to 8	BcB	Braceville loam	3 to 8
CmB	Clymer loam	3 to 8	CdB	Canfield silt loam	3 to 8
CuB	Culleoka silt loam	3 to 8	ChB	Chili silt loam	3 to 8
GnB	Gilpin silt loam	3 to 8	CmB	Clymer loam	3 to 8
GpB	Gilpin-Upshur complex	3 to 8	CoB	Conotton gravelly loam	3 to 8
HaB	Hazelton channery loam	3 to 8	CuB	Culleoka silt loam	3 to 8
MoA	Monongahela silt loam	0 to 3	GnB	Gilpin silt loam	3 to 8
Ph	Philo silt loam		HaB	Hazelton channery loam	3 to 8
Po	Pope silt loam		Lb	Lobdell silt loam	
TsB	Tilsit silt loam	3 to 8	LoB	Loudonville gravelly silt loam	3 to 8
WhA	Wharton silt loam	0 to 3	MoA	Monongahela silt loam	0 to 3
WhB	Wharton silt loam	3 to 8	Ph	Philo silt loam	
<i>Butler County</i>			Po	Pope silt loam	
BeA	Braceville loam	0 to 3	RaA	Ravenna silt loam	0 to 3
BeB	Braceville loam	3 to 8	RaB	Ravenna silt loam	3 to 8
BuB	Buchanan loam	3 to 8	TsB	Tilsit silt loam	3 to 8
CmB	Clymer loam	3 to 8	WhB	Wharton silt loam	3 to 8
CoA	Cookport loam	0 to 3	WoB	Wooster gravelly silt loam	3 to 8
CoB	Cookport loam	3 to 8			
GIB	Gilpin silt loam	3 to 8			
HaB	Hazelton channery loam	3 to 8			

Farmland of Statewide Importance

Map Symbol	Soil Name	Slope Character (% slope)	Map Symbol	Soil Name	Slope Character (% slope)
<i>Allegheny County</i>			<i>Beaver County (continued)</i>		
CaB	Cavode silt loam	2 to 8	CuC	Culleoka silt loam	8 to 15
CaC	Cavode silt loam	8 to 15	ErB	Ernest silt loam	3 to 8
CeB	Caneadea silt loam	3 to 8	ErC	Ernest silt loam	8 to 15
CmC	Clymer silt loam	8 to 15	GnC	Gilpin silt loam	8 to 15
ErB	Ernest silt loam	2 to 8	GpC	Gilpin-Upshur complex	8 to 15
ErC	Ernest silt loam	8 to 15	GsB	Gilpin-Weikert complex	3 to 8
EvC	Ernest-Vandergrift silt loams	8 to 15	GtB	Guernsey silt loam	3 to 8
GIC	Gilpin silt loam	8 to 15	GtC	Guernsey silt loam	8 to 15
GpC	Gilpin-Upshur complex	8 to 15	GvB	Guernsey-Vandergrift complex	3 to 8
GvB	Guernsey-Vandergrift silt loams	3 to 8	GvC	Guernsey-Vandergrift complex	8 to 15
GvC	Guernsey-Vandergrift silt loams	8 to 15	HaC	Hazleton channery loam	8 to 15
GwC	Gilpin-Wharton silt loams	8 to 15	MoB	Monongahela silt loam	3 to 8
HaC	Hazleton loam	8 to 15	MoC	Monongahela silt loam	8 to 15
RaB	Rainsboro silt loam	3 to 8	TsC	Tilsit silt loam	8 to 15
RaC	Rainsboro silt loam	8 to 15	TyA	Tyler silt loam	0 to 3
RyC	Rayne silt loam	8 to 15	TyB	Tyler silt loam	3 to 8
TaB	Tilsit silt loam	3 to 8	WhC	Wharton silt loam	8 to 15
UaC	Upshur silty clay loam	8 to 15	<i>Butler County</i>		
VcB	Vandergrift-Cavode silt loams	3 to 8	At	Atkins silt loam	
VcC	Vandergrift-Cavode silt loams	8 to 15	BuC	Buchanan loam	8 to 15
WhC	Wharton silt loam	8 to 15	CeA	Caneadea silt loam	0 to 3
<i>Beaver County</i>			CeB	Caneadea silt loam	3 to 8
AgC	Allegheny silt loam	8 to 15	CeC	Caneadea silt loam	8 to 15
At	Atkins silt loam		CIA	Cavode silt loam	0 to 3
CeA	Cavode silt loam	8 to 15	CIB	Cavode silt loam	3 to 8
CeB	Cavode silt loam	3 to 8	CIC	Cavode silt loam	8 to 15
CeC	Cavode silt loam	8 to 15	CmC	Clymer silt loam	8 to 15
ChC	Chili silt loam	8 to 15	CoC	Cookport loam	8 to 15
CmC	Clymer loam	8 to 15	ErB	Ernest silt loam	3 to 8
CoC	Conotton gravelly loam	8 to 15	ErC	Ernest silt loam	8 to 15
			FeB	Fredpm loam	3 to 8
			GnC	Gilpin-Upshur complex	8 to 15

Farmland of Statewide Importance

Map Symbol	Soil Name	Slope Character (% slope)	Map Symbol	Soil Name	Slope Character (% slope)
<i>Butler County (continued)</i>			<i>Lawrence County (continued)</i>		
GoB	Gilpin-Weikert channery silt loams	3 to 8	ErC	Ernest silt loam	8 to 15
GpC	Gilpin-Wharton silt loams	8 to 15	FnA	Frenchtown silt loam	0 to 3
GrC	Gresham silt loam	8 to 15	FnB	Frenchtown silt loam	3 to 8
HaC	Hazelton channery loam	8 to 15	GnC	Gilpin silt loam	8 to 15
MoB	Monongahela silt loam	3 to 8	GsB	Gilpin-Weikert complex	3 to 8
MoC	Monongahela silt loam	8 to 15	GtB	Guernsey silt loam	3 to 8
RdC	Riverhead sandy loam	8 to 15	GtC	Guernsey silt loam	8 to 15
TaB	Tilsit silt loam	3 to 8	GvC	Guernsey-Vandergrift complex	8 to 15
VcB	Vandergrift-Cavode silt loam	3 to 8	HaC	Hazelton channery loam	8 to 15
VcC	Vandergrift-Cavode silt loam	8 to 15	Ho	Holly silt loam	
WaC	Wharton silt loam	8 to 15	LoC	Loudonville gravelly silt loam	8 to 15
<i>Lawrence County</i>			MoB	Monongahela silt loam	3 to 8
At	Atkins silt loam		MoC	Monongahela silt loam	8 to 15
CdC	Canfield silt loam	8 to 15	RaC	Ravenna silt loam	8 to 15
CeB	Cavode silt loam	3 to 8	ReB	Rexford silt loam	3 to 8
CeC	Cavode silt loam	8 to 15	Sn	Sloan silt loam	
ChC	Chili silt loam	8 to 15	TsC	Tilsit silt loam	8 to 15
CmC	Clymer loam	8 to 15	TyA	Tyler silt loam	0 to 3
CoC	Conotton gravelly loam	8 to 15	TyB	Tyler silt loam	3 to 8
CuC	Culleoka silt loam	8 to 15	WhC	Wharton silt loam	8 to 15
ErB	Ernest silt loam	3 to 8	WoC	Wooster gravelly silt loam	8 to 15

APPENDIX E. MINING PERMITS

Mine Name	Operation	Permit #	Issued Date	Status	Status	Location
Adams 1 Mine	Surface Mine	3074SM25	6/28/1977	Inactive	Reclamation Complete	Summit Township
Aiken Mine	Surface Mine	37850108	2/21/1986	Inactive	Reclamation Complete	Perry Township
Amerikohl 19 Mine	Surface Mine	10860113	10/29/1997	Inactive	Reclamation Complete	Summit Township
Amerikohl 20 Mine	Surface Mine	10870107	11/25/1988	Inactive	Reclamation Complete	Summit Township
Amerikohl 26 Mine	Surface Mine	10890110	1/24/1990	Inactive	Reclamation Complete	Clearfield Township
Berbigler Mine	Surface Mine	10860104	3/16/1987	Inactive	Reclamation Complete	Clearfield Township
Bittner Mine	Surface Mine	10920108	8/6/1998	Inactive	Reclamation Complete	Concord Township
Blum 2 Mine	Surface Mine	37850110	7/1/1986	Inactive	Reclamation Complete	Wayne Township
Boarts Mine	Surface Mine	3077SM10	5/24/1977	Inactive	Reclamation Complete	Summit Township
Bonnie Brook Mine	Surface Mine	10860121	8/11/2000	Inactive	Reclamation Complete	Summit Township
Bonzo Mine	Surface Mine	10950104	8/2/2001	Inactive	Reclamation Complete	Jackson Township
Book 4 Mine	Surface Mine	10840113	6/17/1985	Inactive	Reclamation Complete	Worth Township
Book Mine	Surface Mine	3075SM8	10/27/1980	Inactive	Reclamation Complete	Worth Township
Boofer Mine	Surface Mine	10060302	9/22/2006	Active	Large Surface Mine Permit	Clay Township
Boots Mine	Surface Mine	37030101	2/26/2007	Active	Surface Mining Permit	Wayne Township
Brm 1 Mine	Surface Mine	10880103	8/1/1998	Inactive	Reclamation Complete	Summit Township
Brown Mine	Surface Mine	10850105	9/29/1997	Inactive	Reclamation Complete	Concord Township
Brucker Mine	Surface Mine	10820123	1/9/1998	Inactive	Reclamation Complete	Concord Township
Burr Mine	Surface Mine	10800115	6/30/1980	Inactive	Reclamation Complete	Jackson Township
Burr Mine	Surface Mine	10930103	8/12/2003	Inactive	Reclamation Complete	Jackson Township
Cadam 1 Mine	Surface Mine	1080102	11/2/1981	Inactive	Reclamation Complete	Summit Township
Campbell Mine	Surface Mine	10010112	8/1/2007	Active	Reclamation Complete	Concord Township
Carbon Ctr Mine	Surface Mine	10800113	4/16/1984	Inactive	Reclamation Complete	Summit Township
Cartwright Mine	Surface Mine	10900111	4/17/1998	Inactive	Reclamation Complete	Concord Township
Castellano Mine	Surface Mine	10820128	11/28/1983	Inactive	Reclamation Complete	Lancaster Township
Castellano Mine	Surface Mine	3075SM7	na	Abandoned	Bond Forfeited	na
Caye Mine	Surface Mine	37830106	3/7/1984	Inactive	Reclamation Complete	Perry Township
Ceasar Mine	Surface Mine	1079108	8/31/1979	Active	Reclamation Complete	Lancaster Township
Chicora 1 Mine	Underground	10851301	3/2/1998	Active	Reclamation Complete	Donegal Township
Chicora 2 Mine	Underground Mine	10891301	na	Abandoned	Bond Forfeited	na
Clearose 3 Mine	Surface Mine	3076SM33	2/17/1977	Inactive	Reclamation Complete	Summit Township
Clymer Mine	Surface Mine	10840108	12/23/1985	Inactive	Reclamation Complete	Oakland Township
Cooper Mine	Surface Mine	37930303	1/3/2005	Active	IM Completion Report	Slippery Rock Township

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Mine Name	Operation	Permit #	Issued Date	Status		Location
Cox Chupka Mine	Surface Mine	10840116	3/9/2007	Active	Active	Oakland Township
Creese Site	Surface Mine	4920101	10/5/1998	Active	Reclamation Complete	Franklin Township
Cross 2 Mine	Surface Mine	37810104	10/26/1981	Active	Surface Mining Permit	Slippery Rock Township
Dallos Mine	Surface Mine	10020104	4/4/2007	Active	CM Annual Bond Calculation	Clay Township
Dambauch Site II Agric Utilization Site	Surface Mine	10020103	na	na	Proposed But Never Materialized	na
Darkowski Mine	Surface Mine	10940101	6/2/2003	Active	CM Annual Bond Calculation	Clay Township
Darmac 12 Mine	Surface Mine	10840122	11/12/1985	Inactive	Reclamation Complete	Summit Township
Darmac 12A Mine	Surface Mine	10850113	10/29/1986	Inactive	Reclamation Complete	Summit Township
Darmac 24 Mine	Surface Mine	10890109	na	Abandoned	Bond Forfeited	NA
Daugherty Mine	Surface Mine	37840106	11/4/2002	Inactive	Reclamation Complete	Perry Township
Davis Mine	Surface Mine	37010102	10/17/2006	Active	Surface Mining Permit	Wayne Township
Drennen Mine	Surface Mine	3078BC19	2/23/1979	Inactive	Reclamation Complete	Center Township
Duncan 2 Mine	Surface Mine	3077SM2	6/10/1977	Inactive	Reclamation Complete	Lancaster Township
Duff Mine	Surface Mine	37820109	7/5/1984	Active	Surface Mining Permit	Shenango Township
Elliott Mine	Surface Mine	10860107	4/6/1987	Inactive	Reclamation Complete	Oakland Township
EP Burr Mine	Surface Mine	1079116	2/24/1982	Inactive	Reclamation Complete	Jackson Township
Fawn 91 CRD Mine	Refuse Disposal	10743701	9/13/2005	Active	Refuse disposal permit	Clinton Township
Fawn 91 Mine	Underground	10841302	12/20/2004	Active	Underground mining permit	Clinton Township
Ferraro Mine	Surface Mine	10060103	pending	Active	Surface mining permit	Clay Township
Fisher Mine	Surface Mine	37980304	1/27/2004	Active	Reclamation Complete	Slippery Rock Township
Fleeger Love Mine	Surface Mine	3076SM30	10/15/1976	Inactive	Reclamation Complete	Concord Township
Flinner Mine	Surface Mine	10800120	4/7/1981	Inactive	Reclamation Complete	Lancaster Township
Fouch Mine	Surface Mine	10813020	6/24/1985	Inactive	Reclamation Complete	Oakland Township
Geibel Mine	Surface Mine	10060807	2/12/2007	Active	Small Surface Mine Permit	Clearfield Township
Guerra Mine	Surface Mine	37850102	na	Inactive	Reclamation Complete	na
Guiher Mine	Surface Mine	10900112	9/23/1997	Inactive	Reclamation Complete	Connoquenessing Township
Hall Mine	Surface Mine	10060101	pending	Active	Surface Mining Permit	Clay Township
Harlan Mine	Surface Mine	37880304	2/13/2006	Active	Reclamation Complete	Slippery Rock Township
Hays Mine	Surface Mine	10970102	10/17/2002	Active	Stage 2 Approved	Oakland Township
Hazen Wash Plt	Mineral Preparation Plant	4841601	6/24/1999	Active	Reclamation Complete	Franklin Township
Hemphill Mine	Surface Mine	10990104	8/15/2006	Active	CM Annual Bond Calculation	Clay Township
Herman Mine	Underground Mine	10971301	10/31/2001	Inactive	Reclamation Complete	Clearfield Township
Hohn Mine	Surface Mine	10930107	9/9/1999	Inactive	Reclamation Complete	Oakland Township
Hooker Tipple	Surface Mine	PA0102032	8/30/1984	Inactive	Reclamation Complete	Concord Township

Connoquenessing Creek Watershed Conservation Plan

Mine Name	Operation	Permit #	Issued Date	Status	Location	
Humphrey Mine	Surface Mine	1079110	8/20/1979	Inactive	Reclamation Complete	Muddy Creek Township
Hunkele Mine	Surface Mine	10910101	1/12/1998	Inactive	Reclamation Complete	Summit Township
Hutchison Mine	Surface Mine	10890105	12/6/1998	Inactive	Reclamation Complete	Oakland Township
Isacco Mine	Surface Mine	10910107	8/4/2004	Inactive	Reclamation Complete	Center Township
Jeffery Washer Tipple	Mineral Preparation Plant	10831601	6/17/1986	Active	Reclamation Complete	Jackson Township
Kerry 24 Mine	Surface Mine	3077SM28	12/29/1977	Inactive	Reclamation Complete	Lancaster Township
Kerry 30 Mine	Surface Mine	10803005	2/13/1984	Inactive	Reclamation Complete	Connoquenessing Township
Kerry 30 Mine	Surface Mine	10800108	2/13/1984	Inactive	Reclamation Complete	Connoquenessing Township
Kerry 32 Mine	Surface Mine	10800111	10/17/1980	Inactive	Reclamation Complete	Muddy Creek Township
Knauf Mine	Surface Mine	3077SM29	9/23/1977	Inactive	Reclamation Complete	Jackson Township
Knaug 2 Mine	Surface Mine	3070BSM2	8/31/1979	Inactive	Reclamation Complete	Forward Township
Kohlepp Mine	Surface Mine	10840121	9/13/1985	Inactive	Reclamation Complete	Concord Township
Lamperski Mine	Surface Mine	10830115	1/8/1985	Inactive	Reclamation Complete	Forward Township
Lardintown Mine	Surface Mine	10980110	3/13/2006	na	Surface Mining Permit	Clinton Township
Liperote Mine	Surface Mine	10930102	8/4/2000	Inactive	Reclamation Complete	Summit Township
Mack Mine	Surface Mine	10930106	4/4/1998	Inactive	Reclamation Complete	Clay Township
Malinski Mine	Surface Mine	3077SM32	2/2/1978	Inactive	Reclamation Complete	Summit Township
Malis Mine	Surface Mine	10850110	8/31/1998	Inactive	Reclamation Complete	Oakland Township
Mamula Mine	Surface Mine	10920111	3/31/1994	Inactive	Reclamation Complete	Center Township
Maple Lane Farms 29 Mine	Surface Mine	10803003	9/13/1985	Inactive	Reclamation Complete	Connoquenessing Borough
McCarrier Mine	Surface Mine	10040104	5/30/2007	Active	CM Bond Liability Revision	Concord Township
McCrea Mine	Surface Mine	10010811	1/14/2007	Active	Small Surface Mine Permit	Clearfield Township
McMillen Mine	Surface Mine	37020307	12/24/2002	na	Large Surface Mine Permit	Wayne Township
Medusa Wampum Mine	Surface Mine	3779103	1/13/2006	Active	IM Bonding Inc	Shenango Township
Montgomery Mine	Surface Mine	1079109	8/26/1979	Inactive	Reclamation Complete	Muddy Creek Township
Moore Mine	Surface Mine	10010101	11/1/2006	Active	Reclamation Complete	Muddy Creek Township
Myers Mine	Surface Mine	37010301	5/29/2007	Active	Large Surface Mine Permit	Slippery Rock Township
Oak Ridge Villa Mine	na	37050903	pending	Active	Incidental Extraction	Wayne Township
Pennington Mine	Surface Mine	10970103	2/3/2004	Inactive	Reclamation Complete	Oakland Township
Portersville Mine	Surface Mine	10810106	12/15/1981	Inactive	Reclamation Complete	Muddy Creek Township
Portersville Tipple	Surface Mine	PA0125792	8/10/1984	Inactive	Reclamation Complete	Muddy Creek Township
Rader Mine	Surface Mine	37840107	6/5/1985	Inactive	Reclamation Complete	Perry Township
Raducz Mine	Surface Mine	10040301	7/31/2007	Active	Large Surface Mine Permit	Penn Township
Reino Mine	Surface Mine	37850115	3/10/1986	Inactive	Reclamation Complete	Wayne Township
Rhodes Mine	Surface Mine	3173SM10	4/16/1999	Active	Reclamation Complete	Slippery Rock Township

Connoquenessing Creek Watershed Conservation Plan

Mine Name	Operation	Permit #	Issued Date	Status	Status	Location
Richland Sportsmens Mine	Surface Mine	10930104	10/31/2000	Inactive	Reclamation Complete	Center Township
Rodis Dayen Mine	Surface Mine	10920112	11/28/2006	na	Surface mining permit	Concord Township
Roudybush Mine	Surface Mine	10860108	3/16/1987	Inactive	Reclamation Complete	Summit Township
Sam Whitmir Mine	Surface Mine	1079119	3/12/1981	Inactive	Reclamation Complete	Oakland Township
Seneca Ldfl	Surface Mine	10000103	na	Active	Active	Jackson Township
Shaffer Mine	Surface Mine	10040102	2/2/2007	Active	Reclamation Complete	Concord Township
Smith Mine	Surface Mine	10980109	6/28/2006	Active	Stage 2 Approved	Muddy Creek Township
Southdown Wampum Mine	Surface Mine	37990302	pending	na	IM Blast Plan Approval	Shenango Township
State Ind 22 Mine	Surface Mine	10970105	12/22/2004	Active	CM Annual Bond Calculation	Concord Township
Stewart Mine	Surface Mine	3076SM32	9/22/1980	Inactive	Reclamation Complete	Concord Township
Trusel Mine	Surface Mine	37020302	8/29/2005	na	Large Surface Mine Permit	Slippery Rock Township
Vandevort Mine	Surface Mine	37820110	9/15/1983	Inactive	Reclamation Complete	Perry Township
Vidic Mine	Surface Mine	3077SM26	1/23/1978	Inactive	Reclamation Complete	Concord Township
Vogel Mine	Surface Mine	10810121	6/9/1982	Inactive	Reclamation Complete	Oakland Township
Waite Mine	Surface Mine	10920106	8/12/2003	Inactive	Reclamation Complete	Clay Township
Walker Mine	Surface Mine	3077SM30	10/7/1977	Inactive	Reclamation Complete	Oakland Township
Watkins Mine	Surface Mine	10810113	10/16/1981	Inactive	Reclamation Complete	Cranberry Township
Wayne Township Mine	Surface Mine	37870301	7/8/2003	Active	Large Surface Mine Permit	Wayne Township
Wayne Twp 2 Mine	Surface Mine	37000302	10/16/2006	Active	Reclamation Complete	Wayne Township
Weingartner Mine	Surface Mine	37050101	9/19/2007	Active	Proposed Awaiting Auth Decision	Wayne Township
Welsh Mine	Surface Mine	37050101	pending	Inactive	Reclamation Complete	Wayne Township
Welsh Mine	Surface Mine	37020105	3/20/2007	Active	Active	Wayne Township
West Pgh Mine	Surface Mine	37950303	5/15/2007	Active	Large Surface Mine Permit	Shenango Township
West Pittsburgh Mine	Surface Mine	37060104	pending	na	Surface Mining Permit	Shenango Township
Wilson Mine	Surface Mine	37930302	12/23/2004	Active	Reclamation Complete	Slippery Rock Township
Whitmire Mine	Surface Mine	3077SM15	3/1/1979	Inactive	Reclamation Complete	Oakland Township
Williams Mine	Surface Mine	10900106	na	Abandoned	Bond Forfeited	na
Windhorst Mine	Surface Mine	37920105	3/10/1999	Inactive	Reclamation Complete	Perry Township
Wise Mine	Surface Mine	10810102	10/23/1981	Inactive	Reclamation Complete	Muddy Creek Township
Wittman Mine	Surface Mine	10950102	8/24/2001	Inactive	Reclamation Complete	Lancaster Township
Wright Mine	Surface Mine	10950103	6/13/2006	Active	CM Annual Bond Calculation	Concord Township
Wright Strip	Surface Mine	4920102	7/12/1999	Active	Reclamation Complete	New Sewickley Township
Wthers Mine	Surface Mine	37970302	2/13/2007	na	Large Surface Mine Permit	Slippery Rock Township
Yalentu Mine	Surface Mine	3077SM11	4/8/1977	Inactive	Reclamation Complete	Oakland Township
Yvorra Mine	Surface Mine	37810110	2/4/1982	Inactive	Reclamation Complete	Perry Township

APPENDIX F. RESOURCE CONSERVATION AND RECOVERY ACT

Site	Permit	Type	City	State
Allegheny County				
Applied Concepts Incorporated.	PAR000005090	SQG	Warrendale	PA
Applied Concepts Incorporated.	PAR000035204	Not in a universe	Warrendale	PA
Atlanta Northern & Wire	PAD987284486	SQG	Warrendale	PA
Chemlawn Corp.	PAD092801992	Not in a universe	Warrendale	PA
Contract Applications Warrendale Plant	PAD982364192	Not in a universe	Warrendale	PA
Cranberry Manufacturing.	PAD124837881	CESQG	Warrendale	PA
Dowty Corp.	PAD051750990	SQG	Warrendale	PA
Doyle Equipment Company.	PAD107330789	SQG	Warrendale	PA
Emeryville Trucking Company.	PAD048193981	SQG	Warrendale	PA
Exxon Gas #27173	PAD987330834	CESQG	Warrendale	PA
Gatan Incorporated	PAR000006858	CESQG	Warrendale	PA
Hauhincos Trading	PAD982577223	SQG	Warrendale	PA
Herion Incorporated.	PAD088902564	CESQG	Warrendale	PA
John B Lombardos Complete Collision Incorporated	PA0000971622	CESQG	Warrendale	PA
Killam Associates DLA Division	PAD987356185	CESQG	Warrendale	PA
LECO Corp.	PAD074989393	Not in a universe	Warrendale	PA
Magee	PAR000020495	SQG	Warrendale	PA
Microbac Labs Incorporated.Pittsburgh Div.	PAD987322237	SQG	Warrendale	PA
Mitchell's Amoco	PAD987377686	SQG	Warrendale	PA
Owl Cleaners	PAR000035394	SQG	Warrendale	PA
Pittsburgh Tribune Review Newsworks	PAR000032417	SQG	Warrendale	PA
PPG Industries Incorporated.	PAR000020081	SQG	Warrendale	PA
Precision Auto Works	PAR000022343	CESQG	Warrendale	PA
Precision Auto Works	PAD982661845	SQG		PA
Retail Control Systems Incorporated.	PAD074979873	CESQG	Warrendale	PA
Shaner Autobody	PA0000909788	CESQG	Warrendale	PA
Sunoco Warrendale Plaza 0374 6526	PAD987400017	CESQG	Warrendale	PA
Team Rahal of Warrendale	PAR000526731	SQG	Wexford	PA
Thornhill Printing Incorporated.	PAD987269883	SQG	Warrendale	PA
Tosco 2634218 76 Gas Station	PAR000011148	SQG	Warrendale	PA
US Filter Incorporated. Warrendale PA	PAD981739188	SQG	Warrendale	PA
US Postal Service Warrendale Maint. Facility	PA6180090072	CESQG	Warrendale	PA
Warrendale Fac.	PAD072164858	LQQ	Warrendale	PA

Site	Permit	Type	City	State
Beaver County				
Rhodes Transit Freedom Depot	PAD987336518	SQG	Freedom	PA
Butler County				
A 1 Cleaners	PAD981733017	SQG	Butler	PA
Advanced Polymer Technology	PAD175522911	SQG Reporter	Harmony	PA
Air Turbine Propeller	PAR000510339	SQG	Zelienople	PA
Aircode Industries. Gases Manufacturing	PAD004375598	SQG	Butler	PA
AK Steel - Butler Works	PAD000736934	LQG Reporter	Butler	PA
Allegheny Axle	PAD987292950	CESQG	Butler	PA
Allegheny Metalworking	PAD987391356	SQG	Cranberry Township	PA
Allegheny Power Butler Service Center	PAD987381845	CESQG	Butler	PA
Allegheny Printed Plastics	PAR000009357	CESQG	Cranberry Township	PA
Amer Glass Research	PAD004375531	CESQG	Butler	PA
American Planting Company	PAD990752099	Not in a universe	Zelienople	PA
Ames Department Store	PAD987324100	CESQG	Butler	PA
Anderson Mavor USA Limited	PAD074995853	Not in a universe	Evans City	PA
Applied Test	PAD987346681	SQG	Butler	PA
Ashland Branded Marketing, Incorporated. 996	PAP000004501	Not in a universe	Harmony	PA
AT&T Butler	PAD980555635	SQG	Butler	PA
B & T Auto Repair	PAD086209632	SQG	Butler	PA
Baglier Buick GMC	PAD054826540	SQG	Butler	PA
Baldauf Auto Body	PAD982580144	SQG	Lyndora	PA
Barnes PCP Incorporated	PAD074971565	Not in a universe	East Butler	PA
Barnsteel Abrasives	PAD987337003	SQG	Butler	PA
Bartolis Cleaner Service	PAD013912738	SQG	Butler	PA
BASF Evans City Plant	PAR000509117	LQG	Evans City	PA
Basilon Cleaners	PAD123801201	SQG	Butler	PA
Basilon Dry Cleaners	PAD014361067	SQG	Mars	PA
Beahm and Son Limited	PA0000104943	CESQG	Evans City	PA
Beckwith Machinery Company	PA0000935262	SQG	Cranberry Township	PA
Bell Telephone Company of Pennsylvania	PAD000779876	Not in a universe	Zelienople	PA
Berry Metal Manufacturing	PAD004319992	Not in a universe	Harmony	PA
Bessemer & Lake Erie Railroad Company	PAD981105562	CESQG	Butler	PA
BFS Butler	PAD981934284	SQG	Butler	PA
Biedenbach Auto Body	PA0000899732	CESQG	Butler	PA
Billco Manufacturing	PAD004372371	SQG	Zelienople	PA

Site	Permit	Type	City	State
Butler County (continued)				
Billco Manufacturing Incorporated Plt 2	PAR000036004	SQG	Zelienople	PA
Bio Pace Technology	PAD982680431	SQG	Butler	PA
Bitter Auto Body	PA0000451997	CESQG	Butler	PA
Black Cat Industries	PAR000034272	CESQG	Cranberry Township	PA
Bobcat of Pittsburgh	PA0000601708	SQG	Cranberry	PA
BOC Gases	PAD981946239	SQG	Butler	PA
Booth, J.B. & Company Incorporated	PAR000019315	CESQG	Zelienople	PA
Borlands Auto Repair	PAR000043653	SQG	Mars	PA
BP Facility # 79557	PAR000511196	SQG	Cranberry Township	PA
BP Lubricants USA	PAD982700783	CESQG	Zelienople	PA
BP Oil 07049	PAD981934342	SQG	Butler	PA
BP Oil 07253	PAD981934441	SQG	Zelienople	PA
BP Oil 07365	PAD981934466	SQG	Butler	PA
BP Oil 79557	PAD981933492	SQG	Cranberry Township	PA
Brush Creek Treat Plant Sludge Farm	PAD000797803	Not in a universe	Zelienople	PA
Brush Creek Treatment Plant	PAD000779926	Not in a universe	Zelienople	PA
Buffalo and Pgh RR Butler	PAD982676280	SQG	Butler	PA
Burgh Charles F M	PAD990752446	Not in a universe	Harmony	PA
Burkerts, Jim Paint Shop	PAD982567745	SQG	Harmony	PA
Burt Hill Architects	PAD987356706	CESQG	Butler	PA
Butler American Sales	PAD013913272	SQG	Butler	PA
Butler Area Sewer Authority	PAD068718923	Not in a universe	Butler	PA
Butler Auto Auction	PAD987323961	SQG	Evans City	PA
Butler County Vocational Technology School	PAD124822685	SQG	Butler	PA
		Reporter		
Butler Cnty Comm College	PAD030085690	SQG	Butler	PA
Butler Color Press	PAD037245370		Butler	PA
Butler Forge and Metal Works	PAD987341773	CESQG	East Butler	PA
Butler Mem Hospital	PAD068718253	SQG	Butler	PA
Butler U.S. Army Reserves Center	PA9210021565	CESQG	Butler	PA
Butler VA Med Center	PA9360007281	SQG	Butler	PA
Butler Winding Company	PAR000039867	Not in a universe	Butler	PA
C & M Chemicals Incorporated	PAD096339411	Unspecified	Portersville	PA
Cammissas Auto Body	PAD987329240	CESQG	Butler	PA
Cannon USA Cranberry Twp	PAD982567141	CESQG	Cranberry Township	PA
Cannon USA Incorporated	PAD987380672	SQG	Zelienople	PA
Capitol Cleaners	PAD013913413	SQG	Butler	PA
Cartwright and Lollo	PAD005001219	Transporter	Callery	PA
Castle Rubber Manufacturing	PAD059079533	SQG	East Butler	PA
CCC Truck Parts Company	PAR000020875	SQG	Zelienople	PA

Site	Permit	Type	City	State
Butler County (continued)				
Checkers 1 Hour Cleaners	PAD982661142	SQG	Mars	PA
Chuck Smith Ford	PAD987381639	CESQG	Zelienople	PA
Churchill Truck Lines	PAD987357753	CESQG	Mars	PA
City Auto Repair	PAD982575912	CESQG	Butler	PA
Classic Automotive Incorporated	PAR000508689	CESQG	Mars	PA
Classic Cleaner Cranberry Service	PAD982575516	SQG	Cranberry Township	PA
Cloverleaf Group Incorporated The DBA IDL Merchan	PAR000527085	LQG	East Butler	PA
Cochran Dave Auto Body	PAR000026716	CESQG	Butler	PA
Cochran Dave Auto Body	PAD016017220	Not in a universe	Butler	PA
Cochran Motors	PAD982661993	SQG	Butler	PA
Concast Metal Prod	PAD000765651	Reporter	Mars	PA
		LQG		
Costco Wholesale 328	PAR000503169	SQG	Cranberry Township	PA
Cranberry Lincoln Mercury	PAD982576191	CESQG	Evans City	PA
Cranberry Lincoln-Mercury Inc	PAD982567000	SQG	Evans City	PA
Cue	PAD987389087	SQG	Cranberry Township	PA
Cygnus Manufacturing Company	PAR000508382	CESQG	Saxonburg	PA
Cygnus Manufacturing Company	PAR000509059	CESQG	Saxonburg	PA
Datt, John Auto Body	PAD982580003	SQG	Valencia	PA
DNM Autos Truck Service	PA0000847970	CESQG	Valencia	PA
Dubrook Incorporated	PAR000024091	SQG	Butler	PA
E S M Incorporated	PAD980918239	Not in a universe	Mars	PA
E S M Incorporated	PAD004378261	Not in a universe	Valencia	PA
E S M Incorporated	PAD004378832	Not in a universe	Mars	PA
Eagle Printery	PAR000524348	CESQG	Butler	PA
Eagle Printing Prod Center	PAR000510040	SQG	Butler	PA
Empire Speciality	PAD987332459	CESQG	Mars	PA
EPH Material Handling	PA0000076133	Not in a universe	Mars	PA
Ervin Industries	PAD074997677	Reporter	Butler	PA
		SQG		
ESM Group Incorporated Myoma Plant	PAR000506907	CESQG	Mars	PA
Etzels Auto Body	PAD987394418	CESQG	Butler	PA
FB Leopold Manufacturing Zelienople	PAD982568925	SQG	Zelienople	PA
FBC Chem Manufacturing	PAD053160297	SQG	Mars	PA
Federal Express Corporation BFDA	PAD987365251	CESQG	Mars	PA
Fed Ex	PAD987326691	SQG	Zelienople	PA
Fender Benders Collision	PAR000002691	CESQG	Valencia	PA
Ferroslag	PAD000800474	Not in a universe	Butler	PA

Site	Permit	Type	City	State
Butler County (continued)				
Filmtronics	PAR000034181	Reporter	Butler	PA
		LQG		
Fireforce	PA0000452029	CESQG	Mars	PA
Fireforce Incorporated	PA0000969477	Not in a universe	Butler	PA
Fishers Cleaners & Tuxedos/Butler	PAD981738701	Not in a universe	Butler	PA
Fishers Cleaners & Tuxedos	PAR000030981	CESQG	Butler	PA
GA Industries	PA0000088336	CESQG	Mars	PA
Geithers, Pete Auto Service	PAD013915046	SQG	Butler	PA
Giant Eagle No 640	PAR000042135	CESQG	Butler	PA
Greenwood Fire Station	PAD987395449	CESQG	Butler	PA
Guttendorf Press, The	PAD065614968	SQG	Zelienople	PA
Halstead Industriess Incorporated	PAD004335519	Not in a universe	Zelienople	PA
Harland, John H Co-Plant Number 44	PAD981945751	SQG	Mars	PA
Harmony Cleaners	PAD981105331	SQG	Harmony	PA
Harmony Industries Chrome Plating	PAD980828727	CESQG	Harmony	PA
Harmony Truck Repair	PAD987281375	SQG	Harmony	PA
Hauhincoc	PAR000042507	CESQG	Evans City	PA
Heckett Plant #01	PAD981733405	SQG	Butler	PA
Herman Corporation	PAD981739980	SQG	Zelienople	PA
Herman Corporation	PAD004322608	Not in a universe	Zelienople	PA
Herr Voss Mars Division	PAD987285830	SQG	Mars	PA
Herr Voss Manufacturing	PAD052196375	SQG	Callery	PA
High Meadows Sewage Treatment Plant	PAD000797910	Not in a universe	Renfrew	PA
Highway Equipment Company	PAD981734106	SQG	Zelienople	PA
HJ Schhneider Construction	PAD987283272	SQG	Evans City	PA
Hoffman Auto Parts	PAD987285939	SQG	Butler	PA
Honeywell Alta Group Zelienople Building	PAR000501585	SQG	Zelienople	PA
Horizon Environmental Solutions Corporation	PAR000526814	Not in a universe	Cranberry Twp.	PA
Horizon Environmental Services Incorporated	PAR000507178	CESQG	Cranberry Twp.	PA
House of Kraus Incorporated, The	PAD004395539	Not in a universe	Butler	PA
Hunters Truck Center	PAD123746430	SQG	Butler	PA
Hunters Truck Sales	PAD981731706	CESQG	Butler	PA
Hutchinson Dry Cleaners	PAD981733439	SQG	Butler	PA
Hy Manufacturing Metals Manufacturing	PAD987328408	CESQG	Mars	PA
IA Const Zelienople Batch Plant	PAD981044480	Used Oil	Evans City	PA
Industrial Machine Incorporated	PAD043745553	Not in a universe	Zelienople	PA

Site	Permit	Type	City	State
Butler County (continued)				
International Machine	PAD981733157	SQG	Butler	PA
ISM Fastening System	PAD004327466	Reporter	Butler	PA
		LQG		
J K Hydraulics Incorporated	PAR000030866	SQG	Butler	PA
J K Hydraulics Incorporated	PAR000020842	SQG	Butler	PA
Jack and Jill Dry Cleaners	PA0000368324	SQG	Mars	PA
James Austin Manufacturing	PAD004340923	CESQG	Mars	PA
JDL Leasing	PAD987379237	Not in a universe	Zelienople	PA
Jiffy Lube	PAD987357811	SQG	Butler	PA
Jims Auto Body	PAR000002709	CESQG	Butler	PA
Jims Auto Body	PAD987378981	CESQG	Zelienople	PA
Joesph J Brunner Incorporated Brunner Landfill	PAD007824766	Transporter	Zelienople	PA
Judson, Jim	PAD982572448	SQG	Butler	PA
Kasing Auto Sales Incorporated	PAD982570319	CESQG	Harmony	PA
Kelly Cadillac Chevrolet	PAD013915277	SQG	Butler	PA
Kenny Ross Chervolet	PAD987356896	SQG	Zelienople	PA
		Transporter		
Kent Addams Auto	PAD987392180	CESQG	Harmony	PA
Keystone Alum Manufacturing	PAD080635311	Not in a universe	Mars	PA
Kozminski Auto Body	PAD987285954	SQG	Mars	PA
Kwik Fill S10	PAD987337375	SQG	Zelienople	PA
Kwik Fill S13	PAD987283090	SQG	Butler	PA
Kwik Fill S14	PAD987283058	SQG	Evans City	PA
Kwik Fill S61	PAD987337490	SQG	Prospect	PA
Kwik Fill S68	PAD987337474	SQG	Evans City	PA
Laidlaw Transit Prospect	PAR000017210	CESQG	Prospect	PA
Lancy International Incorporated	PAD101613719	SQG	Zelienople	PA
Langer Jeep Renault	PAD014977987	SQG	Evans City	PA
Larrys Auto	PA0000451930	Not in a universe	Mars	PA
Lasalle Dry Cleaner Service	PAD981734981	CESQG	Cranberry Twp.	PA
LB Smith	PAD981935406	SQG	Evans City	PA
Leasway	PAD981732258	SQG	East Butler	PA
Lectromat Manufacturing	PAD068719616	SQG	Mars	PA
Lennons Auto Body	PAR000001354	CESQG	Valencia	PA
Leopold F B Company	PAD123786097	SQG	Zelienople	PA
Leopold F B Company	PAD981936933	SQG	Harmony	PA
Lowes Home Ctrs No 0165	PAR000032870	SQG	Butler	PA
Main Steel Polishing	PAR000035378	SQG	Harmony	PA
Marmon Keystone	PAD063745756	SQG	East Butler	PA
Mars Mineral Corporation	PAT440012235	Not in a universe	Saxonburg	PA
Mashuda	PAD074993320	SQG	Evans City	PA
McDonald Mtr Incorporated	PAD013915863	SQG	Butler	PA
Meco Belts	PAR000020602	SQG	Zelienople	PA

Site	Permit	Type	City	State
Butler County (continued)				
Metalized Ceramics for Electronics Incorporated	PAR000040006	Not in a universe	East Butler	PA
Metro Dry Cleaner	PAD987284478	SQG	Cranberry Twp.	PA
Metscan Incorporated C/O Thomas Kane	PAD982679912	Not in a universe	Evans City	PA
MHF Incorporated	PAR000000281	Transporter	Zelienople	PA
MHF Logistical Solutions	PAR000505123	LQG	Cranberry Twp.	PA
		Transporter		
		Used Oil		
MHF Logistical Solutions Incorporated	PAR000036889	Transporter	Zelienople	PA
Midway Auto Body	PAD987351525	CESQG	Valencia	PA
	PAD987391828	CESQG		
Mikan Pontiac	PAD047209986	SQG	Butler	PA
Mike Milech	PAD013916135	Not in a universe	Butler	PA
Mike's Collision	PAD987387776	CESQG	Zelienople	PA
Mike's Collision Repair	PAD162619712	Not in a universe	Harmony	PA
Miller Screen & Design	PAD043741511	SQG	Mars	PA
Milliken Automotive Service	PAD045282258	SQG	Butler	PA
Mine Safety Appliances	PAD981036551	Reporter	Cranberry Twp.	PA
		LQG		
Mine Safety Appliances-Evans City Plant	PAD004322913	Reporter	Evans City	PA
		LQG		
		TSD		
Minuteman Press	PAR000024463	CESQG	Butler	PA
Modern Transportation Services	PAD981938038	Transporter	Zelienople	PA
Monro Muffler Brake 81	PAD982576977	SQG	Butler	PA
Montgomery Ward & Company	PAD987373164	Not in a universe	Butler	PA
Motor Express Incorporated	PAD044314474	Not in a universe	Zelienople	PA
Multiserv Plus Plant 16	PAD981113087	SQG	Butler	PA
Muscle Prod Butler	PAR000507301	CESQG	Butler	PA
Muska Auto	PA0000031336	CESQG	Mars	PA
Myers Trucking	PAD052190766	Transporter	Harmony	PA
Napco Valencia Plant	PAD004319802	Reporter	Valencia	PA
		LQG		
Nationwide Insurance	PAD987342482	CESQG	Butler	PA
Neighborhood Cleaners, The	PAR000036533	CESQG	Cranberry Twp.	PA
Nick's Body Shop	PAD982579740	SQG	Lyndora	PA
Norsub Incorporated	PAD098434574	Transporter	Evans City	PA
North Star Pontiac	PAR000526889	SQG	Zelienople	PA
Oesterlings Sandblasting	PAR000021253	SQG	Butler	PA
Oesterlings Sandblasting & Painting	PAD982674798	SQG	Butler	PA
Overland Transport Systems	PAR000011890	Not in a universe	Zelienople	PA

Site	Permit	Type	City	State
Butler County (continued)				
PA Bureau of Narcotics Invest-Zelienople	PAD982695470	SQG	Zelienople	PA
PA DOT Butler Cnty Maintenance Building	PAD981731839	SQG	Butler	PA
PA Nat Guard Maintenance Shop	PA5211890038	SQG	Butler	PA
Paul's Chrome Plating Evans City	PAR000037275	LQG	Evans City	PA
Paul's Chrome Plating Mars	PAD094212081	Reporter	Mars	PA
		Not in a universe		
Pelushi, Joseph A Scrap	PAD982578544	SQG	Unionville	PA
		Transporter		
Pelushi, Joseph A Scrap	PAD013916671	Not in a universe	Butler	PA
Penn Champ	PAD058569740	Reporter	East Butler	PA
		Not in a universe		
Penn Cleaners	PAD013912381	SQG	Butler	PA
Penn Power Cranberry Service Center	PAR000522805	CESQG	Zelienople	PA
Penn Vacusonics	PAR000034967	CESQG	Butler	PA
Penna Flame Industries Incorporated	PAR000019281	Not in a universe	Zelienople	PA
PENNDOT SR 0079 at Exit 26 N.	PAD987270980	Not in a universe	Zelienople	PA
Pennsylvania Recovery Corp	PAD058106626	Not in a universe	Mars	PA
Pennzoil Company	PAD063745020	Not in a universe	Butler	PA
Perry Forge Butler Plant	PAD004346219	Not in a universe	Zelienople	PA
Pierrel, Joe Auto	PAD118304716	SQG	Butler	PA
Pindroh Brothers Incorporated	PAD097122675	SQG	Evans City	PA
Precision Automotive	PAD982701328	SQG	Butler	PA
Preston Auto Group	PAD116020157	SQG	Butler	PA
Print King	PAR000526947	CESQG	Cranberry Twp.	PA
Pro One Auto	PAR000010413	CESQG	Butler	PA
Pullman Standard Building	PAD004317343	Not in a universe	Butler	PA
Pulva Manufacturing	PAD987285186	SQG	Valencia	PA
R & K Auto Sales	PAR000008250	CESQG	Zelienople	PA
R & K Specialties	PAR000038364	CESQG	Valencia	PA
Ralph's Auto Body	PAD166563080	SQG	Butler	PA
Refiners Transportation & Term	PAD084599448	CESQG	East Butler	PA
Resolite Division of Stabilit Amer	PAD004496816	Reporter	Zelienople	PA
		Not in a universe		
Ritter Engineering	PAD987267457	SQG	Zelienople	PA
Robert Neff Incorporated	PAD987346442	SQG	Mars	PA
Robinson Industrial	PAD987332996	CESQG	Zelienople	PA
Rod's Auto Body	PAD987282738	CESQG	Renfrew	PA
Rome Metals Incorporated	PAD987372067	SQG	Zelienople	PA
Rood Trucking	PA0000780056	CESQG	Evans City	PA

Site	Permit	Type	City	State
Butler County (continued)				
S & W Wire	PAD987379476	CESQG	Zelienople	PA
Sam's Club 4859	PAR000512079	CESQG	Butler	PA
Sapienzas Service	PA0000786574	CESQG	Harmony	PA
Schaffner Printing	PAD004399036	CESQG	Butler	PA
Sears	PA0000045427	CESQG	Butler	PA
Servistar	PAD987285541	Not in a universe	East Butler	PA
Sheetz 217	PAR000507889	SQG	Butler	PA
Sheetz 250	PAR000524751	SQG	Butler	PA
Sheetz 335	PAR000525253	SQG	Butler	PA
Sheetz 133	PAR000526244	SQG	Mars	PA
Sherwin Williams Company, The	PAD982578858	CESQG	Butler	PA
Sherwin Williams Company, The	PAD987328309	SQG	Butler	PA
Sherwin Williams Company, The	PAD074958869	Not in a universe	Butler	PA
Simpson Buick Chevrolet	PAD015164049	SQG	Zelienople	PA
Sir Speedy Printers Manufacturing	PAR000010355	CESQG	Butler	PA
Sohio Oil Company (Site #57284)	PAD981934409	SQG	Butler	PA
Sorg Engineering Company Incorporated	PAD070460415	Not in a universe	Butler	PA
Spang Industriess Incorporated Magnetics Division	PAD004340949	Not in a universe	East Butler	PA
Spang Magnetics Division	PAD004334694	Not in a universe	East Butler	PA
	PAD980715742	Reporter LQG		
Speedway Superamer	PAR000038018	SQG	Butler	PA
Steinheiser Propane	PAD123801094	SQG	Butler	PA
Stengles Auto Body	PAD987283959	SQG	Zelienople	PA
Stirling Village L & G	PAR000008268	CESQG	Butler	PA
Strutz Fabricators Incorporated	PAD990703472	Not in a universe	Mars	PA
Student Transportation of Amer	PA0000082594	CESQG	Prospect	PA
Sunoco 0323 6783	PAR000502815	CESQG	Seven Springs	PA
Sunoco 0363 4995	PAD987340437	CESQG	Butler	PA
Sunoco 0364 0968	PAD982676793	CESQG	Butler	PA
Sunoco 0364 1008	PAD982676736	SQG	Mars	PA
Sunoco Service Station	PAD000774430	Not in a universe	Butler	PA
Sunoco Service Station	PAD000774406	Not in a universe	Butler	PA
Sunoco Service Station	PAD000754127	Not in a universe	Mars	PA
Sunoco Service Station	PAD000774414	Not in a universe	Butler	PA
Sunoco Service Station	PAD000774422	Not in a universe	Butler	PA
Sunoco Service Station	PAD000754259	CESQG	Mars	PA
Sunoco Service Station	PAD000775510	Not in a universe	Zelienople	PA
Superamer 5208	PA0000140376	CESQG	Butler	PA
Tee Pee Cleaners	PAD982675118	SQG	Mars	PA
The Home Depot #4135	PAR000043703	CESQG	Cranberry Twp.	PA

Site	Permit	Type	City	State
Butler County (continued)				
The Home Depot #4139	PAR000043679	CESQG	Butler	PA
The Warrendale Plating Company Incorporated	PAD004386629	Unspecified	Mars	PA
Tool-o-Matic Incorporated	PAD004357414	Not in a universe	Zelienople	PA
Tosco 2634215 76 Gas Station	PAR000011072	SQG	Cranberry Twp.	PA
Traco Aluminum Window Manufacturing	PAD004396610	Reporter	Cranberry Twp.	PA
		LQG		
Transaxle	PAR000004044	SQG	Zelienople	PA
Triangle Gasoline	PAD987364825	SQG	Butler	PA
Trinity Industries	PAD981043318	Not in a universe	Butler	PA
Tru Green Corporation	PAD981732985	SQG	Mars	PA
Turnpike Toyota	PAD987346491	SQG	Mars	PA
		Reporter		
TW Phillips Gas & Oil	PAD987359023	SQG	Butler	PA
Tyco Healthcare Retail Group	PAD068722834	SQG	Harmony	PA
U S X Corp. Homestead Works	PAD000731364	Not in a universe	Saxonburg	PA
Ultra Pure Technologies	PAD987279056	SQG	Mars	PA
Universal Manufacturing	PAD004341079	SQG	Zelienople	PA
Universal Motor Sales of Butler	PAD059080622	SQG	Butler	PA
UPS Butler Distribution Center	PAD987358728	CESQG	Butler	PA
US Waste Hauler Company	PAD008936866	Transporter	Zelienople	PA
Vesuvius USA	PAD004329124	Not in a universe	Zelienople	PA
Viking Spirit Trailers Manufacturing	PAR000010405	CESQG	Renfrew	PA
Vogel Disposal Service Incorporated	PAD005820691	TSD	Zelienople	PA
Wack Engineering	PAD987390127	SQG	Harmony	PA
Wagner Printing Manufacturing	PA0000199711	CESQG	Butler	PA
Wal Mart Supercenter 1885	PAR000506790	CESQG	Butler	PA
Wal Mart Supercenter 1885	PAR000502195	CESQG	Butler	PA
Wal Mart Stores Incorporated	PAR000038455	CESQG	Cranberry Twp.	PA
	PAR000502104	CESQG		
Warrenty Parts	PAD101583128	SQG	Valencia	PA
Waterbec Auto Body	PA0000131714	CESQG	Butler	PA
Weaverling Printing	PAR000030973	CESQG	Cranberry Twp.	PA
Weaverling Printing Company	PAR000017558	CESQG	Cranberry Twp.	PA
Wise Business Forms Incorporated	PAR000032128	CESQG	Butler	PA
Wise Business Forms Incorporated	PAD051131779	Not in a universe	Butler	PA
Wise Machine Company	PA0000008490	SQG	Butler	PA
Woodings Industries	PAD045294147	Not in a universe	Mars	PA
Woodward Industries	PAD004378139	CESQG	Mars	PA
Wroblewski Gulf	PAR000509042	SQG	Zelienople	PA
Yoder Pontiac & Oldsmobile	PA0000018754	SQG	Zelienople	PA

Site	Permit	Type	City	State
Butler County (continued)				
Zimmerman's Service	PAD981739451	SQG	Valencia	PA

Lawrence County

AEP Ellwood City	PAD987400504	CESQG	Ellwood City	PA
Amer Steel	PAD004341095	Not in a universe	Ellwood City	PA
Columbia Gas Ellwood City Comp Station	PAD987397825	SQG	Ellwood City	PA
Columbia Gas of PA Ellwood City	PA0001016880	SQG	Ellwood City	PA
	PAR000505263	SQG		
Commercial Machine Works/ALCO Standard	PAD010448108	SQG	Ellwood City	PA
Ellwood City Borough Wastewater Treatment Plant	PAD074959305	Not in a universe	Ellwood City	PA
Ellwood City Forge	PAD982680555	CESQG	Ellwood City	PA
Ellwood City Heat Treating Company. InCompanyrporated.	PAD119118875	Not in a universe	Ellwood City	PA
Ellwood City Hospital	PAD068743772	SQG	Ellwood City	PA
Ellwood City Iron & Wire	PAD987271434	LQG	Ellwood City	PA
Ellwood Laundry Service	PAD014065916	SQG	Ellwood City	PA
ETSS Incorporated.	PAR000023309	Not in a universe	Ellwood City	PA
H & H Gen Tire	PAR000008243	CESQG	Ellwood City	PA
Hall Industries Incorporated.	PAD147306328	SQG	Ellwood City	PA
INMETCO Manufacturing	PAD087561015	Reporter	Ellwood City	PA
		LQG		
		TSD		
Kwik Fill S0028 280	PAD987337334	SQG	Ellwood City	PA
Laidlaw Transit Incorporated.	PAR000042960	CESQG	Ellwood City	PA
Legend Buick Pontiac	PAD987384351	CESQG	Ellwood City	PA
MSL Industries Incorporated.- Garrett Division	PAD001747500	LQG	Ellwood City	PA
McElwain Chevrolet Oldsmobile	PAD982571473	SQG	Ellwood City	PA
Mill Tex Industries	PA0000144105	SQG	Ellwood City	PA
Myers Chemical Transport	PAD041255175	SQG	Ellwood City	PA
		Transporter		
Nino's One Hour Martinizing	PAD014066872	SQG	Ellwood City	PA
ONDEO NALCO South Plant	PAD000651992	Reporter	Ellwood City	PA
		LQG		
		Used Oil		
P & L Machine Company	PAD990827354	Not in a universe	Ellwood City	PA
Paul's Auto Body	PA0000561936	CESQG	Ellwood City	PA
Pecoraro-Freeman Buick-Pontiac Incorporated.	PAD153749676	SQG	Ellwood City	PA
Ralph Viccari S 1 Hour Cleaners	PAD987367984	SQG	Ellwood City	PA
Richard A Barnes DMD	PAR000030015	CESQG	Ellwood City	PA

Site	Permit	Type	City	State
Lawrence County (continued)				
Sherwin-Williams Co.	PAD000739482	Not in a universe	Ellwood City	PA
Sli Lighting	PAD987279619	Reporter	Ellwood City	PA
		Not in a universe		
Solomon's Dry Cleaning	PAD014067342	SQG	Ellwood City	PA
STM	PAD987401015	SQG	Ellwood City	PA
Sunoco Service Station	PAD000759050	Not in a universe	Ellwood City	PA
Sunoco Service Station-Ellwood City	PAD000759027	Not in a universe	Ellwood City	PA
Sunoco Service Station-Ellwood City	PAD000759035	Not in a universe	Ellwood City	PA
Sunoco Service Station-Ellwood City	PAD000759043	Not in a universe	Ellwood City	PA
Tic Toc Food Mart 108	PAD987327764	SQG	Ellwood City	PA
Townsend Textron Manufacturing.	PAD004340394	TSD	Ellwood City	PA
Universal Machine & Valve Corp.	PAD056882814	Not in a universe	Ellwood City	PA
US Liquids	PAD987270154	Transporter	Ellwood City	PA
Walt Ziegler Auto Body Shop	PA0000791491	CESQG	Ellwood City	PA
Whiting Dry Cleaner & Laundry Service.	PAD072175060	CESQG	Ellwood City	PA

APPENDIX G. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITS

Site/Facility Name	Permit #	Permit Type	Issue Date	Expire Date	City	Municipality
Allegheny County						
Luthultz, Robert	PAG046304	State Issued	1/15/2005	2/4/2009	Wexford	Marshall Township
Timbercreek Farms Homeowners Association	PA0205249	State Issued	12/6/2005	12/31/2010	Warrendale	Marshall Township
US Postal Service	PAR806152	State Issued	8/31/2005	8/31/2010	Warrendale	Marshall Township
Beaver County						
New Sewickley Township	PA0098914	State Issued	1/12/2006	1/31/2011	Rochester	New Sewickley Township
Penna Flame Industry	PA0004685	State Issued	4/6/2006	4/30/2011	Zelienople	Franklin Township
Safran, Greg	PAG046180	State Issued	4/12/2004	2/4/2009	Fombell	Franklin Township
Schweiger, Rani	PAG046185	State Issued	7/19/2004	2/4/2009	Fombell	Franklin Township
Smithwand Mobile Home Park Sewage Treatment Plant	PA0098060	State Issued	11/12/2003	11/12/2008	Fombell	Franklin Township
Sunoco Incorporated	PA0028011	State Issued	8/25/2003	8/25/2008	Rochester	New Sewickley Township
Wright, Dale & Elaine	PA0218456	State Issued	8/31/2005	8/31/2010	New Brighton	New Sewickley Township
Wright, Dean	PAG046322	State Issued	5/22/2006	2/4/2009	Harmony	Franklin Township
Camp Kon O Kwee Spencer	PA0217824	State Issued	3/11/2003	3/11/2008	Fombell	Marion Township
Butler County						
Three Rivers Ice Cream Service	PA0239186	State Issued	7/31/2003	7/30/2008	Evans City	Forward Township
A Cubed Corporation	PA0002216	State Issued	6/9/2004	6/8/2009	Mars	Adams Township
Abbey Woods Homeowners Association	PA0221325	State Issued	9/23/2004	9/22/2009	Zelienople	Jackson Township
Air Products & Chemicals, Incorporated	PAR238301	State Issued	12/17/2002	12/16/2007	Lyndora	Butler Township

Connoquenessing Creek Watershed Conservation Plan

Site/Facility Name	Permit #	Permit Type	Issue Date	Expire Date	City	Municipality
Butler County (continued)						
Albanowski, Albert	PAG048574	State Issued	6/29/2004	2/4/2009	Evans City	Jackson Township
Barnhart, Ralph	PAG048900	State Issued	7/18/2003	7/17/2008	Butler	Summit Township
Baxter Mobile Home Park	PA0102580	State Issued	5/17/2006	5/16/2011	Butler	Center Township
Bergbigler, James	PAG049211	State Issued	11/21/2005	2/4/2009	Butler	Oakland Township
Berry Metal Manufacturing	PAR208303	State Issued	1/28/2003	1/27/2008	Harmony	Jackson Township
Blank, Michael	PAG048882	State Issued	4/7/2003	4/6/2008	Evans City	Adams Township
Boyda, Theodore	PAG048386	State Issued	6/13/2006	2/4/2009	Renfrew	Penn Township
Brush Creek Water Pollution Control Facility	PA0024571	State Issued	11/15/2004	11/14/2009	Cranberry Township	Cranberry Township
Buffalo & Pittsburgh Railroad	PAR808331	State Issued	4/7/2003	4/6/2008	Butler	Butler Township
Butler County Airport Authority	PAR808353	State Issued	3/4/2005	3/3/2010	Butler	Penn Township
Butler County Country Club	PA0220931	State Issued	11/2/2004	11/1/2009	Butler	Penn Township
Chestnut Grove Homeowners Association	PA0238619	State Issued	6/23/2006	6/22/2011	Butler	
Clifford, Brenda & Gregory	PAG048703	State Issued	8/15/2005	2/4/2009	Valencia	Adams Township
Connoquenessing Borough Sewage Treatment Plant	PA0223051	State Issued	7/22/2005	7/21/2010	Connoquenessing	Connoquenessing Borough
Cromwell Estates Mobile Home Park	PA0239666	State Issued	6/6/2006	6/11/2011	Saxonburg	Jefferson Township
Cumberledge, C Thomas Sr.	PA0222810	State Issued	12/26/2003	12/25/2008	Connoquenessing	Lancaster Township
Ervin Industries	PAR218308	State Issued	8/29/2003	8/28/2008	Butler	Summit Township
Evans City Borough Wastewater Treatment Plant	PA0028941	State Issued	6/20/2003	6/19/2008	Evans City	Jackson Township
Evans City Borough Wastewater Treatment Plant	PA0102130	State Issued	1/7/2005	1/6/2010	Evans City	Jackson Township
Gavin, Jeffery	PAG048907	State Issued	8/7/2003	8/6/2008	Butler	Penn Township
Glenn Hawbaker Incorporated	PAR708322	State Issued	4/26/2006	4/25/2011	Butler	Penn Township
Green, Kevin & Rita	PA0239208	State Issued	7/18/2003	7/17/2008	Fennelton	Summit Township
Green Acres MHP	PA0102482	State Issued	4/24/2006	4/23/2011	Butler	Penn Township
High Meadows Sewer Service	PA0091197	State Issued	6/2/2003	6/1/2008	Butler	Penn Township

Connoquenessing Creek Watershed Conservation Plan

Site/Facility Name	Permit #	Permit Type	Issue Date	Expire Date	City	Municipality
Butler County (continued)						
Hulbert, Gregory	PAG048585	State Issued	1/12/2004	1/11/2009	Harmony	Jackson Township
Jaksec, Florence	PA0239747	State Issued	3/7/2006	3/6/2011	Butler	Penn Township
John Wagner & Sons Auto Recycling	PAR608331	State Issued	7/7/2005	7/6/2010	Harmony	Lancaster Township
Joseph Brunner Incorporated	PAR506116	State Issued	12/21/2005	12/21/2010	Zelienople	New Sewickley Township
Kennedy, William	PAG048638	State Issued	9/17/2004	2/4/2009	Evans City	Adams Township
Keystone Senior Care	PA0092304	State Issued	9/8/2003	9/7/2007	Butler	Penn Township
Kibbie, John	PAG049017	State Issued	11/8/2004	2/4/2009	Butler	Summit Township
Lighthouse Foundation Group Home	PA0221635	State Issued	3/27/2003	3/26/2008	Butler	Middlesex Township
Lutherlyn Camp & Retreat Center	PA0104299	State Issued	9/30/2005	9/29/2010	Prospect	Connoquenessing Township
Mason, David & Lori	PA0239461	State Issued	6/3/2004	6/2/2009	Saxonburg	Clinton Township
Meadow Ridge Sewage Treatment Plant	PA0239518	State Issued	8/20/2004	8/19/2009	Evans City	Forward Township
Michael's Restaurant & Motel	PA0239411	State Issued	3/24/2004	3/23/2009	Butler	Franklin Township
Middlesex Township Wastewater Treatment Plant	PA0238937	State Issued	4/3/2003	4/3/2008	Butler	Middlesex Township
Nalepa, Nancy & Ronald	PAG048939	State Issued	1/22/2004	1/21/2009	Evans City	Forward Township
Oak Springs Mobile Home Park Incorporated	PA0102547	State Issued	11/9/2004	11/8/2009	Cranberry Township	Cranberry Township
One Land Corporation/Fitness Center	PA0102598	State Issued	3/21/2005	3/20/2010	Valencia	Middlesex Township
Orchard, Karen	PAG049212	State Issued	10/31/2005	2/4/2009	Mars	Adams Township
Pennsylvania American Water-Butler	PA0210161	State Issued	11/18/2005	11/17/2010	Butler	Oakland Township
Penn Christian Academy	PA0093301	State Issued	8/1/2005	7/31/2010	Butler	Penn Township
Petrick, Robert	PAG048597	State Issued	3/4/2004	2/4/2009	Butler	Penn Township
Pine Valley Estates Mobile Home Park	PA0041564	State Issued	10/2/2003	10/1/2008	Harmony	Jackson Township
Pittsburgh District Church	PA0031879	State Issued	10/14/2005	10/13/2010	Butler	Franklin Township
Port O-Call Mobile Home Park	PA0090590	State Issued	2/2/2004	2/1/2009	Butler	Penn Township
Purvis Brothers Incorporated	PAR808378	State Issued	2/17/2004	2/16/2009	Mars	Adams Township
Puskar, Kathleen	PAG048897	State Issued	8/7/2003	8/6/2008	Renfrew	Forward Township

Connoquenessing Creek Watershed Conservation Plan

Site/Facility Name	Permit #	Permit Type	Issue Date	Expire Date	City	Municipality
Butler County (continued)						
Reffner, Collins	PA0239763	State Issued	1/31/2006	1/31/2011	Butler	Summit Township
Rock Lake North Association	PA0104132	State Issued	4/21/2003	4/20/2011	Zelienople	Jackson Township
Rolling Valley Estates	PA0102822	State Issued	12/27/2004	12/26/2009	Butler	Connoquenessing Township
Sandy Hill Estates	PA0102717	State Issued	8/10/2004	8/9/2009	Valencia	Middlesex Township
Sarver, Thomas	PAG049182	State Issued	6/30/2005	2/4/2009	Butler	Cranberry Township
Saxonburg Area Authority	PA0029122	State Issued	12/15/2004	12/14/2009	Renfrew	Jefferson Township
Scherer, Jean & Joseph	PAG048846	State Issued	2/3/2003	2/2/2008	Renfrew	Forward Township
Seibel, Fred	PAG048996	State Issued	8/12/2004	2/4/2009	Saxonburg	Middlesex Township
Severino, Dan & Pauline	PAG049236	State Issued	5/4/2006	2/4/2009	Evans City	Forward Township
Shannon Mills Estate	PA0239569	State Issued	10/14/2005	10/13/2010	Renfrew	Butler Township
Shemela, Ronald	PAG048922	State Issued	9/17/2003	9/16/2008	Mars	Adams Township
Smith, Grant	PAG049154	State Issued	3/21/2005	2/4/2009	Harmony	Jackson Township
Starr Subdivision	PA0239623	State Issued	12/5/2005	12/4/2009	Valencia	Middlesex Township
Staskiewicz, Thomas & Alma	PAG048530	State Issued	7/28/2003	7/27/2008	Mars	Adams Township
Suburban Animal Clinic	PA0221287	State Issued	1/30/2004	1/29/2009	Butler	Penn Township
Summit School Incorporated	PA0031305	State Issued	5/24/2006	5/23/2011	Herman	Summit Township
Traficante, Michael	PAG048514	State Issued	2/12/2003	2/11/2008	Butler	Penn Township
UPS Incorporated	PAR808348	State Issued	3/23/2005	3/22/2010	Butler	Summit Township
USF Holland Incorporated/Mars Pennsylvania Facility	PAR808357	State Issued	1/31/2006	1/30/2011	Mars	Adams Township
Victnor Farms Single Residence Sewage Treatment Plant	PA0239101	State Issued	6/11/2003	6/10/2008	Evans City	Forward Township
Villa Vista Estates	PA0102610	State Issued	7/5/2005	7/4/2010	Butler	Middlesex Township
Weider, Andrea Single Resident Sewage Treatment Plant	PAG048878	State Issued	3/13/2003	3/12/2008	Evans City	Forward Township
Western Butler County Authority	PA0021504	State Issued	6/19/2003	6/18/2008	Zelienople	Jackson Township

Connoquenessing Creek Watershed Conservation Plan

Site/Facility Name	Permit #	Permit Type	Issue Date	Expire Date	City	Municipality
Butler County (continued)						
Wilson Ridge-Walnut Square and Hidden Acres	PA0239615	State Issued	9/13/2005	9/12/2010	Evans City	Forward Township
Wolfe, John	PAG048967	State Issued	5/12/2004	2/4/2009	Cranberry Township	Cranberry Township
Woodland Meadows Mobile Home Park	PA0101826	State Issued	11/30/2004	11/29/2009	Renfrew	Connoquenessing Township
Woods, Abbey	PA221325	State Issued	9/23/2004	9/22/2009	Zelienople	Jackson Township
Zacherl, James	PAG048339	State Issued	9/2/2004	2/4/2009	Renfrew	Penn Township
Ziegler, Bruce	PAG049157	State Issued	3/16/2005	2/4/2009	Butler	Summit Township

Lawrence County

Baker, Bruce	PAG049250	State Issued	5/10/2006	2/4/2009	Harmony	Perry Township
Ellport Borough Sewer Authority	PA0038814	State Issued	3/8/2005	3/7/2010	Ellwood City	Wayne Township
Ellwood City Borough Wastewater Treatment Plant	PA0026832	State Issued	7/27/2005	7/26/2010	Ellwood City	Wayne Township
Nalco Company-Ellwood Plant	PA0003824	State Issued	8/25/2004	8/31/2009	Ellwood City	Wayne Township
Salvation Army-Camp Allegheny	PA0209996	State Issued	7/12/2006	7/11/2011	Ellwood City	Wayne Township
Santilo, Charles & Deborah	PAG048509	State Issued	9/26/2003	9/25/2008	Ellwood City	Wayne Township
Schry Water Conditioning	PA0003573	State Issued	10/18/2004	10/17/2009	Ellport	Wayne Township
West Wind Village Mobile Home Park	PA0238872	State Issued	6/19/2003	6/18/2008	Ellwood City	Wayne Township

Appendix H: Species of Concern

Common Name	Scientific Name	Global Rank	State Rank	State Status	Proposed State Status	Federal Status
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Birds

American Bittern	<i>Botaurus lentiginosus</i>	G4	S1B	PE	PE	
American Coot	<i>Fulica americana</i>	G5	S3B,S3N		CR	
Appalachian Bewick's Wren	<i>Thryomanes bewickii altus</i>	G5T2Q	SH		PX	
Bald Eagle	<i>Haliaeetus leucocephalus</i>	G5	S2B	PT	PT	PS:LT,PD
Common Moorhen	<i>Gallinula chloropus</i>	G5	S3B		CA	PS
Dickcissel	<i>Spiza americana</i>	G5	S2B	PE	PE	
Great Blue Heron	<i>Ardea herodias</i>	G5	S3S4B,S4N			
King Rail	<i>Rallus elegans</i>	G4	S1B	PE	PE	
Least Bittern	<i>Ixobrychus exilis</i>	G5	S1B	PE	PE	
Marsh Wren	<i>Cistothorus palustris</i>	G5	S2S3B		CR	
Osprey	<i>Pandion haliaetus</i>	G5	S2B	PT	PT	
Pied-billed Grebe	<i>Podilymbus podiceps</i>	G5	S3B,S4N		CR	
Sedge Wren	<i>Cistothorus platensis</i>	G5	S1B	PE	PE	
Short-eared Owl	<i>Asio flammeus</i>	G5	S1B,S3N	PE	PE	
Sora	<i>Porzana carolina</i>	G5	S3B		CR	
Upland Sandpiper	<i>Bartramia longicauda</i>	G5	S1S2B	PT	PT	
Virginia Rail	<i>Rallus limicola</i>	G5	S3B			

Fish

Southern Redbelly Dace	<i>Phoxinus erythrogaster</i>	G5	S1	PT	PT	
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Invertebrates

Appalachian Jewelwing	<i>Calopteryx angustipennis</i>	G4	S1S2			
Blue-tipped Dancer	<i>Argia tibialis</i>	G5	S1			
Gray Petaltail	<i>Tachopteryx thoreyi</i>	G4	S3			
Halloween Pennant	<i>Celithemis eponina</i>	G5	S2S3			
Regal Fritillary	<i>Speyeria idalia</i>	G3	S1			
Sable Clubtail	<i>Gomphus rogersi</i>	G4	S1			
Smoky Rubyspot	<i>Hetaerina titia</i>	G5	S2			

Mammals

Northern Myotis	<i>Myotis septentrionalis</i>	G4	S3B,S3N		CR	
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Connoquenessing Creek Watershed Conservation Plan

Common Name	Scientific Name	Global Rank	State Rank	State Status	Proposed State Status	Federal Status
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Mussels

Clubshell	<i>Pleurobema clava</i>	G2	S1S2	PE	PE	LE, XN
Creek Heelsplitter	<i>Lasmigona compressa</i>	G5	S2S3		CR	
Long-solid	<i>Fusconaia subrotunda</i>	G3	S1		PE	
Purple Wartyback	<i>Cyclonaias tuberculata</i>	G5	SX		PX	
Rainbow Mussel	<i>Villosa iris</i>	G5	S1		PE	
Snuffbox	<i>Epioblasma triquetra</i>	G3	S1		PE	

Plants

American Columbo	<i>Swertia caroliniensis</i>	G5	S1	PE	PE	
American Globeflower	<i>Trollius laxus</i>	G4T3	S1	PE	PE	
Appalachian Gametophyte Fern	<i>Vittaria appalachiana</i>	G4	S2	PT	PT	
Autumn Willow	<i>Salix serissima</i>	G4	S2	PT	PT	
Balsam Poplar	<i>Populus balsamifera</i>	G5	S1	PE	PE	
Beard-tongue	<i>Penstemon laevigatus</i>	G5	S3	N	TU	
Broad-leaved Water-plantain	<i>Alisma triviale</i>	G5	S1	PE	PE	
Broad-leaved Willow	<i>Salix myricoides</i>	G4	S2	N	TU	
Broad-winged Sedge	<i>Carex alata</i>	G5	S2	PT	PT	
Brome Grass	<i>Bromus kalmii</i>	G5	S3	N	TU	
Brook Lobelia	<i>Lobelia kalmii</i>	G5	S1	PE	PE	
Brown Sedge	<i>Carex buxbaumii</i>	G5	S3	TU	PR	
Carolina Grass-of-parnassus	<i>Parnassia glauca</i>	G5	S2	PE	PE	
Carolina Leaf-flower	<i>Phyllanthus caroliniensis</i>	G5	S1	PE	PE	
Carolina Willow	<i>Salix caroliniana</i>	G5	S1	N	PE	
Common Shooting-star	<i>Dodecatheon meadia</i>	G5	S1	PE	PE	
Cyperus-like Sedge	<i>Carex pseudocyperus</i>	G5	S1	PE	PE	
Dodder	<i>Cuscuta campestris</i>	G5T5	S2	N	TU	
Downy Willow-herb	<i>Epilobium strictum</i>	G5?	S3	PE	PR	
Drooping Bluegrass	<i>Poa languida</i>	G3G4Q	S2	TU	PT	
Duckweed sp.	<i>Lemna turionifera</i>	G5	SU	TU	TU	
Featherbells	<i>Stenanthium gramineum</i>	G4G5	S1S2	N	TU	
Glaucous Rattlesnake-root	<i>Prenanthes racemosa</i>	G5	SNR	PX	PX	

Connoquenessing Creek Watershed Conservation Plan

Common Name	Scientific Name	Global Rank	State Rank	State Status	Proposed State Status	Federal Status
Plants (continued)						
Great Indian-plantain	<i>Cacalia muehlenbergii</i>	G4	S1	N	PE	
Greenflowered Wintergreen	<i>Pyrola chlorantha</i>	G5	S1	N	TU	
Harbinger-of-spring	<i>Erigenia bulbosa</i>	G5	S2	PT	PT	
Hard-stemmed Bulrush	<i>Schoenoplectus acutus</i>	G5	S2	PE	PE	
Heartleaf Meehania	<i>Meehania cordata</i>	G5	S1	TU	PE	
Highbush-cranberry	<i>Viburnum trilobum</i>	G5T5	S3S4	TU	PR	
Hooded Ladies'-tresses	<i>Spiranthes romanzoffiana</i>	G5	S1	PE	PE	
Laurentian Bladder-fern	<i>Cystopteris laurentiana</i>	G3	S1	TU	PE	
Lobed Spleenwort	<i>Asplenium pinnatifidum</i>	G4	S3	N	PR	
Meadow Willow	<i>Salix petiolaris</i>	G5	S4	TU	DL	
Mead's Sedge	<i>Carex meadii</i>	G4G5	S1	TU	PE	
Mistflower	<i>Eupatorium coelestinum</i>	G5	S3	N	TU	
New England Grape	<i>Vitis novae-angliae</i>	G4G5Q	S1	PE	PE	
Pineland Pimpernel	<i>Samolus parviflorus</i>	G5T5	S2	TU	PE	
Prairie Sedge	<i>Carex prairea</i>	G5?	S2	PT	PT	
Purple Rocket	<i>Iodanthus pinnatifidus</i>	G5	S1	PE	PE	
Pursh's Golden-rod	<i>Solidago purshii</i>	G4G5	SH	TU	TU	
Puttyroot	<i>Aplectrum hyemale</i>	G5	S3	PR	PR	
Queen-of-the-prairie	<i>Filipendula rubra</i>	G4G5	S1S2	TU	TU	
Roundleaf Serviceberry	<i>Amelanchier sanguinea</i>	G5	S1	TU	PE	
Scarlet Indian-paintbrush	<i>Castilleja coccinea</i>	G5	S2	TU	PT	
Sedge sp.	<i>Carex tetanica</i>	G4G5	S2	PT	PT	
Shining Ladies'-tresses	<i>Spiranthes lucida</i>	G5	S3	N	TU	
Short-awn Foxtail	<i>Alopecurus aequalis</i>	G5	S3	N	TU	PS
Showy Goldenrod	<i>Solidago speciosa</i> var. <i>speciosa</i>	G5T5?	SNR	N	PT	
Showy Lady's-slipper	<i>Cypripedium reginae</i>	G4	S2	PT	PT	

Connoquenessing Creek Watershed Conservation Plan

Common Name	Scientific Name	Global Rank	State Rank	State Status	Proposed State Status	Federal Status
Plants (continued)						
Slender Spike-rush	<i>Eleocharis elliptica</i>	G5	S2	PE	PE	
Slender Spike-rush	<i>Eleocharis tenuis</i> var. <i>verrucosa</i>	G5T3T5	S1	PE	PE	
Small Wood Sunflower	<i>Helianthus microcephalus</i>	G5	S3	N	TU	
Small Yellow Lady's-slipper	<i>Cypripedium calceolus</i> var. <i>parviflorum</i>	G5	S1	PE	PE	
Snow Trillium	<i>Trillium nivale</i>	G4	S3	PR	PR	
Soft-leaved Sedge	<i>Carex disperma</i>	G5	S3	PR	PR	
Sterile Sedge	<i>Carex sterilis</i>	G4	S1	PT	PE	
Stiff Cowbane	<i>Oxypolis rigidior</i>	G5	S2	TU	PT	
Swamp Lousewort	<i>Pedicularis lanceolata</i>	G5	S1S2	N	PE	
Tall Larkspur	<i>Delphinium exaltatum</i>	G3	S1	PE	PE	
Tall Tick-trefoil	<i>Desmodium glabellum</i>	G5	SU	TU	TU	
Thin-leaved Cotton-grass	<i>Eriophorum viridicarinatum</i>	G5	S2	PT	PT	
Twig Rush	<i>Cladium mariscoides</i>	G5	S2	PE	PE	
Virginia Bunchflower	<i>Melanthium virginicum</i>	G5	SU	N	TU	
White Trout-lily	<i>Erythronium albidum</i>	G5	S3	N	TU	
Wild Kidney Bean	<i>Phaseolus polystachios</i>	G5	S1S2	N	TU	
Yellow Gentian	<i>Gentiana alba</i>	G4	SH	TU	PX	

Reptiles

Bog Turtle	<i>Glyptemys muhlenbergii</i>	G3	S1S2	PE	PE	LT, SAT
Eastern Massasauga	<i>Sistrurus catenatus catenatus</i>	G3G4T3T4Q	S1S2	PE	PE	C
Kirtland's Snake	<i>Clonophis kirtlandii</i>	G2	SH	PE	PE	

Basic Global Rank Codes and Definitions

Rank Code	Description	Definition
GX	Presumed Extinct	Believed to be extinct throughout its range. Not located despite intensive searches of historic sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.
GH	Possibly Extinct	Known from only historical occurrences. Still some hope of rediscovery.
G1	Critically Imperiled	Critically imperiled globally because of extreme rarity or because of some factor(s) making it especially vulnerable to extinction. Typically 5 or fewer occurrences or very few remaining individuals (<1,000) or acres (<2,000) or stream miles (<10).
G2	Imperiled	Imperiled globally because of rarity or because of some factor(s) making it very vulnerable to extinction. Typically 6 to 20 occurrences or few remaining individuals (1,000 to 3,000) or acres (2,000 to 10,000) or stream miles (10 to 50).
G3	Vulnerable	Vulnerable globally either because very rare and local throughout its range, found only in a restricted range (even if abundant at some locations), or because of other factors making it vulnerable to extinction. Typically 21 to 100 occurrences or between 3,000 and 10,000 individuals.
G4	Apparently Secure	Uncommon but not rare, and usually widespread. Possibly cause for long-term concern. Typically more than 100 occurrences and more than 10,000 individuals.
G5	Secure	Common, typically widespread and abundant. Typically with considerably more than 100 occurrences and more than 10,000 individuals.
G#G#	Range Rank	A numeric range rank (e.g., G2G3) is used to indicate uncertainty about the exact status of a taxon.
T	Infraspecific Taxon (trinomial)	The status of infraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank. Rules for assigning T ranks follow the same principles outlined above. For example, the global rank of a critically imperiled subspecies of an otherwise widespread and common species would be G5T1. A T subrank cannot imply the subspecies or variety is more abundant than the species= basic rank (e.g., a G1T2 subrank should not occur). A population (e.g., listed under the U.S. Endangered Species Act or assigned candidate status) may be tracked as an infraspecific taxon and given a T rank; in such cases a Q is used after the T rank to denote the taxon's questionable taxonomic status.

Global Rank Qualifiers

Qualifier	Description	Definition
?	Inexact Numeric Rank	Denotes inexact numeric rank.
Q	Questionable Taxonomy	Taxonomic status is questionable; numeric rank may change with taxonomy.
C	Captive or Cultivated Only	Taxon at present is extant only in captivity or cultivation, or as a reintroduced population not yet established.

State Rank Codes and Definitions

Rank Code	Description	Definition
SX	Extirpated	Element is believed to be extirpated from the "state" (or province or other subnational unit).
SH	Historical	Element occurred historically in the state (with expectation that it may be rediscovered), perhaps having not been verified in the past 20 years, and suspected to be still extant. Naturally, an element would become SH without such a 20-year delay if the only known occurrences in a state were destroyed or if it had been extensively and unsuccessfully looked for. Upon verification of an extant occurrence, SH-ranked elements would typically receive an S1 rank. The SH rank should be reserved for elements for which some effort has been made to relocate occurrences, rather than simply ranking all Elements not known from verified extant occurrences with this rank.
S1	Critically Imperiled	Critically imperiled in the state because of extreme rarity or because of some factor(s) making it especially vulnerable to extirpation from the state. Typically 5 or fewer occurrences or very few remaining individuals or acres.
S2	Imperiled	Imperiled in the state because of rarity or because of some factor(s) making it very vulnerable to extirpation from the state. Typically 6 to 20 occurrences or few remaining individuals or acres.
S3	Vulnerable	Vulnerable in the state either because rare and uncommon, or found only in a restricted range (even if abundant at some locations), or because of other factors making it vulnerable to extirpation. Typically 21 to 100 occurrences.
S4	Apparently Secure	Uncommon but not rare, and usually widespread in the state. Usually more than 100 occurrences.
S5	Secure	Demonstrably widespread, abundant, and secure in the state, and essentially ineradicable under present conditions.
S?	Unranked	State rank is not yet assessed.

State Rank Codes and Definitions (continued)

Rank Code	Description	Definition
SU	Unrankable	Currently unrankable due to lack of information or due to substantially conflicting information about status or trends. NOTE: Whenever possible, the most likely rank is assigned and a question mark added (e.g., S2?) to express uncertainty, or a range rank (e.g., S2S3) is used to delineate the limits (range) of uncertainty.
S#S#	Range Rank	A numeric range rank (e.g., S2S3) is used to indicate the range of uncertainty about the exact status of the Element. Ranges cannot skip more than one rank (e.g., SU should be used rather than S1S4).
HYB	Hybrid	Element represents an interspecific hybrid.
SE	Exotic	An exotic established in the state; may be native in nearby regions (e.g., house finch or catalpa in eastern U.S.).
SE#	Exotic Numeric	An exotic established in the state that has been assigned a numeric rank to indicate its status, as with S1 through S5.
SA	Accidental	Accidental or casual in the state (i.e., infrequent and outside usual range). Includes species (usually birds or butterflies) recorded once or only a few times. A few of these species may have bred on the one or two occasions they were recorded. Examples include European strays or western birds on the East Coast and vice-versa.
SZ	Zero Occurrences	Not of practical conservation concern in the state because there are no definable occurrences, although the taxon is native and appears regularly in the state. This rank will generally be used for long distance migrants whose occurrences during their migrations have little or no conservation value for the migrant as they are typically too irregular (in terms of repeated visitation to the same locations), transitory, and dispersed to be reliably identified, mapped, and protected. Typically, the SZ rank applies to a non-breeding population in the subnation -- for example, birds on migration. An SZ rank may in a few instances also apply to a breeding population, for example certain Lepidoptera which regularly die out every year with no significant return migration. Although the SZ rank typically applies to migrants, it should not be used indiscriminately. Just because a species is on migration does not mean it receives an SZ rank. SZ only applies when the migrants occur in an irregular, transitory, and dispersed manner.
SP	Potential	Potential that Element occurs in the state but no extant or historic occurrences reported.

State Rank Codes and Definitions (continued)

Rank Code	Description	Definition
SR	Reported	Element reported in the state but without a basis for either accepting or rejecting the report. Some of these are very recent discoveries for which the program hasn't yet received first-hand information; others are old, obscure reports.
SRF	Reported Falsely	Element erroneously reported in the state (e.g., misidentified specimen) and the error has persisted in the literature
SSYN	Synonym	Element reported as occurring in the state, but state does not recognize the taxon; therefore the Element is not ranked by the state.
*		S rank has been assigned and is under review. Contact the individual state Natural Heritage program for assigned rank.
Not Provided		Species is known to occur in this state. Contact the individual state Natural Heritage program for assigned rank.

State Rank Qualifiers

Qualifier	Description	Definition
B	Breeding	Basic rank refers to the breeding population of the Element in the state.
N	Non-breeding	Basic rank refers to the non-breeding population of the Element in the state.
?	Inexact or Uncertain	Denotes inexact or uncertain numeric rank. For SE denotes uncertainty of exotic status. (The ? qualifies the character immediately preceding it in the SRANK.)
C	Captive or Cultivated	Element is presently extant in the state only in captivity or cultivation, or as a reintroduced population not yet established.
NOTE - A breeding status subrank is only used for species that have distinct breeding and/or non-breeding populations in the state. A breeding-status SRANK can be coupled with its complementary non-breeding-status SRANK. The two are separated by a comma, with the higher-priority rank listed first in		

Pennsylvania State Status - Invertebrates

Status	Description	Definition
N		No current legal status but is under review for future listing.

Pennsylvania Status Definitions - Plants

Status	Description	Definition
PE	Pennsylvania Endangered	Plant species which are in danger of extinction throughout most of their natural range within this Commonwealth, if critical habitat is not maintained or if the species is greatly exploited by man. This classification shall also include any populations of plant species that have been classified as Pennsylvania
PT	Pennsylvania Threatened	Plant species which may become endangered throughout most or all of their natural range within this Commonwealth, if critical habitat is not maintained to prevent their future decline, or if the species is greatly exploited by man.
PR	Pennsylvania Rare	Plant species, which are uncommon within this Commonwealth. All species of the native wild plants classified as Disjunct, Endemic, Limit of Range and Restricted are included within the Pennsylvania Rare classification.
	Disjunct	Significantly separated from their main area of distribution
	Endemic	Confined to a specialized habitat.
	Limit of Range	At or near the periphery of their natural distribution
	Restricted	Found in specialized habitats or habitats infrequent in Pennsylvania.
PX	Pennsylvania Extirpated	Plant species believed by the Department to be extinct within this Commonwealth. These plants may or may not be in existence outside the Commonwealth.
PV	Pennsylvania Vulnerable	Plant species which are in danger of population decline within Commonwealth because of their beauty, economic value, use as a cultivar, or other factors which indicate that persons may seek to remove these species from their native habitats.
TU	Tentatively Undetermined	A classification of plant species which are believed to be in danger of population decline, but which cannot presently be included within another classification due to taxonomic uncertainties, limited evidence within historical records, or insufficient data.
N		No current legal status exists, but is under review for future listing.

Pennsylvania State Status - Wild Birds and Mammals

Status	Description	Definition
PE	Pennsylvania Endangered	Species in imminent danger of extinction or extirpation throughout their range in Pennsylvania if the deleterious factors affecting them continue to operate. These are: 1) species whose numbers have already been reduced to a critically low level or whose habitat has been so drastically reduced or degraded that immediate action is required to prevent their extirpation from the Commonwealth; or 2) species whose extreme rarity or peripherality places them in potential danger of precipitous declines or sudden extirpation throughout their range in Pennsylvania; or 3) species that have been classified as "Pennsylvania Extirpated", but which are subsequently found to exist in Pennsylvania as long as the above conditions 1 or 2 are met; or 4) species determined to be "Endangered" pursuant to the Endangered Species Act of 1973, Public Law 93 205 (87 Stat. 884), as amended.
PT	Pennsylvania Threatened	Species that may become endangered within the foreseeable future throughout their range in Pennsylvania unless the casual factors affecting the organism are abated. These are: 1) species whose populations within the Commonwealth are decreasing or have been heavily depleted by adverse factors and while not actually endangered, are still in critical condition; 2) species whose populations may be relatively abundant in the Commonwealth but are under severe threat from serious adverse factors that have been identified and documented; or 3) species whose populations are rare or peripheral and in possible danger of severe decline throughout their range in Pennsylvania; or 4) species determined to be "Threatened" pursuant to the Endangered Species Act of 1973, Public Law 93205 (87 Stat. 884), as amended, that are not listed as "Pennsylvania Endangered".
N		No current legal status but is under review for future listing.

Pennsylvania State Status - Fish, Amphibians, Reptiles, and Aquatic Organisms

Status	Description	Definition
PE	Pennsylvania Endangered	All species declared by: 1) the Secretary of the United States Department of the Interior to be threatened with extinction and appear on the Endangered Species List or the Native Endangered Species List published in the Federal Register; or 2) have been declared by the Pennsylvania Fish Commission, Executive Director to be threatened with extinction and appear on the Pennsylvania Endangered Species List published by the Pennsylvania Bulletin.
PT	Pennsylvania Threatened	All species declared by: 1) the Secretary of the United States Department of the Interior to be in such small numbers throughout their range that they may become endangered if their environment worsens, and appear on a Threatened Species List published in the Federal Register; or 2) have been declared by the Pennsylvania Fish Commission Executive Director to be in such small numbers throughout their range that they may become endangered if their environment worsens and appear on the Pennsylvania Threatened Species List published in the Pennsylvania Bulletin.
PC		Animals that could become endangered or threatened in the future. All of these are uncommon, have restricted distribution or are at risk because of certain aspects of their biology.
N		No current legal status, but is under review for future listing.

Pennsylvania Biological Survey Suggested Status Definitions

Status	Description	Definition
PE	Pennsylvania Endangered	Species in imminent danger of extinction or extirpation throughout their range in Pennsylvania if the deleterious factors affecting them continue to operate. These are: 1) species whose numbers have already been reduced to a critically low level or whose habitat has been so drastically reduced or degraded that immediate action is required to prevent their extirpation from the Commonwealth; or 2) species whose extreme rarity or peripherality places them in potential danger of precipitous declines or sudden extirpation throughout their range in Pennsylvania; or 3) species that have been classified as "Pennsylvania Extirpated", but which are subsequently found to exist in Pennsylvania as long as the above conditions 1 or 2 are met; or 4) species determined to be "Endangered" pursuant to the Endangered Species Act of 1973, Public Law 93 205 (87 Stat. 884), as amended.

Pennsylvania Biological Survey Suggested Status Definitions

Status	Description	Definition
PT	Pennsylvania Threatened	Species that may become endangered within the foreseeable future throughout their range in Pennsylvania unless the casual factors affecting the organism are abated. These are: 1) species whose populations within the Commonwealth are decreasing or have been heavily depleted by adverse factors and while not actually endangered, are still in critical condition; 2) species whose populations may be relatively abundant in the Commonwealth but are under severe threat from serious adverse factors that have been identified and documented; or 3) species whose populations are rare or peripheral and in possible danger of severe decline throughout their range in Pennsylvania; or 4) species determined to be "Threatened" pursuant to the Endangered Species Act of 1973, Public Law 93205 (87 Stat. 884), as amended, that are not listed as "Pennsylvania Endangered".
PR	Pennsylvania Rare	Plant species which are uncommon within this Commonwealth. All species of the native wild plants classified as Disjunct, Endemic, Limit of Range and Restricted are included within the Pennsylvania Rare classification.
	Disjunct	Significantly separated from their main area of distribution
	Endemic	Confined to a specialized habitat.
	Limit of Range	At or near the periphery of their natural distribution
CP	Candidate Proposed	Species comprising taxa for which the Pennsylvania Biological Survey (PBS) currently has substantial information on hand to support the biological appropriateness of proposing to list as
CA	Candidate at Risk	Species that although relatively abundant now are particularly vulnerable to certain types of exploitation or environmental modification.
CR	Candidate Rare	Species which exist only in one of a few restricted geographic areas or habitats within Pennsylvania, or they occur in low numbers over a relatively broad area of the Commonwealth.
CU	Condition Undetermined	Species for which there is insufficient data available to provide an adequate basis for their assignment to other classes or categories.
PX	Pennsylvania Extirpated	Species that have disappeared from Pennsylvania since 1600 but still exist elsewhere.
DL	Delisted	Species which were once listed but are now cited for delisting.
N		No current legal status, but is under study for future listing.

Federal Status Codes and Definitions

LE	Listed Endangered	A species which is in danger of extinction throughout all or a significant portion of its range.
LT	Listed Threatened	Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.
LELT	Listed Endangered in part of range; listed Threatened in the remaining part.	
PE	Proposed Endangered	Taxa proposed to be listed as endangered.
PT	Proposed Threatened	Taxa proposed to be listed as threatened
PEPT		Proposed Endangered in part of range; proposed Threatened in the remaining part.
C	Candidate for listing.	
E(S/A)		Treat as Endangered because of similarity of appearance.
T(S/A)		Treat as Threatened because of similarity of appearance.
XE	Essential Experimental population	
XN	Nonessential Experimental population	
"xy" (mixed status)		Status varies for different populations or parts of range.
"x" NL		Status varies for different populations or parts of range with at least one part not listed.

APPENDIX I. RECREATION FACILITIES

Recreation Site	Municipality	Size	Amenities
<i>Recreational Parks</i>			
Adams Township Park	Adams Township		
Butler Athletic Field	Butler, City of		Athletic Field
Butler Memorial Park	Butler, City of	84.6 acres	Playgrounds, multi-purpose field, obstacle course, tennis courts, picnic shelters, horseshoe court, swimming pool, volleyball court, skateboarding and restrooms
Diamond Park	Butler, City of	.5 acres	Historical monuments, benches, and fountain
Father Marinaro Park	Butler, City of	7 acres	Multi-purpose field, playground, and sandbox
Institute Hill Playground	Butler, City of	.7 acres	Basketball court, volleyball court, and a playground
Island Playground	Butler, City of	2.2 acres	Picnic pavilion, playground, and volleyball court
Pullman Park	Butler, City of	7.3 acres	Baseball stadium and grandstand
Ritts Park	Butler, City of	7 acres	Tennis courts, basketball court, playground
Rotary Park	Butler, City of	2 acres	Picnic tables and playground
South Hills Playground	Butler, City of	.3 acres	Basketball courts, sandbox, and a playground
SS Play Area	Butler, City of		Playground
Whippo Avenue Playground	Butler, City of	1.3 acres	Swings, sandbox, and multi-purpose field
Almeda Park	Butler Township	417 acres	Multi-purpose field, picnic shelters, horseshoe and boccie courts, sand volleyball courts, swimming pool and bath house, playground, restrooms, and a fitness trail
Butler Community College	Butler Township		Athletic Field
Butler Township Athletic fields	Butler Township		Athletic fields
Daniel Lohner Park	Butler Township	.3 acres	Asphalt pad and picnic shelter
Highfield Park	Butler Township		
Meridian Athletic Fields 1 and 2	Butler Township		Athletic fields

Connoquenessing Creek Watershed Conservation Plan

Recreation Site	Municipality	Size	Amenities
Recreational Parks (continued)			
Saw Mill Run/Butler Township Park	Butler Township	90 acres	Deck hockey court, multi-purpose fields, lodge, 9-hole golf course, downhill ski trails, sledding area, picnic pavilion, hiking trail, restrooms, and a cross country ski trail.
Woodbury Estates Park Lot	Butler Township	1.7 acres	Undeveloped
Callery Field	Callery Borough		Athletic fields
Butler County Soccer Association	Center Township		Athletic fields
Lion Park	Center Township	3.7 acres	No facilities
Timberly Heights Athletic Fields	Center Township		Athletic fields
Connoquenessing Park	Connoquenessing Borough	16.3 acres	Fishing, tennis, basketball, horseshoes, picnic areas, Athletic fields, lake, and restrooms
Butler Farm Show	Connoquenessing Township		
Connoquenessing Elementary Play Area	Connoquenessing Township		Playground
Roe Field	Connoquenessing Township		Athletic fields
White Church Athletic Fields	Connoquenessing Township		Athletic fields
Whitestown Athletic fields	Connoquenessing Township		Athletic fields
Cranberry Athletic Fields	Cranberry Township		Athletic fields
Cranberry Play Areas	Cranberry Township		Playground
Cranberry School Athletic fields	Cranberry Township		Athletic fields
Cranberry Community Park	Cranberry Township	68 acres	picnic shelters, tennis courts, volleyball courts, athletic fields, playground, basketball court, nature
Cranberry Skate Park	Cranberry Township		Skate park
Graham Park (under dev.)	Cranberry Township		Under development
North Boundary Park	Cranberry Township		Picnic areas, baseball field, soccer fields, playground, sledding hill, water park, and walking path
Rolling Road Field	Cranberry Township	2 acres	Soccer/Hockey fields

Connoquenessing Creek Watershed Conservation Plan

Recreation Site	Municipality	Size	Amenities
<i>Recreational Parks (continued)</i>			
Brandon Park	East Butler Borough	.3 acres	Basketball court and playground
East Butler, City of Park	East Butler Borough	16.8 acres	Pavilion, playground, and horseshoe courts
Fifth Street Park	East Butler Borough	.2 acres	Playground and basketball court
Circle Playground	Ellwood City Borough		Playground
Ellport Community Park	Ellwood City Borough		Picnic areas, playground, fields, Connoquenessing Creek
Ewing Park	Ellwood City Borough		Picnic areas, playground, swimming pool, fields, hiking trails, running track, basketball court, and bocce
G. William Blank Jr. Park/ Franklin Township Park	Ellwood City Borough	6 acres	Pavilion and playground
Merritt Book Park	Ellwood City Borough		Playground
RC Steiffel Park	Ellwood City Borough	44 acres	Tennis, hockey, athletic fields
Rosannah Street Playground	Ellwood City Borough	.8 acres	
Edco Park	Evans City Borough	3.3 acres	Swimming pool, pavilion, volleyball courts
Evans City Athletic fields 1 and 2	Evans City Borough		Athletic fields
Evans City Athletic fields 3	Evans City Borough		Athletic fields
Evans City Elementary Athletic Fields	Evans City Borough		Athletic fields
Forward Township Ballfields	Forward Township		Athletic fields, Canoe access
Franklin Township Elementary Play Area	Franklin Township		Playground
Harmony Playground	Harmony Borough	.25 acres	Swings, basketball court, and picnic table
Swampoodle Park	Harmony Borough		Playground
Wood Street Park	Harmony Borough		Future stream access site
Seneca Valley Athletic Fields	Jackson Township		Athletic fields
Jefferson Township Athletic fields	Jefferson Township		Athletic fields
Knoch Athletic Fields	Jefferson Township		Athletic fields
Laura J. Doerr Memorial Park	Jefferson Township		Swimming pool, pavilion, volleyball courts

Connoquenessing Creek Watershed Conservation Plan

Recreation Site	Municipality	Size	Amenities
Recreational Parks (continued)			
Bauder Park	Lancaster Township	1.5 acres	Athletic fields and picnic shelter
Garfield Playground	Mars Borough	1.8 acres	Multi-purpose field, playground, and basketball court
Mars Borough Athletic Field	Mars Borough	5.6 acres	Athletic fields and concession stand
Mars Borough Ice Skating Rink	Mars Borough	.7 acres	Ice skating rink, sand volleyball, and pavilion
Mars Borough Park	Mars Borough		
Athletic fields	Marshall Township		Athletic fields
Warrendale Park	Marshall Township		
Knob Hill Community Park	Marshall Township		
Middlesex Township Park	Middlesex Township	12 acres	Mixed use field, tennis court, pavilion, and playground
Moraine State Park (portions of)	Muddy Creek Township		
Green Valley Township Park	New Sewickley Township	89.2 acres	Athletic fields, restrooms, and concession stand
Brush Creek Park	North Sewickley Township	645	Picnic areas, tennis courts, horse trails, basketball courts, athletic fields, walking and jogging trails, playgrounds, lake, meadow, and a covered bridge
Penn Township Athletic fields	Penn Township		Athletic fields
Penn Township High School Athletic Fields	Penn Township		Athletic fields
Penn Township Playground	Penn Township		Playground
Renfrew Park	Penn Township	1.5 acres	Picnic shelter and half-court basketball
Pine Community Park	Pine Township		Playground
Portersville Community Park	Portersville Borough	37.7 acres	Multi-purpose fields, playground, pavilion, horseshoe courts, and restrooms
Prospect Boys and Girls Club Park	Prospect Borough		Athletic fields, pavilions
Richland Park	Richland Township		Playground
Aderhold Park	Saxonburg Borough	1.1 acres	Small wooded lot
Green Acres Park	Saxonburg Borough	1.8 acres	Under development

Recreational Facility	Location		Description
Recreational Parks (continued)			
Roebling Park	Saxonburg Borough		Picnic pavilions, museum
Seven Fields Town Park	Seven Fields Borough	7 acres	Playground, basketball courts, swimming pool, baseball field, soccer fields, and picnic pavilion
Adams Ridge Park	Seven Fields Borough		Basketball court, playground, tennis court, pool, athletic fields, restrooms, clubhouse
North Ridge Park	Seven Fields Borough		
Herman Athletic fields	Summit Township		Athletic Fields
Summit Play Area	Summit Township		Playground
Valencia Community Park	Valencia Borough	7 acres	Playground, basketball court, picnic shelter, and baseball field
Ecoz Park	Zelienople Borough	148 acres	Pavilions and stream access
Zelienople Community Park	Zelienople Borough	40 acres	Swimming pool, athletic fields, tennis court, basketball court, picnic areas, playground, and walking trail
Zelienople Main Street Park	Zelienople Borough		Historical monuments

Recreational Facility	Location		Description
Golf Courses			
Aubrey's Dubbs Dred Golf Course	Butler Township		18-hole semi-private course
Butler Country Club	Penn Township		18-hole private course
Conley Resort Inn	Penn Township		18-hole public course
Connoquenessing Country Club	North Sewickley		18-hole private course
Cranberry Highlands	Cranberry Township		18-hole public course
Del Mar Golf Course	Wayne Township		18-hole semi-private course
Hartmann's Deep Valley Golf Course	Jackson Township		18-hole public course
Highland Golf Course	Summit Township		18-hole public course
Krendale Golf Course	Butler Township		Three nine-hole courses played as 18-hole course
Lake Arthur Country Club	Franklin Township		18-hole public course
Lake Vue North Golf Club	Penn Township		18-hole public course
Mars-Bethel Golf Course	Adams Township		Nine-hole public course

Connoquenessing Creek Watershed Conservation Plan

Recreational Facility	Location	Description
Golf Courses (continued)		
Mount Chestnut Driving Range and Golf Course	Franklin Township/Center Township	Nine-hole public course
Old Stonewall Golf Club	North Sewickley	18- hole course
Pine Needles Par 3	Butler Township	Nine-hole public course
Pittsburgh North Golf Course	Richland Township	27-hole public course
Rittswood Golf Course	Middlesex Township	18-hole public course
Serene Valley Golf Course	Summit Township	Nine-hole public course
Stoughton Acres Golf Course	Center Township	18-hole public course
Strawberry Ridge Golf Course and Driving Range	Lancaster Township	18-hole public course
Suncrest Golf Course	Penn Township	18-hole public course
Treesdale Golf and Country Club	Adams Township	9-hole private course
Venango Trails Golf Club	Marshall Township	18-hole private course

Historic Sites

Bessenheim Furnance	Franklin Township (<i>Beaver Co.</i>)	Old furnance site located in Franklin Township, Beaver County
Woolslayer Bridge	North Sewickley	Covered bridge over Brush Creek at the Brush Creek Park
Butler Armory	Butler, City of	
Butler County Courthouse	Butler, City of	
Butler County National Bank	Butler, City of	
Butler Historic District	Butler, City of	
Elm Court	Butler, City of	
Senator Walter Lowrie House	Butler, City of	
Harmony Historic District	Harmony Borough, Jackson Township	
Passavant House	Zelienople Borough	
Harmony Museum	Harmony Borough	
Maridon Museum	Butler, City of	
Providence Plantation	Evans City	
Harmonie Society Cemetery	Harmony Borough	
Saxonburg Historic District	Saxonburg Borough	
John Roebling House	Saxonburg Borough	

Recreational Facility	Location	Description	
<i>Conservation Areas</i>			
Hereford Manor Lakes	Franklin Township		
Deston Woods Conservation Area	Butler Township	15 acres	1/4 mile trail, picnic tables
Glade Run Management Area	Middlesex Township	146.4 acres	Glade Run Lake (55 acre), fishing pier, boat launch, restrooms
Proposed Harmony Boat Launch	Harmony		
Seven Fields Nature Park	Seven Fields		
Middlesex Township Nature Preserve	Middlesex Township	18 acres	Undeveloped Nature Preserve
Rock Point	Ellwood City		Boat Launch

APPENDIX K. SURVEY AND INTERVIEW QUESTIONS

Public Survey

Connoquenessing Creek Watershed Conservation Plan

Thank you for taking the time to complete this very important survey. The Connoquenessing Creek Watershed Conservation Plan Steering Committee and Western Pennsylvania Conservancy are conducting this survey.

The purpose of this study is to help us understand what residents of the communities within the watershed think of current conditions and their future visions. Your ideas provide a basis for making recommendations and priorities for the watershed in the plan. Should you have any questions about the survey, or if you would like to find out more information or become involved in the planning process, please do not hesitate to contact Carla Ruddock or Kylie Daisley of the Western Pennsylvania Conservancy at 724-459-0953.

Thanks again for your time to complete this survey. We truly value your input.

Public Survey

1.) In what county and municipality do you reside?

County _____ Municipality _____

2.) In what watershed do you reside?

- Lower Connoquenessing Creek (Mainstem) –Little Connoquenessing Creek to mouth and including Brush Creek
- Middle Connoquenessing Creek (Mainstem) –Thorn Creek to Little Connoquenessing Creek and including Glade Run, Breakneck Creek, and little Connoquenessing Creek
- Upper Connoquenessing Creek (Mainstem) –Headwaters to Thorn Creek including Bonnie Brook and Thorn Creek
- Don't Know
- Other _____

3.) What do you think are the two most common land uses in your area?

- Residential
- Commercial
- Industrial
- Other _____
- Forested
- Agricultural
- Recreation

4.) Please indicate the importance of the following watershed values.

	Very Important	Somewhat Important	Neutral	Not likely Important	Not Important
Attractive Natural Settings	5	4	3	2	1
Preserving Historic Sites	5	4	3	2	1
Recreation Opportunities	5	4	3	2	1
Water Quality Improvement	5	4	3	2	1
New Business/Jobs	5	4	3	2	1
Community Activities	5	4	3	2	1
Residential Development	5	4	3	2	1
Educational Opportunities	5	4	3	2	1
Other _____	5	4	3	2	1

5.) Please indicate the importance of the following recreational activities in the watershed.

	Very Interested	Somewhat Interested	Neutral	Not-likely Interested	Not Interested
Boating	5	4	3	2	1
Hiking	5	4	3	2	1
Fishing	5	4	3	2	1
Canoeing/Kayaking	5	4	3	2	1
Horseback Riding	5	4	3	2	1
Swimming	5	4	3	2	1
Hunting	5	4	3	2	1
Bird Watching	5	4	3	2	1
Picnicking	5	4	3	2	1
Visiting Scenic Vistas	5	4	3	2	1
Organized Sports	5	4	3	2	1
Photography	5	4	3	2	1
Visiting Public Parks	5	4	3	2	1
ATV Riding	5	4	3	2	1
Biking	5	4	3	2	1
Golfing	5	4	3	2	1
Other _____	5	4	3	2	1

6.) List three things you like about the watershed.

1. _____
2. _____
3. _____

7.) List three things you don't like about the watershed.

1. _____
2. _____
3. _____

8.) List three suggestions to improve conditions in the watersheds.

1. _____
2. _____
3. _____

9.) Other comments or concerns.

If you would like to be informed of public meetings regarding this project and project updates, please complete the information below.

Name _____ E-mail _____
Address _____ Home Phone _____
_____ Work Phone _____

Completed Surveys can be sent to
Connoquenessing Creek Watershed Conservation Plan, 246 South Walnut Street, Blairsville, PA 15717

Municipal Survey

Part One - Phone

1.) Does your municipality have a comprehensive plan? **YES or NO**
If yes, what is the name of the plan(s) and when was it adopted?

2.) Does your municipality currently utilize zoning and/or subdivision ordinances?
YES or NO If yes, what types of ordinances do you have?

3.) Does your municipality have floodplain ordinances? **YES or NO**

4.) Are there any municipal parks in your municipality? If yes, please list them?

5.) a. Does your municipality have any public water services in the Connoquenessing Creek watershed area? **YES or NO** If yes, please list the name and capacity of each facility.

Connoquenessing Creek Watershed Conservation Plan

b. Do you foresee the need to upgrade or establish a public water supply in your municipality in the Connoquenessing Creek watershed area within the next ten years? **YES or NO**

6.) a. Does your municipality have any public sewage systems in the Connoquenessing Creek watershed area? **YES or NO** If yes, please list the name and capacity of each facility.

b. Do you foresee the need to upgrade or establish a public sewage system in your municipality in the Connoquenessing Creek watershed area within the next ten years? **YES or NO**

7.) Is there anything unique, or well known about your municipality that you would like to have highlighted in the plan?

Part Two – Mailed

Connoquenessing Creek Watershed Conservation Plan

Thank you for taking the time to complete this very important survey. The Connoquenessing Creek Watershed Conservation Plan Steering Committee and Western Pennsylvania Conservancy are conducting the survey.

The purpose of this study is to help us understand what municipal officials of the communities within the Connoquenessing Creek watershed think of current conditions and how they would like to see the watershed resources and characteristics progress in the future. This will give the steering committee a basis for making recommendations for the watershed in the plan. Should you have any questions about the survey, or if you would like to find out more information or become involved in the planning process, please do not hesitate to contact Carla Ruddock of Western Pennsylvania Conservancy at 724-459-0953 ext. 107.

Thank you again for taking the time to complete this survey. We truly value your input.

Municipal Survey

1.) In what county and municipality do you represent?

County _____ Municipality _____

2.) In what watershed(s) is your municipality located?

- Lower Connoquenessing Creek (Mainstem) –Little Connoquenessing Creek to mouth and including Brush Creek
- Middle Connoquenessing Creek (Mainstem) –Thorn Creek to Little Connoquenessing Creek and including Glade Run, Breakneck Creek, and little Connoquenessing Creek
- Upper Connoquenessing Creek (Mainstem) –Headwaters to Thorn Creek including Bonnie Brook and Thorn Creek
- Don't Know
- Other _____

7.) What projects would you like to see implemented in the area that you represent that could be included in the Connoquenessing Creek Watershed Conservation Plan? Please list short-term and long-term projects and goals.

a.) Land Use/Land Resources (farmland preservation, development, planning, etc.)

b.) Water Resources (quality, quantity, etc.)

c.) Biological Resources (plant, animal, terrestrial, aquatic, areas of concern, etc.)

d.) Cultural Resources (historical, recreational, environmental education, etc.)

e.) Other (roads/other transportation, economy/jobs, population & demographic trends)

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Completed surveys can be sent to: Connoquenessing Creek Watershed Conservation Plan, 246 South Walnut Street, Blairsville, PA 15717, Attention: Carla Ruddock

Interview Questions

Connoquenessing Creek Watershed Conservation Plan
Key Individual Interview

Name: _____

1. How has the watershed* changed in the past 10 years? Were these changes good, bad, indifferent? *Note: "watershed" includes landscape features, ecological communities, & human infrastructure.

2. How do the following currently meet the needs of the watershed community?
(Are the quantities sufficient, insufficient, or satisfactory? Are they in good condition?) Please include your solution recommendations.

a. Transportation –area roads, public transportation

b. Infrastructure – water and sewer lines

c. Employment Opportunities

d. Educational Opportunities

e. Land Use Ordinances

3. Do the recreational opportunities currently meet the needs of the watershed community?
(Are there too many, not enough, or a sufficient number? What condition are they in? Are they easy to access? Please include your solution recommendations.)

a. Parks/Picnic Sites

b. Hiking/Biking Trails

c. Off- Road Vehicle Riding

d. Scenic Vistas/Photography

e. Wildlife/Bird Watching

f. Hunting/Fishing

g. Boating/Swimming

h. Historical Sites/Structures

i. Golf Courses and other

4. What are some of the positive features of the watershed? (Please consider both the ecological and social community in your answer, from water quality to economics.)

Connoquenessing Creek Watershed Conservation Plan

5. What are some of the negative impacts currently affecting the land, water, and biological resources?

6. Do you have any specific projects or type of projects you would like to see identified in the plan?

7. What must the watershed conservation plan say to be successful?

8. What must the watershed conservation plan *not* say to be successful?

9. Do you know of any other people we should interview?

Name _____ Phone _____
Address _____

Name _____ Phone _____
Address _____

Name _____ Phone _____
Address _____

10. Do you have any other questions or comments before we conclude this interview?

APPENDIX L. FUNDING SOURCES

Sponsoring Organization	Description / Restrictions
BMP	
State Conservation Commission-Dirt and Gravel Roads Maintenance	Available to local municipalities and state agencies for projects dealing with the BMPs for erosion and sedimentation control problems and fugitive dust in watersheds; dirt and gravel road jurisdiction required.
Community	
Pittsburgh Foundation	Economic, community development and the environment. Activities that increase employment, build strong neighborhoods, and promote civic engagement by all segments of the population. Funds for quality of life.
Energy	
DEP - Alternative Fuels	The Alternative Fuels Incentive Grants program continues to fund a considerable number of projects that use alternative fueled energy sources to reduce air pollution and our dependence on foreign oil. Alternative fuels include compressed natural gas.
Environmental	
Beldon II Fund	Support environmental organizations working at the state-level. Some grants are made to regional and national organizations for efforts that support the work of state level groups.
Ben & Jerry's Foundation	Grant applications need to demonstrate that the project will lead to environmental change, address the root causes of environmental problems, and must help ameliorate an unjust or destructive situation by empowering constituents and facilitating leadership.
Eddie Bauer	Fund projects in certain local areas that support environmental goals such as clean rivers and streams or beautifying parks and school grounds. Must be 501(c) 3 and proposal should be kept between 2-3 pages.
Howard Heinz Endowment	This program promotes environmental quality and sustainable development by supporting efforts to eliminate waste, harness the power of the market, and create a restorative economy. Should Promote sustainable urban design. Concentrated in Western Pennsylvania.

Connoquenessing Creek Watershed Conservation Plan

Sponsoring Organization	Description / Restrictions
Environmental (continued)	
Raymond Proffitt Foundation	The foundation's purpose is to protect and restore the quality of the natural and human environment by informing and educating the general public about the impact of human endeavors upon the natural environment. The RPF strives to advance this understanding.
Surdna Foundation	The foundation's goal is to prevent damage to the environment and to promote more efficient, economically sound, environmentally beneficial, and equitable use of land and natural resources. Does not fund environmental education, sustainable agriculture, food production or toxic and hazardous waste.
Vira I Heinz Endowment	This program promotes environmental quality and sustainable development by supporting efforts to eliminate waste, harness the power of the market, and create a restorative economy. The program's goal is to promote sustainable urban design. Western Pennsylvania watersheds only.
Environmental / Watershed	
EPA-Clean Water State Revolving Fund	May also contact: Beverly Reinhold (717) 783-6589. Infrastructure Investment Authority, Keystone Building 22 South Third Street, Harrisburg, PA 17101. email: breinhold@state.pa.us or Peter Slack, (717) 772-4054; DEP 400 Market Street, Harrisburg, PA 17105
WREN - Conference/Training Scholarships	The activities funded must be educational and relate to drinking water source protection or watershed education. Applicant is required to provide a five percent match.
River Network Watershed Assistance Grants	Watershed projects and group start-ups.
Foundation for Pennsylvania Watersheds	Provides funding to grassroots organizations and watershed associations for specific watershed remediation in Pennsylvania.
Environmental Education	
Captain Planet	Supports hands-on environmental projects for children and youth to encourage innovative programs that empower children and youth around the world to work individually and collectively to solve environmental problems. Only for environmental education of children. Online only.
DEP Environmental Education Grants	Open to schools, conservation districts, and non-profits. Open in summer, awarded in spring. Final application due dates vary. Application available online. Requires twenty percent match and reimbursement program.

Sponsoring Organization	Description / Restrictions
Environmental Education (continued)	
Education Mini Projects Program	Small grants for Pennsylvania-based grassroots educational projects that address non-point source watershed concepts.
Emerson Charitable Trust	Strong emphasis on cultural aspects and youth education, also science and education.
EPA Environmental Education Grants Region III	Grants awarded to small non-profit groups for various projects in Region III.
National Environmental Education and Training Foundation	To increase environmental awareness, environmental education, partnerships, etc. May also be reached at (202) 261-6464. Proposal deadlines: Jan. 1, March 1, July 15, and Sept. 1
PACD - Mini Projects	The objectives of the Educational Mini-Project must promote the We All Live Downstream message by: stimulating an awareness of and interest in Pennsylvania's non-point source water pollution problems and solutions; salaries are not an approved expenditure.
Project Wild	Project Wild is an interdisciplinary supplementary environmental and conservation program for educators of children in grades K-12. Small grants only.
The Dunn Foundation	Promote the issues of the negative effect that sprawl, visual pollution, and poorly planned development have on the visual environment of communities and the resulting loss of quality of life. Encourage dialogue within and between communities. Do not fund property acquisition, capital improvement projects, capital campaigns, endowments, individuals, religious groups, or political organizations.
The Pathways to Nature Conservation Fund - National Fish and Wildlife Foundation	A partnership between the more than 270 Wild Birds Unlimited, Inc. franchises and the National Fish and Wildlife Foundation. The Pathways to Nature Conservation Fund offers grants to enhance environmental education activities and bird and wildlife viewing opportunities at significant sites.
Water Resources Education Network - LWV	Funding to develop education programs for water issues facing communities. Local contact is shrenehess@yourinter.net, Indiana PA, 724-465-2595. Must be 501(c)3
WREN - Opportunity Grants	The activities funded must be educational and relate to drinking water source protection or watershed education.

Environmental Justice

EPA-Environmental Justice Small Grant Program	The program provides financial assistance to eligible affected local community-based organizations working on or planning to work on projects to address local environmental and/or public health concerns.
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Sponsoring Organization	Description / Restrictions
Environmental Justice (continued)	
Nathan Cummings Foundation	The foundation's purpose is to facilitate environmental justice and environmentally sustainable communities by supporting the accountability of corporations, governments, and other institutions for their environmental practices. Does not fund individuals, scholarships, or capital or endowment campaigns.
Norman Foundation	Support efforts that strengthen the ability of communities to determine their own economic, environmental, and social well-being, and that help people control those forces that affect their lives. Only fund in U.S. They do not fund individuals, universities, conferences, scholarships, research, films, media, arts projects, capital campaigns, fundraising drives, or direct social service programs .
Environmental Planning	
Coldwater Heritage Partnership	Grants for prioritizing watersheds in need of protection, for assessment of coldwater ecosystems, and for the development of watershed conservation plans.
DEP Nonpoint Source Control	Grants for planning and non-point source pollution control projects.
DCNR - Community Conservation Partnership Program	Available to organizations that conserve and enhance river resources. Planning grants are available to identify significant natural and cultural resources, threats, concerns, and special opportunities, and the development of river conservation plans. Grants requires 50 percent match.
NRCS Watershed Surveys and Planning	Providing assistance for planning in water and coordinated water and related land resource programs in watersheds and river basins. Types of surveys and plans funded include watershed plans, river basin surveys and studies, flood hazard analyses, and floodplain studies.
Flood Protection	
DEP Flood Protection Grant Program	Open to communities that need to perform non-routine maintenance or improvements to already existing flood protection projects. Also applies to the purchase of specialized equipment. Open to communities that have flood protection projects that are deemed operable.
General	
Archer-Daniels-Midland Foundation	Proposals can be sent in letter form containing: 1) Description of the organization applying. 2) Description of the project/What funding would be used for. 3) A budget including how much is going to administrative costs. Emphasis is given to corporate operating locations.

Sponsoring Organization	Description / Restrictions
General (continued)	
Audrey Hillman Fisher Foundation, Inc.	Must refer to Application Procedures for more information. Preference given to southwestern Pennsylvania and central New Hampshire.
Eureka Company	No specific interest, but, general focus is on social services, health, and the environment (wildlife, fisheries, habitat, and sustainable community development)
Henry Hillman Foundation	Preference is given to organizations in the Pittsburgh/southwestern Pennsylvania area.
Patagonia, Inc. Environmental Grants Program	Supports small grassroots organizations. Does not fund land acquisition.
The Boeing Company	Provides contributions for capital campaigns, seed money (one-time grants) for new programs or projects that address community needs and priorities, and one-time grants to buy equipment, improve facilities, or enable special projects.
The Education Foundation for America	EFA's priorities include supporting the monitoring of the utility restructuring process as it impacts the environment, combating the growth of the "wise-use" movement, opposing large-scale live-stock confinement, and cutting federal "pollution." Letter limited to two pages.
The Prospect Hill Foundation	The foundation's environmental grant making concentrates on habitat and water protection in the northeastern region of the United States. Must have 501(c)3. The organization does not fund individuals, basic research, sectarian religious activities, or organizations that lack tax exemption under U.S. Law.

GIS	
DEP-GIS Software Grant	The grants consist of the latest commercial release of ArcView GIS software; several texts about utilizing GIS for environmental applications and land-use planning; CD-ROM containing spatial data about the commonwealth. Only issue 10 per quarter.

Habitat	
General Challenge Grant Program -National Fish and Wildlife Foundation	Requires non-federal match of 2:1. Address actions promoting fish and wildlife conservation and habitat; should involve conservation and community interest; leverage available funding and evaluate project outcomes.
Keep the Wild Alive (KWA) Species Recovery Fund	Fund on-the-ground projects that directly improve conditions for the endangered species highlighted in the KWA campaign. Current National Wildlife Federation employees are ineligible and applications must be submitted in English.

Connoquenessing Creek Watershed Conservation Plan

Sponsoring Organization	Description / Restrictions
Habitat (continued)	
Small Grants Program - National Fish and Wildlife Foundation	Address priority actions promoting fish and wildlife conservation and the habitats on which they depend; work proactively to involve other conservation and community interest; leverage available funding, and evaluate project outcomes. A 2:1 match of non-federal funds is required.
Internship	
Office of Surface Mining Intern Program	Candidates must organize their work, work well with community groups and on their own, quickly internalize the requirements of acid mine drainage remediation and the national Clean Streams program, write well and enjoy public presentations. Academic credit. Can be undergraduate or graduate student. Positions available in AL, IL, IN, IA, KY, MD, MS, OH, OK, PA, TN, VA, WV. Must provide housing for interns.
Land Protection	
DCNR - Land Trust Grants	Provide funding for acquisition and planning of open space and natural areas which face imminent loss. Lands must be open to public use and priority is given to habitat for threatened species. Eligible applicants are non-profit land trusts and 501(c)3. Requires 50 percent match.
Lowes Charitable Foundation	Environmental initiatives that support the continued enhancement of the natural landscape, natural environment enhancers, and/or park improvement projects. Must apply online. Must be a 501(c)3.
Michael D. Ferguson Charitable Foundation	General environment, wildlife, fisheries, habitat, sustainable community, and development.
Nationals Parks Service - Land & Water Conservation Fund	Provide federal grants for land acquisition and conservation to federal and state agencies.
The Wilderness Society	To preserve wilderness and wildlife, protect America's prime forest, parks, rivers, and shore lands, and foster an American land ethic. Alternate address Montana Regional Office, 105 West Main St., Suite E, Bozeman, MT 59715-4689
Town Creek Foundation	Environmental issues of interest to the foundation include: 1) Preserving the ecological richness of our natural heritage, with a major focus on our federal public lands. 2) Promoting policies and practices to protect the land, estuaries, and coastal bays.

Sponsoring Organization	Description / Restrictions
Loan	
Environmental Loan Fund	The loan can be used for membership development, creating and implementing a workplace giving program, cause-related marketing, donor development, special events, direct mail campaigns, mission related business enterprises, or capital campaign work.
Pennsylvania Infrastructure Investment Authority Drinking Water Loans	Must show water quality impact, must have qualified loan candidate. Loans to stormwater projects and non-point source projects. Interest is 1-2.8 percent over 20 years.

Multiple	
Acorn Foundation	Interested in small and innovative community-based projects which preserve and restore habitats supporting biological diversity and wildlife, and advocate for environmental justice. Does not fund the following: direct services, capital expenditure, construction or renovation programs, programs undertaken by tax-supported institutions or government initiatives, emergency funding, scholarship funds, or other individual aid.
Allegheny Foundation	The Allegheny Foundation concentrates its giving in the western Pennsylvania area and confines its grant awards to programs for historic preservation, civic development, and education. No event sponsoring. Does not fund individuals.
Anne & George Clapp Charitable & Educational Trust	Fields of interest include education, social services, youth and child welfare, and aging. Limited support for cultural programs, historic preservation, and conservation. Southwestern Pennsylvania only; grants are not made to individuals. No grants are made for medical research, research projects, filmmaking, conferences, or field trips.
Charlotte and Donald Teast Foundation	Sustainable communities, arts, humanities, civic and public affairs, education, the environment, health, and social services.
DCNR Community Conservation Partnership Program	Conserve and enhance river resources by offering planning grants, technical assistance, implementation grants, development grants, and acquisition grants.
Ford Foundation	Interested in general/operating support, continuing support, endowment funds, program development, conferences/seminars, professorships, publication, seed money, fellowships, internships, research, technical assistance, consulting services, and program-related investments.
Max and Victoria Dreyfus Foundation	Consider support for museums, schools, educational and skill training projects, programs for youth, seniors, and the handicapped. Must be located in the U.S. Does not issue grants to individuals.

Sponsoring Organization	Description / Restrictions
Multiple (continued)	
National Fish and Wildlife Fund -Five Star Restoration Challenge	Projects must involve diverse partnerships of, ideally, five organizations that contribute funding, land, technical assistance, workforce support, and/or other in-kind services. Projects involving only research, monitoring, or planning are not eligible. No mitigation work.
National Parks Foundation	Education, training, preservation, and conservation. The grants that are available change often. See the website for current funding opportunities. Projects must connect with National Parks, be located on or next to National Park or River, and work in cooperation with the National Park. Alternate Phone: 202-785-2520
Native Plant Conservation Initiative - National Fish and Wildlife Foundation	Through this initiative, grants of federal dollars will be provided to non-profit organizations and agencies at all levels of government to promote the conservation of native plants. There is a strong preference for "on-the-ground" projects that involve local communities and citizen volunteers in the restoration of native plant communities. Projects that include a pollinator conservation component are also encouraged.
Public Welfare Foundation	The Public Welfare Foundation supports organizations that address human needs in disadvantaged communities, with strong emphasis on organizations that include service, advocacy and empowerment in their approach: service that remedies specific problems; advocacy that addresses those problems in a systemic way through changes in public policy; and strategies to empower people in need to play leading roles in achieving those policy changes and in remedying specific problems.
Robertshaw Charitable Foundation	Money to assist those organizations who work to enhance the educational, health and welfare, cultural, youth development, social welfare, and community development needs of the area. Only one grant per year will be awarded to any organization. Preference to southwestern Pennsylvania organizations.
Scaife Family Foundation	Grants awarded will support programs that strengthen families, address the health and welfare of women and children, or promote animal welfare. No event sponsorships, endowments, capital campaigns, renovations, or government agencies. No grants to individuals.
The French Foundation	Environment, and natural resources
The Lawrence Foundation	The mission of The Lawrence Foundation is to make a difference in the world by providing contributions and grants to organizations that are working to solve pressing educational, environmental, health, and other issues.
The Max and Anna Levinson Foundation	Interested in the environment, including preservation of ecosystems and biological diversity, but also environmental justice, alternative energy, alternative agriculture, and toxics. Must have 501(c)3 status. Rarely fund organizations with budgets in excess of \$500,000.

Sponsoring Organization	Description / Restrictions
Multiple (continued)	
Turner Foundation	Supports activities to preserve the environment, conserve natural resources, protect wildlife, and develop and implement sound population policies. Interested in protecting rivers, lakes, wetlands, aquifers, oceans. Does not provide funding for buildings, land acquisition, endowments, start-up funds, films, books, magazines, or other specific media projects. Alternate Phone: 404-681-0172.
Natural Resources	
Beneficia Foundation	Only applications for projects focusing on conservation of the environment or the arts will be considered. Beneficia has no geographic preferences, but favors requests for project support over general support and does not look favorably upon requests for general overhead or construction of facilities.
Canaan Valley Institute	Promotes the development and growth of local associations committed to improving or maintaining the natural resources of their watersheds in the Mid-Atlantic portions of Pennsylvania.
Charles A. and Anne Morrow Lindburgh Foundation	Grants awarded for the conservation of natural resources and water resource management. Grants are awarded to individuals for research and educational programs, not to organizations for institutional programs.
Dana Corporation	Will consider funding air quality, environment, general, and water resources projects. Emphasis is given to areas where the corporation operates.
DCNR- Community Conservation Partnership Program	Awarded for local recreation, park, and conservation projects, including rehabilitation and development of parks and recreation facilities, acquisition of land for park and conservation purposes, and technical assistance for feasibility studies, and trail studies. Requires 50 percent match, except for some technical assistance and projects eligible as small community projects.
Home Depot	Assistance is provided to non-profit organizations that direct effort toward protecting our natural systems. The grant program focuses on forestry and ecology, clean up, and recycling, green building design, and lead poisoning prevention.
W. Alton Jones Foundation, Inc.	The goals of the foundation are to build a sustainable world by developing new ways for humanity to interact responsibly with the planet's ecological systems, and build a secure world by eliminating the possibility of nuclear war by providing alternative methods of resolving conflicts and promoting security.
Leo Model Foundation	Grants for habitat conservation, watershed conservation, and species preservation in the U.S.

Connoquenessing Creek Watershed Conservation Plan

Sponsoring Organization	Description / Restrictions
Natural Resources (continued)	
National Fish and Wildlife Fund Challenge Grants for Conservation	The foundation, in partnership with the NRCS and NACD (National Association of Conservation Districts) provides challenge grants. Primary goal of the program is to support model projects which positively engage private landowners.
Rivers, Trails and Conservation Assistance Program	Grants to work with National Park Service to conserve land and river resources, and provides funding for various projects dealing with the conservation of these resources, including the development of trails and greenways.
The River Restoration - NOAA	Submittal by email whenever possible. Encourage contact to discuss project prior to submitting application. Formal non-federal matches not required, but encouraged. Dam removal and fish passage. Available in northeast, Mid-Atlantic, and California.
The Watershed Protection and Flood Prevention Act	Plan development for natural resource concerns within a watershed area; cost sharing available to carry out plan.
The William C. Kenney Watershed Protection Foundation	Protecting the remaining wild rivers of the west and ensuring the effectiveness of small environmental organizations.
Other	
Charles Stewart Mott Foundation	The environmental program is devoted to reform of international lending and trade policies. Projects must be part of a national demonstration when out of the Flint, Michigan area.
North American Fund for Environmental Cooperation	Funds community based projects in Canada, Mexico and the U.S. to enhance regional co-operation, prevent environmental and trade disputes, and to promote the effective enforcement of environmental law.
PA DEP Brownfields Inventory	Grantees will be paid \$1,000 for each site registered into the PA Site finder. Municipalities and economic development agencies may apply for the grant by submitting an application.
Retired and Senior Volunteer Program (RSVP)	Provides a variety of opportunities for people aged 55+ to volunteer in the management of trails, rivers, and open space. Grants can be used for staff salaries, fringe benefits, travel, equipment, and transportation.
Plantings	
National 4-H Council	Grants are used to stimulate community tree planting and/or reforestation projects. Awarded to communities in support of on-going community planting/reforestation project or to stimulate new and creative youth-led projects. Organization must secure matching funds or in-kind contributions from other sources equal to the amount requested.

Sponsoring Organization	Description / Restrictions
Plantings (continued)	
National Gardening Association	One hundred grants to be awarded to start-up programs involving children, and 300 will be awarded to established programs. Covers tools, seeds, plant materials, products, and educational resources. Grant restricted to programs involving children. There is a \$10.00 administrative fee.
Plant Material Centers	American Indian Liaison Resource Conservation and Community Assistance Division of USDA/NRCS. PMC select and grow plants that grow naturally and provide them to those people who wish to grow native plants.

Remediation/Restoration

Abandoned Mine Land Reclamation Program - Office of Surface Mining	Applications accepted anytime. Provides for the restoration of eligible lands and waters that have been mined, abandoned, or left inadequately restored. Two different grants are available. Protects land and corrects environmental damage caused by coal mining.
AMD Watershed Assessment - Bureau of Mining and Reclamation	Must be a municipality, municipal authority or incorporated non-profit. AMD projects only.
American Canoe Association CFS Grants	For grassroots organizations to improve waterways. Cleanups, riparian corridor, and water quality monitoring projects. Very flexible as long as it is improving waterways and fish habitat. Can not be used to pay staff. However, it can be used to pay a contractor. Must use volunteer help.
PA DEP - BAMR Abandoned Mine Reclamation Grants	Funds must be used for project development, design, construction, and directly related expenses. Site chosen must be located in a watershed or area with an approved rehabilitation plan. No administrative cost. Must be a municipality, municipal authority, or incorporated 501(c)3.
Bring Back the Natives - National Fish and Wildlife Foundation	Supports on-the-ground habitat restoration projects that benefit native aquatic species in their historic range.
Community Foundation	Projects related to abandoned mine drainage remediation, alkaline discharges, streambank preservation, removal of spoil piles, and other issues related to water quality are of interest to the foundation's board of advisors.
EPA - Nonpoint Source Implementation Grants	Funds are provided to the state to carry out non-point source projects and programs pursuant to Section 319 of the Clean Water Act as amended by the Water Quality Act of 1987. Grants are awarded to a single agency in each state, designated by the governor. 40 percent non-federally funded match required. Only one administered to each state.

Sponsoring Organization	Description / Restrictions
Remediation/Restoration (continued)	
NOAA Fish Habitat Restoration Program	Financial assistance for community-based habitat restoration projects, to restore fish habitats.
Office of Surface Mining Clean Stream Initiative	This grant is used to treat AMD. Design and administration is covered but the bulk of funding must go into construction. Must have funding partners. Applications available upon request. Review period takes 2.5-3 months, depending on eligibility. Must be a cooperative agreement.
PA DEP -Stream Improvement Project Reimbursements	Provides assistance in an instance where a stream is posing a treat to structures, such as homes or businesses. Must pose threat to structure. Must be applied for by a conservation group or municipality.
PA Fish and Boat Commission	Habitat improvement and technical assistance.
Partnership with the U.S. Army Corps of Engineers	To foster cooperation on projects of mutual interest, such as fish and wildlife habitat restoration, non-structural flood control opportunities, wetland restoration, and endangered species protection.
Pinellas County Environmental Foundation - National Fish and Wildlife Foundation	A partnership between Pinellas County and the National Fish and Wildlife Foundation. These two groups share the common goals of actively pursuing the protection, restoration and enhancement of fish and wildlife habitat, and developing creative and sustainable solutions to natural resource issues.
Research	
Conservation & Research Foundation at Connecticut College	The conservation and enlightened use of the earth's resources to encourage research to deepen the understanding of the intricate relationship between people and the environment. Will support higher education, individuals, museums, non-profits, and research. Unsolicited proposals are not accepted; however, letters of inquiry including a budget may be sent.
USDA - Nutrient Science for Improved Watershed Management	Funds for integrated research in extension management of nutrients on a watershed level. Nutrients of interest are nitrogen and phosphorous. Please note that a research foundation maintained by a college or university is not eligible. These grants are for research.
Stormwater Management	
DEP Stormwater Management Program	Watershed planning for stormwater control and implementation of programs at local levels.

Sponsoring Organization	Description / Restrictions
Streambank Fencing	
Ducks Unlimited - PA Stewardship Program	Provides strong incentives to landowners to create wooded stream buffers, create wider than minimum buffers, and fence cattle out of the stream. Grant is available for fencing and tree planting.
Fish America Foundation	Grants awarded for streambank stabilization materials, instream habitat improvements, contracted heavy equipment, and stream morphology work. Match not required, but is highly recommended.
Partners for Fish and Wildlife Program	The Partners for Fish and Wildlife Program provides technical and financial assistance to private landowners for habitat restoration on their lands. A variety of habitats can be restored to benefit Federal trust species (for example, migratory birds and fish and threatened and endangered species.) Normally the cost share is 50 percent (the Service and the landowner each pay half of the project costs), but the percentage is flexible. Services or labor can qualify for cost-sharing.
US Fish and Wildlife Service	Assists landowners in installation of high-tensile electric fence to exclude livestock from streams and wetlands. No buffer requirements.
USDA Conservation Reserve Program	Statewide costshare program for creating stream buffers. A 40 percent practice incentive as well as a \$10/acre incentive. Buffers of 35-180 feet per side of the stream. Land must have been pasture.
USDA - Environmental Quality Incentives Program	A statewide program based on environmental problems. It addresses all environmental problems on a farm. They fund BMPs.
USDA Project Grass	A co-operative effort of local farmers, conservation districts, with assistance from USDA, to improve agriculture productivity in southwestern Pennsylvania. For local contacts see information brochure on file. Contact: james.harrold@pasomerset.fsc.usda.gov
Technical Assistance	
Watershed Assistance Grants	Funding supports organizational development and capacity building for watershed partnerships with diverse membership. Match requested but not required. Non-profits, tribes, and local government only.

Sponsoring Organization	Description / Restrictions
Trails	
DCNR - PA Recreational Trails Program	Will consider proposals for maintenance and restoration of existing recreational trails; development and rehabilitation of trailside and trailhead facilities and trail linkages; purchase and lease of recreational trail construction and maintenance equipment. Must have 20 percent match. Eligible applicants include federal and state agencies, local governments, and private organizations.
DCNR - Rails to Trails	Provide 50 percent funding for the planning, acquisition, or development of rail-trail corridors. Applicants include municipalities and non-profit organizations established to preserve and protect available abandoned railroad corridors for use as trails. Grants require 50 percent match.
Volunteers	
3M Foundation	3M sponsors a volunteer program called Community Action Retired Employee Service (CARES). Company favors projects that impact 3M communities. Alternate Phone: 612-737-3061
Wetlands	
U.S. Fish and Wildlife Service	For wetland Conservation projects. Must have 50 percent non-federal match in small-grant program with North American Wetlands Conservation Council.
Wetlands Reserve Program USDA Natural Resources Conservation Service	Restore and protect wetlands on private property; provide landowners with financial incentives to enhance wetlands in exchange for retiring marginal agricultural land.

APPENDIX M: AQUATIC COMMUNITY CLASSIFICATION

What information is used to describe the communities and their habitats?

Community Indicators

The animals that are most commonly associated with each community type are listed. While not every organism described in a given community will occur in each location where this community is found, organisms listed in this section give a general account of which organisms to expect in that community’s habitat.

Species of Conservation Concern

Fish and mussels that are associated with a community and are tracked for their rarity are noted.

Habitat

Average values of the community characteristics across their entire range are presented. Size of the stream’s watershed, gradient (slope) and elevation are a few habitat characteristics that may be important to the community type. Local conditions are also mentioned.

- **Land Use Composition** - Trends in land-use patterns were calculated for each stream reach as percentages of the entire contributing watershed. Different amounts of urban, agricultural, or forested area in watersheds can directly influence stream habitat and resident organisms. For example, some organisms are only found in heavily forested (undisturbed) watersheds, while others can tolerate the altered habitat types that are found in heavily agricultural or urbanized settings.

Stream Quality Rating

Community types are generally ranked as low, medium, or high quality based on habitat, water chemistry, and sensitivity of the community’s common organisms to pollution.

Community Rarity

Rarity in watersheds within Pennsylvania was determined by examining the number and distribution of community occurrences.

Threats

Potential pollution sources, where known, or other threats that may alter the natural state of the community are described.

Conservation Recommendations

Issues for natural resource managers and land planners to consider in the protection and management of watersheds and communities are described.

State and Global Rank Descriptions

State/Global Rank	Rank Description
SX/GX	Extirpated – Element is believed to be extirpated/extinct from the state/ its entire global range
SH/GH	Historical – Only known from historical records
S1/G1	Critically Imperiled – Critically imperiled because of extreme rarity or because of vulnerability to extirpation
S2/G2	Imperiled – Imperiled because of extreme rarity or because of vulnerability to extirpation
S3/G3	Vulnerable – Vulnerable because rare and uncommon, or found only in a restricted range
S4/G4	Apparently Secure – Uncommon but not rare, and usually widespread
S5/G5	Secure – Demonstrably widespread, abundant, and secure

Fish Communities

Coolwater Stream Community

Community Indicators: Blacknose dace, creek chub, stocked brown trout, white sucker, redbreast dace, longnose dace, fathead minnow, and pearl dace are common community members. Not all community members are present at community habitats.

Species of Conservation Concern: none

Habitat: This community type occurs in small to medium size streams, and in transitional temperature streams. Community habitats may occur in the headwaters of warm-water streams, in marginally or in seasonally warm streams, and in waters that have been degraded. Coolwater streams are generally faster than larger warm-water streams, and have intermediate temperature between warm and cold streams.

Fish in the Coolwater Stream Community are habitat generalists, and generally pollution tolerant. This community type may represent small, cool-water communities that occur in agricultural landscapes. This community also occurs in watersheds where urbanization and agriculture may be altering water quality.

In the Connoquenessing Creek watershed, the Coolwater Stream Community occurs in the headwaters of Connoquenessing Creek and in some tributaries, like Thorn Creek, Breakneck Creek, and Brush Creek. Because of its generalist nature, this community habitat may overlap with both WWF and CWF streams.

Stream quality rating: Low-medium

Community rarity: No

Threats: The potential threats to the community habitat are a number of pollution types. Some tributaries to lower Connoquenessing Creek, like Brush Creek, are impaired for pollution from municipal point sources, degrading water with organic enrichment and low dissolved oxygen. In Thorn Creek and its tributaries, agricultural practices may be altering stream flow, adding nutrients, and modifying stream habitats. Mercury was cited as impairing fish consumption in Thorn Creek. Siltation from urban runoff and impoundment on Breakneck Creek (DEP 2006) likely degrades stream habitats. Near the community habitat in upper Connoquenessing Creek, urban runoff is causing excess siltation and one of the nearby tributaries has excess suspended solids from acid mine drainage.

Conservation recommendations: The habitat for the Ohio Coolwater Community represents an important transition between the smallest headwater streams and warm, larger streams. In its most natural state, this habitat is distinct among other habitat types and should be protected and restored.

Restoration of habitat and water quality is recommended especially addressing problems from sewer outfalls, agriculture, urban runoff and acid mine drainage. Management of storm water runoff and riparian vegetation restoration are critical to improvement of stream habitat conditions in agricultural and urban settings. Treating AMD is important for reducing stream acidity and toxic metal concentrations.

Warmwater Community



Blacknose dace indicative of Coolwater Stream Communities

Community indicators: blunt-nose minnow, rock bass, pumpkinseed, bluegill, large-mouth bass, and golden shiner.

In other community locations, additional warm-water fish may be present, including: greenside darter, northern hogsucker, river chub, central stoneroller, rainbow darter, rosyface shiner, banded darter, smallmouth bass, common shiner, johnny darter, fantail darter, variegate darter, logperch, stonecat, silver shiner, blackside darter, striped shiner, golden redhorse, sand shiner, mimic shiner, spotfin shiner, yellow bullhead, silverjaw minnow, green sunfish, streamline chub, yellow perch, black redhorse, brown bullhead, tonguetied minnow, grass pickerel, trout perch, and Ohio lamprey.



The pumpkinseed is one community indicator of a Warmwater Community

Species of Conservation Concern: None

Habitat: The Warmwater Community usually occurs in medium to large streams and rivers. Habitats are slower moving and warmer than small headwater streams. In its best condition, community habitat has little silt and turbidity, and gravelly substrate.

Examples of the community habitat are sections of Connoquenessing Creek and Breakneck Creek. The Community is also likely to occur in throughout the tributaries to Connoquenessing Creek that are also classified as Warm Water Fisheries by DEP.

Stream quality rating: Medium

Community rarity: No

Threats: The mid- and upper-reaches of Connoquenessing Creek are impaired by excess salinity/TDS/chlorides and siltation from stormwater. Siltation from urban runoff and impoundment on Breakneck Creek (DEP, 2006) degrade the stream habitat. Because of the large amount of agriculture in the watershed, runoff and habitat alteration from poorly managed agricultural areas is also a concern for this community.

Conservation recommendations: This community is a high conservation priority since high quality warmwater streams are uncommon. The fish in this community type are not especially rare individually, but this group represents habitats in need of protection.

Addressing threats of habitat alteration and water quality from impervious surfaces, agriculture, and other sources is the major recommendation for protecting the Warmwater Community.

Large Stream and River Community

Community Indicators: Common carp, gizzard shad, emerald shiner, black crappie, and white crappie.

In other community locations, particularly large rivers, the following fish are also associated with the community: Channel catfish, sauger, freshwater drum, walleye, white bass, shorthead redhorse, spotted bass, silver redhorse, quillback carpsucker, flathead catfish, smallmouth buffalo, river redhorse, mooneye, muskellunge, longnose gar, brook silver-side, and northern pike.

Species of Conservation Concern: mooneye (S2/G5), smallmouth buffalo (S2/G5), longnose gar (S2S3/G5), river herring (S3/G4), channel darter (S1S2/G4)

Habitat: Although the Large Stream and River Community occurs in the largest streams and rivers (hence, its name), it may be somewhat inappropriately named for the smaller warm water community habitats, like the Connoquenessing Creek. In addition to Connoquenessing Creek, the community occurs in Breakneck Creek. The diverse fish assemblage may also transition to the Warmwater Community throughout the watershed.

The preferred habitats of fish in the Ohio Large River Community generally exist in varied riverine habitats, including shallow shorelines, deep channels and slow or non-flowing impoundments behind dams. Impounded sections of the streams in the watershed may create habitat for this community type.

Stream quality rating: Medium

Community rarity: Yes

Threats: Breakneck Creek and its tributaries are impaired for most of their lengths because of siltation from impoundment and from impervious surfaces. Runoff from urban/suburban sources, roads, and stormwater degraded water quality and habitat. The water quality on Connoquenessing Creek was found to have excess salinity/TDS/chlorides. Other sources of water quality degradation on Connoquenessing Creek are from impervious surface runoff and acid mine drainage (DEP, 2006).

Conservation recommendations: Siltation and water quality issues within the watershed must be addressed to conserve fish habitat. Municipalities should work to reduce current stormwater issues and minimize additional runoff. Game and non-game fish populations and communities will benefit from better water quality and in-stream habitats.

Freshwater Mussel Communities

General Threats and Conservation - Freshwater mussel populations are rapidly declining in North America. In the past 100 years, more than 10 percent of our continent's mussels have become extinct. For mussel species in the United States, nearly 25 percent have a status of federally endangered or threatened, and 75 percent are listed as endangered, threatened, or special concern by individual states (Nedeau et al., 2005).



Large, dead freshwater mussel shell found in Connoquenessing Creek near Camp Kon-O-Kwee

Mussel communities are generally indicative of habitat types that are rare in Pennsylvania and becoming increasingly rarer. Mussel species are generally found in watersheds at least 75 km² (approximately 21.87 square miles) in size that have medium or large streams. Mussel richness (number of different species) generally increases with increasing watershed size (Strayer & Jirka, 1997), so the largest rivers in Pennsylvania, like the Ohio, Allegheny, Susquehanna and Delaware Rivers, generally have the most diverse mussel communities. Large streams and rivers of good quality without major habitat alterations are few.

Water quality threats to mussels include toxic and organic compounds released from industrial and municipal point

sources. In recent decades, regulations of gross point source discharges have sufficiently improved water quality and allowed mussels to recolonize some streams and rivers. Non-point source pollution contributed from large areas, like farms and cities, can also threaten water quality for mussels. Agricultural practices can vary greatly, as can their influences on mussel communities. In many instances mussels are seemingly undisturbed by agricultural pollution, when compared to other aquatic organisms. However, excessive sedimentation and habitat alteration from agricultural practices can be detrimental to mussel communities. Runoff from urban and suburban developments appears to be more damaging to mussels, most likely due to combined effects of altered hydrology, warmer water temperatures and excess sediment and nutrient levels (Strayer & Jirka 1997).

Dams negatively influence mussel communities via hydrologic alteration, disrupted connectivity, habitat modification, and changes in thermal properties of the water. Dams also restrict the movement of fish hosts that transport the larval, parasitic mussel glochidia; this consequently restricts the dispersal ability and reproductive success of mussels. Alterations of the stream channel above and below the dam will potentially alter available habitat for mussel communities. Water quality and temperature are also largely altered in a reservoir. Impoundment management and drawdown plans are vital for maintaining healthy mussel communities.

Invasive mussel species like the zebra mussel and the Asian clam may be damaging to populations of native mollusks. Zebra mussels damage native mussels by attaching to individuals in large numbers, eventually killing them (Strayer & Jirka, 1997). Other non-native mussels may alter food resources and habitat (Hakenkamp et al., 2001), and may also deteriorate endemic mussel populations.

Mussel habitat requirements are not well known. Protecting habitats where mussels are currently occurring is a first step to ensuring a long-term mussel resource. Protection from major channel alteration by bridges, dams and dredging is important for maintaining habitat. Preventing excessive amounts of sediments, nutrients, and toxins in streams and rivers will maintain good water quality to support healthy mussel communities. Adopting zoning, stormwater detention ordinances, and natural resource protection ordinances will help protect mussel resources. Reducing the effects of urbanization through control of quantity and quality of stormwater will also help protect these habitats.

Many experts believe that effective aquatic conservation will result only from the protection of habitats within ecological and evolutionary contexts, which they equate with biological organization above the level of individual species (e.g. Angermeier & Schlosser, 1995). Targeting biological communities is a proactive approach to biodiversity conservation, because it protects whole assemblages of species before any single species declines into imperilment. In biological community protection, all species are protected: the common, the rare, and those not yet known (Higgins et al., 1998). Pennsylvania is fortunate to harbor many inland freshwater mussel taxa that are globally rare. By conserving the processes that support these species, we are better able to conserve the species. It is important to protect each mussel community type and the habitats that contain rich mussel populations to effectively protect biodiversity.

Ohio/Great Lakes Mussels: Fatmucket Mussel Community

Community Indicators: fatmucket

Although the fatmucket may occur in the absence of other mussel species in the Connoquenessing Creek watershed, in other locations, mussel species like the giant floater, three-ridge, and Wabash pigtoe may be found with this community type.

Species of conservation concern: fatmucket (S4/G5), giant floater (S4/G5), Wabash pigtoe (S2/G5), three-ridge (S2S3/G5)

Preferring quieter and relatively slow waters in Pennsylvania, the Fatmucket Community inhabits various size streams, but usually occurs in medium size or larger streams. This community prefers with sand and gravel substrate, but reaches greatest abundance in standing water, in clay, silt, or mud substrate (Parmalee & Bogan, 1998). Fatmucket mussels usually prefer quiet or slow moving water with mud bottoms and avoid riffles (Parmalee & Bogan, 1998). This species is widespread and occurs in a variety of habitats (Strayer & Jirka, 1997).

The primary indicators are moderately strong indicators that this community is present, but are also found in other community types (especially the fatmucket mussel). A moderate number of rare and intolerant taxa are associated with this community. In the Connoquenessing Creek watershed, the community is found in Connoquenessing Creek, Little Connoquenessing Creek, Thorn Creek, and Glade Run. The Fatmucket Community is common throughout the Ohio River Basin.

Stream quality rating: Undetermined

Community rarity: No

Threats: The causes of potential threats to the community area varied, but include acid mine drainage, urban/suburban runoff, and siltation and nutrient enrichment for agricultural sources. In the mid-reaches of Connoquenessing Creek, where the Fatmucket Community occurs, water quality impairment due to high salinity/total dissolved solids/chlorides and runoff from impervious surfaces likely damages the mussel community. The community habitat in Little Connoquenessing Creek and its tributaries is threatened by excess metals from acid mine drainage. In Thorn Creek and its tributaries, agricultural practices may be altering stream flow, adding nutrients, and modifying stream habitats. Mercury was cited as impairing fish consumption in Thorn Creek and may also be a hazard to mussels. Similar to Thorn Creek, headwaters of Glade Run are impaired by agriculture, leading to excess siltation and nutrients (DEP 2006).

Conservation recommendations: Conserving quiet medium to large streams and the backwaters of rivers as community habitat is a priority for conservation. Aggressively combating the many sources of pollution and habitat degradation in the Connoquenessing Creek watershed are necessary to maintain the fatmucket Community. Managing non-point sources in watersheds from agriculture and impervious sources will maintain quality habitats. In addition, preventing severe in-stream and riparian habitat and stream flow disturbance near community habitats will also ensure community survival over the long term. Acid mine drainage and associated pollution is particularly toxic to mussels; ameliorating water pollution from that source must be addressed for the health of mussel populations and communities.

Ohio/Great Lakes Mussels: Spike Mussel Community

Community Indicators: spike and black sandshell.

Several other mussels including the fatmucket, flutedshell, and pocketbook are also found in this community, but are common components of other communities, as well. In transitional habitat, like the

lower Connoquenessing Creek, other species like, the giant floater are also found in the mussel community.

Species of conservation concern: spike (S4/G5), black sandshell (S3S4/G5), fatmucket (S4/G5), flutedshell (S4/G5), pocketbook (S4/G5), and giant floater (S4/G5).

Stream quality rating: High

Community rarity: No

Habitat: The habitat for the Spike Mussel Community is generally found in large streams and rivers system such as the habitats found in the Allegheny River and the Beaver River basin. In the Connoquenessing Creek watershed, the community was found in the lower reaches of Connoquenessing Creek below its confluence with Slippery Rock Creek.



The spike pictured here is a species of concern as well as a community indicator of the Ohio/Great Lakes Mussels: Spike Mussel Community

The environment associated with this community includes waters that do not have a steep slope, but have varied substrates (stream materials) and a mix of pool, riffle, and run habitat. The species in this community are typically found in medium to large rivers in sand and gravel substrate and are often associated with riffles. The spike mussel exists in a wide range of habitats of varied size and depth. It is one of the most abundant mussels in the Allegheny basin (Strayer & Jirka, 1997).

Water may have many dissolved ions in the watershed detected by relatively high conductivity and moderate alkalinity. Sandstone and shale geology is the dominant bedrock in the Connoquenessing Creek Watershed and is commonly associated with the spike community. The community can tolerate some disturbance in the watershed from agricultural sources, but prefers relatively good water quality and habitat.

Although the strongest indicators of this community are very common, a number of rare and pollution-intolerant taxa are often associated with this group.

Threats: Since this mussel community usually occurs in relatively high quality streams, the threats from poor water quality and habitat conditions in Connoquenessing Creek could be detrimental to this community. Much of the lower Connoquenessing Creek watershed is disturbed by a combination of agricultural and urban runoff and acid mine drainage. Sections of the Connoquenessing Creek adjacent to the Spike Community are classified as impaired by DEP for poor water quality, including high concentrations of metals, low pH, and salinity/total dissolved solids/chlorides. Tributaries to the lower Connoquenessing Creek are impaired by stormwater from urban runoff and by pollution from acid mine drainage (DEP, 2006). Agriculture in the lower Slippery Rock Creek and throughout the Connoquenessing Creek watershed may also be contributing to poor water quality and habitat in the watershed.

Conservation Recommendations: This community is characterized by high mussel diversity, many rare species and very few species that can tolerate pollution; therefore it is a high conservation priority. This community occurs in sections of watersheds that currently experience relatively little watershed disturbance.

Habitat disturbance and poor water quality may pose serious problems for the long term health of the community. Amelioration of water pollution from urban/suburban, agricultural, and mining sources should be a priority for conserving the Spike Community.

Ohio/Great Lakes Mussels: Flutedshell Mussel Community

Community Indicators: fluted shell, mucket, squawfoot, and plain pocketbook.

Also found with this community in the Connoquenessing Creek Watershed, are other mussel species, like: giant floater, fatmucket, spike mussel, and squawfoot.

Some additional species found with this community in other community habitats: kidneyshell, elktoe, pocketbook, and wavy-rayed lampmussel.

Species of conservation concern: fluted shell (S4/G5), kidneyshell (S4/G4G5), mucket (S4/G5), giant floater (S4/G4), elktoe (S4/G4), squawfoot (S2S4/G5), plain pocketbook (S3S4/G5), wavy-rayed lampmussel (S4/G4), fatmucket (S4/G5), spike mussel (S4/G5),

Habitat: The Fluted Shell Community is characteristic of medium to large streams, like the Connoquenessing Creek, and medium size rivers. Habitats for this community are similar to the spike mussel community, but the stream size may be smaller. Sand and gravel beds are favorable to the fluted shell community.

A number of rare and pollution-intolerant mussel species are associated with this community type. Consequently, the Fluted Shell Community may be found in ecosystems that are still able to support species that cannot survive in other areas.

Stream quality rating: High

Community rarity: No

Threats: Similar to the Spike Mussel Community environment, water quality and habitat issues in the lower Connoquenessing Creek watersheds are serious threats to the long-term health of the Fluted shell Community. Water pollution classified the Connoquenessing Creek as impaired, according to DEP for metals and pH from acid mine drainage, and high salinity/total dissolved solids/chlorides. Some tributaries to lower Connoquenessing Creek near the Fluted Shell Community occurrences, like Brush Creek, are impaired for pollution from municipal point sources, degrading water with organic enrichment and low dissolved oxygen. Stormwater and runoff from impervious surfaces also has degraded some tributaries to the Connoquenessing Creek (DEP, 2006).

Conservation Recommendations: This community is characterized by high mussel diversity, many rare species and very few species that can tolerate severe pollution. It is a high conservation priority. Protection of current high quality mussel habitat is important for the long-term viability of the Fluted Shell Community in the Connoquenessing Creek. Minimizing altered channels and siltation resulting from some agricultural practices and urban runoff will benefit the community. Proactive measures to fix the water quality problems in the Connoquenessing Creek watershed are needed to sustain healthy mussel populations and communities.

APPENDIX N. RESOURCE GUIDE

Conservation Groups

Connoquenessing Watershed Alliance, Inc
PO Box 92
Connoquenessing, PA 16027
Website: www.connoqwatershed.org

Ducks Unlimited
Butler 020 - Butler County Chapter
325 Mercer Street
Butler, PA 16001
Phone: 724-287-5680

Ducks Unlimited
Cranberry 190 - North Hills Chapter
56 Rolling Road
Cranberry Twp., PA 16066
Phone: 724-776-7538

Ducks Unlimited
Pittsburgh 192 - West Wings Chapter
217 Pflugh Road
Butler, PA 16001
Phone: 724-865-2777

Hereford Manor Lake Conservancy and Watershed Association
PO Box 41
Fombell, PA 16123
Website: www.herefordmanorlake.org

National Wild Turkey Federation
Western Pennsylvania Regional
Carl Mowry
Phone: 724-283-5708
Website: www.panwtf.org

Pennsylvania Environmental Council (PEC)
Southwest Regional Office
22 Terminal Way
Pittsburgh, PA 15219
Phone: 412-481-9400
Fax: 412-481-9401
Website: www.pecpa.org/region/southwest

Stream Restoration Incorporated
3016 Unionville Road
Cranberry Township, PA 16066
Phone: 724-776-0161
Fax: 724-776-0166
Website: www.streamrestorationinc.org

Trout Unlimited: Arrowhead Chapter #214
153 Doyle Road
Sarver, PA 16055
Website: www.arrowheadtu.com

Trout Unlimited: Penns Woods West Chapter #042
P.O. Box 9772
Pittsburgh, PA 15229
Website: www.pwwtu.org

Western Pennsylvania Conservancy
Pittsburgh Office
800 Waterfront Drive
Pittsburgh, PA 15222
Phone: 412-288-2777
Fax: 412-231-1414
Website: www.waterlandlife.org

Western Pennsylvania Conservancy
Freshwater Conservation Program
246 South Walnut Street
Blairsville, PA 15717
Phone: 724-459-0953
Fax: 724-459-4721
Website: www.waterlandlife.org

Wild Waterways Conservancy, Inc.
101 East Spring Street, Suite 200
Zelienople, PA 16063
Phone: 724-452-1429
Fax: 724-452-1591
Website: www.wildwaterways.org

Historical Societies

Beaver County Model Railroad and Historical Society

416 Sixth Street
Monaca, PA 15061
Website: www.bcmrr.railfan.net/

Butler County Historical Society

Lowrie/Shaw House Museum
123 West Diamond Street
PO Box 414
Butler, PA 16003
Phone: 724-283-8116
Fax: 724-283-2505
Website: www.butlerhistory.com

Cranberry Township Historical Society

PO Box 1931
Cranberry Township, PA 16066
Phone: 724-776-3234

Ellwood City Historical Society

310 Fifth Street
Ellwood City, PA 16117
Phone: 724-752-2021

Evans City Area Historical Society

204 C Jackson Street
Evans City, PA 16033
Phone: 724-538-9846

Historic Harmony Inc.

218 Mercer Street
Harmony, PA 16037
Phone: 724-452-7341
Website: www.harmonymuseum.org

Lawrence County Historical Society

408 N. Jefferson Street
PO Box 1745
New Castle, PA 16103
Phone: 724-658-4022
Fax: 724-658-4022
Website: www.lawrencechs.com/index.html

Living History Center at Providence Plantation

300 Textor Hill Road
Evans City, PA
Phone: 724-538-8818
Website: www.frontier-history.org

Saxonburg Historical & Restoration Commission

PO Box 150
Saxonburg, PA 16056
Phone: 724-352-3024

Zelienople Historical Society

243 South Main Street
PO Box 45
Zelienople, PA 16063
Phone: 724-452-9457
Website: www.fyi.net/~zhs

State Agencies

Department of Conservation and Natural Resources (DCNR) Executive Office

Rachel Carson State Office Building, 7th Floor
400 Market Street, PO Box 8767
Harrisburg, PA 17105
Phone: 717-787-2869
Fax: 717-772-9106
Website: www.dcnr.state.pa.us

DCNR Southwest Region (Allegheny, Beaver, and Butler Counties)

1405 State Office Building
300 Liberty Avenue
Pittsburgh, PA 15222

DCNR Northwest Region (Lawrence County)

230 Chestnut Street
Meadville, PA 16335

Department of Environmental Protection (DEP) Headquarters

Rachel Carson State Office Building
400 Market Street
Harrisburg, PA 17101
Phone: 717-783-2300
Website: www.dep.state.pa.us

State Agencies (continued)

**DEP Southwest Regional Office
(Allegheny and Beaver County)**
400 Waterfront Drive
Pittsburgh, PA 15222
Phone: 412-442-4000

**DEP Beaver Falls District Office
(Allegheny and Beaver County)**
206 Municipal Building
8th Avenue and 15th Street
Beaver Falls, PA 15010
Phone: 724-847-5270

**DEP Northwest Regional Office
(Butler and Lawrence County)**
230 Chestnut Street
Meadville, PA 16335
Phone: 814-332-6945
Fax: 814-332-6125

**DEP New Castle District Office
(Butler and Lawrence County)**
121 North Mill Street
New Castle, PA 16101
Phone: 724-656-3160
Fax: 724-656-3267

**PA Fish and Boat Commission
Southwest Region
(Allegheny and Beaver County)**
236 Lake Road
Somerset, PA 15501
Phone: 814-445-8974
Fax: 814-445-3497
Website: www.fish.state.pa.us

**PA Fish and Boat Commission
Northwest Region
(Butler and Lawrence)**
11528 State Highway 98
Meadville, PA 16335
Phone: 814-337-0444
Fax: 814-337-0579
Website: www.fish.state.pa.us

**PA Game Commission
Southwest Region
(Allegheny and Beaver County)**
4820 Route 711
Bolivar, PA 15923
Phone: 724-238-9523
Website: www.pgc.state.pa.us

**PA Game Commission
Northwest Region
(Butler and Lawrence County)**
PO Box 31
Franklin, PA 16323
Phone: 814-432-3188
Website: www.pgc.state.pa.us

**PA Department of Agriculture
Regional Office**
6 McIntyre Road
Gibsonia, PA 15044
Phone: 724-443-1585
Fax: 724-443-8150
Website: www.agriculture.state.pa.us

**PA Department of Transportation
Penn DOT Central Office**
Keystone Building
400 North Street
Harrisburg, PA 17120
Phone: 717-787-2838
Website: www.dot.state.pa.us

**PA Department of Transportation
Region 10 Office**
2550 Oakland Avenue
Indiana, PA 15701
Phone: 724-357-2800

**PA Department of Transportation
Region 11 Office**
45 Thoms Run Road
Bridgeville, PA 15017
Phone: 412-429-5000

State Agencies (continued)

**PA Governor Edward G. Rendell
Southwest Office
(Counties served include Allegheny, Beaver,
Butler, and Lawrence)**
State Office Building, 14th Floor
300 Liberty Avenue
Pittsburgh, PA 15222
Phone: 412-565-5700
Fax: 412-565-2445
Website: www.governor.state.pa.us

PA State Conservation Commission
2301 North Cameron Street
Harrisburg, PA 17110
Phone: 717-787-8821
Fax: 717-705-3778
Website: www.pascc.state.pa.us

Federal Agencies

**Environmental Protection Agency (EPA)
EPA Region 3 Regional Office**
1650 Arch Street
Philadelphia, PA 19103
Phone: 1-800-438-2474
Website: www.epa.gov

**Penn Soil Resource Conservation and
Development Council (RC&D)**
265 Holiday Inn Road, Suite 3
Clarion, PA 16214
Phone: 814-226-8160 ext.5
Fax: 814-226-4521
Website: www.pennsoilrcd.org

Penn's Corner RC&D
RR #12, Box 202C
Greensburg, PA 15601
Phone: 724-834-9063 ext. 116
Fax: 724-832-9063 ext.3
Website: www.parcld.org/penns_corner.htm

**United States Army Corps of Engineers
Pittsburgh District**
2200 William S. Moorhead Federal Building
1000 Liberty Avenue, Room 1817
Pittsburgh, PA 15222
Phone: 412-395-7500
Fax: 412-644-4093
Website: www.lrp.usace.army.mil

**U.S. Department of Agriculture (USDA)
Animal and Plant Health Inspection Service
(APHIS) – Pennsylvania Wildlife Services**
PO Box 60827
Harrisburg, PA 17106
Phone: 717-236-9451
Fax: 717-236-9454
Website: www.aphis.usda.gov/wildlife_damage

**USDA Farm Service Agency
Pennsylvania State Farm Service Agency**
1 Credit Union PL
Harrisburg, PA 17110
Phone: 717-237-2117
Website: www.fsa.usda.gov

**USDA Farm Service Agency
Butler County Farm Service Agency**
625 Evans City Road
Butler, PA 16001
Phone: 724-482-4800 ext 2
Fax: 724-482-4826
Website: www.fsa.usda.gov

**USDA Natural Resources Conservation
Service (NRCS) Pennsylvania State Office**
One Credit Union Place, Suite 340
Harrisburg, PA 17110
Phone: 717-237-2100
Fax: 717-237-2238
Website: www.pa.nrcs.usda.gov

**USDA-NRCS Butler Field Office
(Allegheny, Beaver, and Butler Counties)**
625 Evans City Road, Ste. 102
Butler, PA 16001
Phone: 724-482-4800 ext. 3
Fax: 724-482-4826

Federal Agencies (continued)

**USDA-NRCS New Castle Field Office
(Lawrence County)**
1503 Old Butler Road
New Castle, PA 16101
Phone: 724-652-5811
Fax: 724-657-8503

**USDA Rural Development
Butler Area Office
(Allegheny, Beaver, and Butler Counties)**
625 Evans City Road, Suite 101
Butler, PA 16001
Phone: 724-482-4800 ext 4
Fax: 724-482-9033
Website: www.rurdev.usda.gov/pa

**USDA Rural Development
Crawford Area Office
(Lawrence County)**
14699 N. Main Street, Extension
Meadville, PA 16335
Phone: 814-336-6155 ext 4
Fax 814-337-0294
Website: www.rurdev.usda.gov/pa

**United States Department of Energy
Pennsylvania Public Utility Commission**
Commonwealth Keystone Building
400 North Street
PO Box 3265
Harrisburg, PA 17105
Website: www.puc.state.pa.us

**United States Department of Energy
National Energy Technology Laboratory**
Pittsburgh Research Center
626 Cochran Mill Road, PO Box 10940
Pittsburgh, PA 15236
Phone: 412-386-6569
Fax: 412-386-5917
Website: www.netl.doe.gov

**United States Fish and Wildlife Service
Pennsylvania Field Office**
315 South Allen Street, Suite 322
State College, PA 16801
Phone: 814-234-4090
Fax: 814-234-0748
Website: www.fws.gov

Allegheny County

Allegheny County Executive
101 County Courthouse
436 Grant Street
Pittsburgh, PA 15219
Phone: 412-350-6500
Fax: 412-350-6512
Website: www.county.allegheny.pa.us

**Allegheny County Department of Economic
Development**
425 Sixth Avenue, Suite 800
Pittsburgh, PA 15219
Website: www.alleghenyplaces.com

Allegheny County Conservation District
400 North Lexington St, Suite 102
Pittsburgh, PA 15208
Phone: 412-241-7645
Fax: 412-242-6165
Website: <http://accd.pghfree.net>
Allegheny County Cooperative Extension
400 North Lexington Street
Pittsburgh, PA 15208
Phone: 412-473-2540
Fax: 412-473-2768
Website: www.cas.psu.edu/directory/county.asp

Allegheny County Visit Pittsburgh
The Regional Enterprise Tower
425 Sixth Avenue
Pittsburgh, PA 15219
Phone: 800-366-0093
Fax: 412-644-5512
Website: www.visitpittsburgh.com

Allegheny County (continued)

Bradford Woods Borough

4908 Wexford Run Road, PO Box 163
Bradford Woods, PA 15015
Phone: 724-935-2990
Fax: 724-935-0293
Website: bradfordwoodspa.org

Marshall Township

525 Pleasant Hill Road
PO Box 2094
Warrendale, PA 15086
Phone: 724-935-3090
Website: www.twp.marshall.pa.us

Pine Township

230 Pearce Mill Road
Wexford, PA 15090
Phone: 724-625-1591
Fax: 724-625-1560
Website: http://twp.pine.pa.us

Richland Township

4011 Dickey Road, Room 200
Gibsonia, PA 15044
Phone: 724-443-5921
Fax: 724-443-8860
Website: http://richland.pa.us

West Deer Township

109 East Union Road, PO Box 2
Russellton, PA 15076
Phone: 724-265-3680
Fax: 724-265-2228
Website: www.westdeertownship.com

Beaver County

Beaver County Commissioners

810 Third Street
Beaver, PA 15009
Phone: 724-728-5700
Website: www.co.beaver.pa.us

Beaver County Planning Commission

810 Third Street, Courthouse
Beaver, PA 15009
Phone: 724-728-5700
Fax: 724-775-3915
Website: www.co.beaver.pa.us/Planning/index.htm

Beaver County Conservation District

156 Cowpath Road
Aliquippa, PA 15001
Phone: 724-378-1701
Website: www.co.beaver.pa.us/conservation

Beaver County Cooperative Extension

2020 Beaver Avenue, Suite 200
Monaca, PA 15061
Phone: 724-774-3003
Fax: 724-774-0971
Website: www.cas.psu.edu/directory/county.asp

Beaver County Recreation and Tourism

Brady's Run Park
526 Brady's Run Road
Beaver Falls, PA 15010
Phone: 724-891-7030
Fax: 724-891-7085
Website: www.visitbeavercounty.com

Daugherty Township

2182 Mercer Road
New Brighton, PA 15066
Phone: 724-846-5337
Fax: 724-846-6481
Website: www.daughertytownship-pa.gov

Franklin Township

897 State Route 288
Fombell, PA 16123
Phone: 724-758-9702
Fax: 724-758-2414

Marion Township

485 Hartzell School Road
Fombell, PA 16123
Phone: 452-1986
Fax: 452-6619

Beaver County (continued)

New Sewickley Township

233 Miller Road
Rochester, PA 15074
Phone: 724-774-7822
Fax: 724-774-7825
Website: www.newsewickley.com/

North Sewickley Township

893 Mercer Road
Beaver Falls, PA 15010
Phone: 843-5826
Fax: 843-9108

Butler County

Butler County Commissioners

124 West Diamond Street
PO Box 1208
Butler, PA 16003
Phone: 724-285-4731
Website: www.co.butler.pa.us

Butler County Planning Commission

Fifth Floor, County Government Center
124 West Diamond Street
PO Box 1208
Butler, PA 16003
Phone: 724-284-5300
Website: www.co.butler.pa.us/butler

Butler County Conservation District

122 McCune Drive
Butler, PA 16001
Phone: 724-284-5270
Fax: 724-285-5515
Website: www.bccdonline.org

Butler County Cooperative Extension

101 Motor Pool Way
Butler, PA 16001
Phone: 724-287-4761
Fax: 724-287-5911
Website:
www.cas.psu.edu/directory/county.asp

Butler County Tourism & Convention Bureau

310 East Grandview Avenue
Zelienople, PA 16063
Phone: 866-856-8444
Second Phone: 724-234-4619
Fax: 724-234-4643
Website: www.visitbutlercounty.com

Adams Township

690 Valencia Road
Mars, PA 16046
Phone: 724-625-2221
Website: www.adamstwp.org

Butler Township

290 South Duffy Road
Butler, PA 16001
Phone: 724-283-3430
Fax: 724-282-2142
Website: www.butlertwp.org

Callery Borough

Drawer-G
199 Railroad Street
Callery, PA 16024
Phone: 724-538-3531

Center Township

419 Sunset Drive
Butler, PA 16001
Phone: 724-282-7805
Fax: 724-282-6550
Website: www.centertownship.net

Clay Township

1115 Euclid School Road
Butler, PA 16001
Phone: 724-637-2638
Fax: 724-637-3415

Clearfield Township

PO Box 5
Fenelton, PA 16034
Phone: 724-283-7701
Fax: 724-283-4111

Butler County (continued)

Clinton Township

711 Saxonburg Blvd
Saxonburg, PA 16056
Phone: 724-352-9000
Fax: 724-352-9011
Website: www.clintontownship.pa.us

Concord Township

167 Manuel Road
West Sunbury, PA 16061
Phone: 724-894-2195

Connoquenessing Borough

228 Constitution Avenue, PO Box 471
Connoquenessing, PA 16027
Phone: 724-789-9097
Fax: 724-789-7900
Website: www.connoquenessingboro.com

Connoquenessing Township

102 Connoquenessing Drive
Renfrew, PA 16053
Phone: 724-789-7186
Fax: 724-789-7835

Cranberry Township

2525 Rochester Road, Suite 400
Cranberry Township, PA 16066
Phone: 724-776-4806
Fax: 724-776-5488
Website: www.twp.cranberry.pa.us

Donegal Township

PO Box 413
Chicora, PA 16025
Phone: 724-445-7303
Fax: 724-445-3090

East Butler Borough

1105 Randolph Road, PO Box 87
East Butler, PA 16029
Phone: 724-283-5402
Fax: 724-282-0287

Evans City Borough

220 Wahl Avenue
Evans City, PA 16033
Phone: 724-538-8320
Fax: 724-538-8444

Forward Township

207 Ash Stop Road
Evans City, PA 16033
Phone: 724-538-9251
Fax: 724-538-9251

Franklin Township

191 Election House Road
Prospect, PA 16052
Phone: 724-865-2412
Fax: 724-865-2469

Harmony Borough

217 Mercer Street, PO Box 945
Harmony, PA 16037
Phone: 724-452-6780
Fax: 724-452-6236
Website: www.harmony-pa.us

Jackson Township

140 Magill Road
Zelienople, PA 16063
Phone: 724-452-5581
Fax: 724-452-5584
Website: www.jacksontwpbutler.org

Jefferson Township

157 Great Belt Road
Butler, PA 16002
Phone: 724-352-2324
Fax: 724-352-8850

Lancaster Township

113 Kings Alley
Harmony, PA 16037
Phone: 724-452-7213
Fax: 724-453-0129

Mars Borough

598 Spring Road, PO Box 395
Mars, PA 16046
Phone: 724-625-1858
Fax: 724-625-4065

Butler County (continued)

Middlesex Township

133 Browns Hill Road
Valencia, PA 16059
Phone: 724-898-3571
Fax: 724-898-4607
Website: www.middlesextownship.org

Muddy Creek Township

114 Brians Court
Portersville, PA 16051
Phone: 724-368-3438
Fax: 724-368-3432

Oakland Township

565 Chicora Road
Butler, PA 16001
Phone: 724-287-8067
Fax: 724-287-3979

Penn Township

157 East Airport Road
Butler, PA 16002
Phone: 724-586-1165
Fax: 724-586-1172
Website: www.penntownship.org

Portersville Borough

1141 West Portersville Street, PO Box 148
Portersville, PA 16051
Phone: 724-368-9175
Fax: 724-368-9175

Prospect Borough

159 Monroe Street, PO Box 308
Prospect, PA 16052
Phone: 724-865-3010
Fax: 724-865-2320
Website: www.prospectborough.com

Saxonburg Borough

420 West Main Street, PO Box 275
Saxonburg, PA 16056
Phone: 724-352-1400
Fax: 724-352-8820
Website: www.saxonburgpa.com

Seven Fields Borough

2200 Garden Drive, Suite 100
Seven Fields, PA 16046
Phone: 724-776-3090
Fax: 724-776-3082
Website: www.sevenfields.org

Summit Township

502 Bonniebrook Road
Butler, PA 16002
Contact: Township Supervisors

Valencia Borough

61 Elmira Street
Valencia, PA 16059
Phone: 724-625-3430

Zelienople Borough

111 West New Castle Street
Zelienople, PA 16063
Phone: 724-452-6610
Fax: 724-452-6613
Website: www.zelieboro.org

Lawrence County

Lawrence County Commissioners

430 Court Street
New Castle, PA 16101
Phone: 724-658-2541
Website: www.co.lawrence.pa.us

Lawrence County Planning Office

430 Court Street
New Castle, PA 16101
Phone: 724-656-2144
Fax: 724-656-2151
Website: www.co.lawrence.pa.us/planning/index.html

Lawrence County Conservation District

Lawrence County Government Center
430 Court Street
New Castle, PA 16101
Phone: (724) 652-4512
Fax: (724) 652-9646
Website: www.lawrenceccd.org

Lawrence County (continued)

Lawrence County Cooperative Extension

430 Court Street
Courthouse
New Castle, PA 16101
Phone: 724-654-8370
Fax: 724-656-2298
Website: www.cas.psu.edu/directory/county.asp

Lawrence County Tourist Promotion Agency

229 South Jefferson Street
New Castle, PA 16101
Phone: 888-284-7599
Fax: 724-654-2044
Website: www.visitlawrencecounty.com

Ellport Borough

313 Burns Avenue
Ellwood City, PA 16117
Phone: 724-752-1422
Fax: 724-752-9430

Ellwood City Borough

525 Lawrence Avenue
Ellwood City, PA 16117
Phone: 724-758-7777
Website: www.ecboro.com

Perry Township

284 Reno Road
Portersville, PA 16051
Phone: 724-368-8230

Shenango Township

1000 Willowbrook Road
New Castle, PA 16101
Phone: 724-658-4460

Slippery Rock Township

4334 US Route 422
New Castle, PA 16101
Phone: 724-924-2482

Wayne Township

1418 Wampum Road
Ellwood City, PA 16117
Phone: 724-752-1361
Website: <http://ellwoodcity.org/wayne>

APPENDIX O. USEFUL WEBSITES

Source	Data	Website
Project Area Characteristics		
Bureau of Labor Statistics	Unemployment Rate	http://www.bls.gov/home.htm
Free Demographics	Population and Economic Data	http://www.freedemographics.com
Green Media Toolshed	Pollution in Your Community	http://www.scorecards.com
Natural Lands Trust	Conservation by Design	http://www.natlands.org
PA Department of Community and Economic Development	Zoning and Comprehensive Planning	http://www.elibrary.state.pa.us
Pennsylvania Department of Education	School Report Cards	http://www.paprofiles.org
Smart Growth Partnership	Smart Growth	http://www.smartgrowth.org
United States Census Bureau	Population and Economic Data	http://www.census.gov

Land Resources

Conservation Reserve Enhancement Program	Conservation Practices	http://www.creppa.org
Natural Resources Conservation Service	Soil Characteristics	http://www.nrcs.usda.gov/technical/efotg/
Pennsylvania Department of Environmental Protection	Permits, Violations	http://www.dep.state.pa.us/efacts/default.asp
Pennsylvania Spatial Data Access (PASDA)	Geographic Information System Data	http://www.pasda.psu.edu/
United States Environmental Protection Agency	Brownfields	http://www.epa.gov/brownfields
United States Environmental Protection Agency	Superfund	http://www.epa.gov/superfund
United States Environmental Protection Agency - ECHO	Enforcement and Compliance History	http://www.epa-echo.gov/echo/
United States Environmental Protection Agency - Envirofacts	Federal Permits, Violations, Wastesites	http://www.epa.gov/enviro/

Water Resources

Center for Dirt & Gravel Road Studies		http://www.mri.psu.edu/centers/cdgrs/Index.html
Coldwater Heritage Partnership		http://www.coldwaterheritage.org/
Environmental Protection Agency	Surf Your Watershed	http://cfpub.epa.gov/surf/huc.cfm?huc_code=05030105
Federal Emergency Management Agency	National Flood Insurance Program	http://www.fema.gov/business/nfip/
Keystone Chapter Soil and Water Conservation Society		http://www.keystoneswcs.com/index.html
League of Women Voters	Groundwater Primer for Pennsylvanians	http://pa.lwv.org/wren/pubs/primer.html
Pennsylvania American Water		http://www.amwater.com/awpr1/paaw/default.html

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Source	Data	Website
Water Resources (continued)		
Pennsylvania Department of Environmental Protection	Stormwater Management Program	http://www.depweb.state.pa.us/watershedmgmt/cwp/view.asp?a=1437&Q=518682&PM=1
Pennsylvania Department of Environmental Protection	Water Resources Plan	http://www.dep.state.pa.us/dep/deputate/watermgmt/wc/subjects/WaterResources/docs/WaterResourcesExecutiveSummary.htm
Pennsylvania Department of Environmental Protection	Watershed Management	http://www.depweb.state.pa.us/watershedmgmt/site/default.asp
Pennsylvania Department of Environmental Protection	State Water Planning Resource Center	http://www.dep.state.pa.us/dep/deputate/watermgmt/wc/act220/default.htm
Pennsylvania Fish and Boat Commission	Wild Trout Waters	http://www.fish.state.pa.us/classa98.htm
Pennsylvania Geological Survey:	Water Resources Reports	http://www.dcnr.state.pa.us/topogeo/groundwater/gwlist.aspx
Pennsylvania Trout	Wilderness Trout Streams	http://www.patrou.org/wildernesstroutstreams.htm
Stroud Water Research Center		http://www.stroudcenter.org/
U.S. Geological Survey	Water Resources Links	http://water.usgs.gov/lookup/getwatershed?05030105
United States Environmental Protection Agency	Water Quality Trading	http://www.epa.gov/owow/watershed/trading.htm
University of Pittsburgh	Regional Water Management Task Force	http://www.iop.pitt.edu/water/index.htm

Biological Resources

Biodiversity

Ecological Society of America	Biodiversity	http://www.esa.org/
NatureServe	Biodiversity	http://www.natureserve.org/
Pennsylvania Biodiversity Partnership	Biodiversity	http://www.pabiodiversity.org/index.html
Pennsylvania Biological Survey (PABS)	Biodiversity	http://alpha.dickinson.edu/prorg/pabs/index.htm
Pennsylvania GAP Analysis Project	Biodiversity	http://www.orser.psu.edu/PAGAP/gappage.htm

Invasive Species

Aquatic Invasive Species of Pennsylvania	Invasive Species	http://www.pserie.psu.edu/seagrant/ais/
Common Invasive Plant in Riparian Areas	Invasive Species	http://www.dep.state.pa.us/dep/deputate/watermgmt/wc/subjects/streamreleaf/Docs/Invasive%20Plants.pdf
Invasive Plants of Pennsylvania	Invasive Species	http://www.dcnr.state.pa.us/forestry/wildplant/invasive.aspx
Invasive Plants of the Eastern United States	Plant Invaders of Mid-Atlantic Natural Areas	http://www.invasive.org/eastern/midatlantic/intro.html
Invasive Species	Invasive Species	www.invasive.org
Invasive Species in Pennsylvania	Invasive Species	http://www.biodiversitypartners.org/invasive/factsheets/PA.pdf

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Source	Data	Website
Biological Resources (continued)		
<i>Invasive Species</i>		
Mid-Atlantic Exotic Pest Plant Council		http://www.ma-eppc.org/
U.S. Department of Agriculture:	National Agricultural Library – Pennsylvania Invasive Species Resources	http://www.invasivespeciesinfo.gov/unitedstates/pa.shtml
<i>Native Plants and Landscaping</i>		
American Chestnut Foundation	Pennsylvania Chapter	www.patacf.org
Arbor Day Foundation	Backyard Woods	http://www.arborday.org/backyardwoods/guide.cfm
Arbor Day Foundation	Tree City U.S.A.	http://www.arborday.org/programs/treeCityUSA.cfm
Carnegie Library of Pittsburgh	Books on Native Plants	http://www.carnegielibrary.org/subject/gardening/nativeplants.html
Ernst Conservation Seeds	Native Plant Sales and Landscaping Information	www.ernstseed.com
Pennsylvania Department of Conservation and Natural Resources	Pennsylvania Community Forests	http://www.dcnr.state.pa.us/forestry/pucfc/
Pennsylvania Flora Database		http://www.paflora.org/Web3/Speciesbywatershed_search_form.asp
Pennsylvania Native Plant Society	Useful Links and Information Regarding Native Plants	http://www.pawildflower.org/04_links/links.htm
Sylvania Natives	Native Plant Sales	www.sylvanianatives.com
U.S. Department of Energy	Energy Efficient Landscaping	http://www.eere.energy.gov/consumer/your_home/landscaping/index.cfm/mytopic=11910
Western Pennsylvania Audubon Society	List of plants native to Allegheny County and surrounding region	http://www.aswp.org/files/allegheny_county_pennsylvania_native_plants_aswp.pdf
Pennsylvania Invertebrate Biodiversity Project		http://www.ento.psu.edu/home/frost/pinbiop/about.html
Pennsylvania Natural Heritage Program		http://www.naturalheritage.state.pa.us/
U.S. Environmental Protection Agency	Ecoregions	http://www.epa.gov/wed/pages/ecoregions/reg3_eco.htm
<i>Wildlife</i>		
Animal Rescue League of Western Pennsylvania	Wildlife Rehabilitation	http://www.pawildlifecenter.org/about-pwc.htm
Audubon Society	Important Bird Areas	http://pa.audubon.org/iba/maps.html
Carnegie Museum of Natural History	2 nd Pennsylvania Breeding Bird Atlas	http://www.carnegiemnh.org/atlas/about_book.htm
Carnegie Museum of Natural History	Pennsylvania Mammals	http://www.carnegiemnh.org/mammals/index.html
Field Guides		http://www.enature.com/fieldguides/index.asp

Connoquenessing Creek Watershed Conservation Plan

Source	Data	Website
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Biological Resources (continued)

Wildlife

National Biological Information Infrastructure		http://www.nbio.gov/portal/server.pt
National Wildlife Federation		http://www.nwf.org/nationalwildlife/article.cfm?articleid=292&issueid=31
North American Pollinator Protection Campaign		http://www.nappc.org/
Pennsylvania Audubon		http://pa.audubon.org/
Pennsylvania Biological Survey	Important Mammal Areas	http://www.pawildlife.org/imap.htm
Pennsylvania Department of Conservation and Natural Resources	Endangered and Threatened Species of Pennsylvania	http://www.dcnr.state.pa.us/wrcf/contents.aspx
Pennsylvania Fish and Boat Commission	Pennsylvania Fishes	http://www.fish.state.pa.us/pafish/fishhtms/chapindx.htm
Pennsylvania Wildlife Federation		http://www.pawildlife.org/
Species Profiles		http://www.fcps.edu/StratfordLandingES/Ecology/mpages/organism_menu.htm
The Wildlife Society		http://joomla.wildlife.org/?CFID=13824013&CFTOKEN=85052420
Wildbird Recovery	Songbird Rehabilitation Center	http://www.stormpages.com/wildbird/index.html

Cultural Resources

National Parks Service	National Register of Historic Places	http://www.nps.gov/history/nr/research/nris.htm
PA Roots	Historical Information	http://www.pa-roots.com/
Pennsylvania Department of Education	Environment and Ecology Standards	http://www.pde.state.pa.us/k12/lib/k12/envec.pdf
Pennsylvania Fish and Boat Commission	Fishing Regulations	http://www.fish.state.pa.us/regs_fish.htm