



## Empowering people to eliminate illegal dumping and littering in Pennsylvania.

Since 1990, PA CleanWays has been dedicated to empowering people to eliminate illegal dumping and littering. Through the coordinated efforts of more than 41,500 PA CleanWays cleanup volunteers, over 10,100 tons of trash and 126,000 tires have been removed from illegal dumpsites in Pennsylvania and properly disposed. Through special collection events sponsored by PA CleanWays chapters and affiliates, an additional 255,000 tires and 24,000 appliances have been properly disposed. Our experience indicates that local involvement, partnerships, and support are vital to lasting success in addressing illegal dumping and littering.

#### PA CleanWays

105 West Fourth Street, Greensburg, PA 15601 Phone: 724-836-4121 •Toll Free: 877-772-3673 Fax: 724-836-1980 • www.pacleanways.org

#### **EXECUTIVE SUMMARY**

PA CleanWays is a nonprofit organization that empowers people to eliminate illegal dumping and littering in Pennsylvania through various education and environmental programs. PA CleanWays' illegal dump surveys educate state, county, and local officials about the problem of illegal dumping and provide valuable data about the dumpsites and the community in which they reside to address the problem through cleanups, municipal waste collections, and recycling programs.

Illegal dumpsite identification was completed by driving roads and contacting various constituent groups such as municipal offices and community services, state agencies, and environmental and conservation groups in the area. Limitations of the survey process included poor visibility in high growth areas and surveyors not accessing private lands or high crime/high risk areas. Due to these limitations, it is likely that there were additional dumpsites not accounted for in this report. Farm dumps and private dumps were not included in the survey. The survey process is to document sites where landowners have been the victim of illegal dumping from other parties, not sites where they have been doing the dumping themselves, or past owners did the dumping.

There were 45 dumpsites identified containing an estimated 58.13 tons of trash. Ninety-six percent of the sites were determined to be active and 100% of the sites were located in a rural area. Of 21 municipalities in Snyder County, one municipality has mandatory trash collection. Two of the municipalities (10%) within Snyder County have a curbside recycling program in their community while seven municipalities (33%) have access to a recycling drop off program. Fourteen municipalities (67%) have illegal dumping activity. All 45 sites (100%) were located in municipalities without a curbside recycling program.

Sixteen, or 36%, of the surveyed sites were in the vicinity (50 feet and within) of some sort of waterway or body of water. Of those, 7 had waste materials directly in the waterway itself. Hard-to-dispose of items, such as tires, construction and demolition waste, and other bulky waste items were the most common waste type in the identified dumpsites. Recyclables, including steel, bi-metallic and aluminum cans, glass, plastic bottles, newspaper, magazines, and cardboard were also found, usually mixed with other materials.

## TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
BACKGROUND	1
PURPOSE OF ILLEGAL DUMP SURVEYS	1
IMPACTS OF ILLEGAL DUMPING	1
SURVEY METHOD	2
DEFINITION OF AN ILLEGAL DUMPSITE	2
SITE IDENTIFICATION AND ASSESSMENT	
LIMITATIONS	3
FARM/PRIVATE DUMPING	4
SNYDER COUNTY ILLEGAL DUMPSITE SURVEY AREA AND RESULTS	4
SURVEY AREA	4
SITE CHARACTERISTICS	5
IMPACTS ON WATERWAYS	6
WASTE CHARACTERISTICS	6
POSSIBLE CAUSES AND SOLUTIONS	6
Possible Causes	6
Possible Solutions	7
SUMMARY	8
ATTACHMENTS	
#1 Snyder County Illegal Dumpsites and Municipalities Map	
#2 Snyder County Illegal Dumpsites and Population Density Map	
#3 Snyder County Illegal Dumpsites and Environmental Features Map	
#4 Illegal Dumpsite and Trash Collection by Municipality	
#5 Illegal Dumpsite Survey Site Characteristics by Municipality	
#6 Illegal Dumpsite Survey Waste Characteristics by Municipality	
#7 Illegal Dumpsite Survey Summary Chart by County	

#### **BACKGROUND**

PA CleanWays is a nonprofit organization that empowers people to eliminate illegal dumping and littering in Pennsylvania. Since 1990, PA CleanWays has helped people who are ready to take action against these destructive problems. By partnering with county and local officials, concerned residents, and community organizations, tangible results can be seen within a community through:

- organization of illegal dump and litter cleanups,
- adoption of local areas,
- prevention of future dumping by the watchful eyes of volunteer monitors,
- placement of physical deterrents, and,
- enforcement action when needed.

PA CleanWays educates the public about proper waste disposal, recycling, and practical alternatives to dumping and littering through the dissemination of literature, presentations, and coordination of collection events for hard-to-dispose of items.

#### PURPOSE OF ILLEGAL DUMP SURVEYS

The purpose of the illegal dump survey was to assess and document as many illegal dumpsites as possible within the county. Illegal dumping mostly occurs in remote and secluded places, rural areas where few people live and the roads are less traveled. However, for many people who are residents of an urban area, an illegal dump can often be found within a one-mile radius of their home. Illegal dumping, within an urban context, has its own set of unique characteristics. Overall, very few people are aware of the widespread problem of illegal dumping.

The first step in developing an action plan against illegal dumping in a community is to determine the extent of the illegal dumping problem. Once sites are identified, assessed, and mapped, the data gathered can be used to:

- show that a problem does indeed exist,
- prioritize the sites and areas for cleanup and abatement,
- document problem materials within the dumpsites and develop plans for proper disposal, and,
- provide a benchmark to measure cleanup progress.

The survey is also a tool that can be used for planning purposes within the community. It can provide valuable insight into the development and enhancement of solid waste and recycling programs. It can also be used to gain support for funding for public awareness programs and education, as well as to generate funds to clean the existing dumpsites.

#### IMPACTS OF ILLEGAL DUMPING

Illegal dumping poses a direct threat to the health and safety of humans and animals. Illegal dumping attracts disease-spreading rodents and mosquitoes by giving them a place to live and

breed. West Nile Virus, carried by mosquitoes, has been a primary concern for environmental officials. Illegal dumps also can be a source of physical injury for humans and animals due to broken glass, rusty metals, and toxic substances.

Recently, a new threat has been added to illegal dumping. Methamphetamine labs, used to produce the illegal drug crystal meth, are becoming more and more common. The materials used to make the illegal drug are tossed along the roadsides in illegal dumps and are extremely toxic.

Environmentally, illegal dumping pollutes our soil, surface, and groundwater supplies, as well as the air we breathe if a site catches on fire. The emissions released by the burning plastics and household hazardous waste can be extremely toxic. It is also aesthetically unpleasing and ruins the beauty of natural areas, including many public places such as community parks and state forests, parks, and game lands.

Economically, illegal dumps are expensive to clean up. Government agencies spend millions annually on cleanup efforts. The estimated cost to clean up a site can be anywhere from \$600 to over \$1,000 per ton for clean up and removal.<sup>1</sup>

Illegal dumpsites can also impact property values, can be a liability for property owners, and affect property purchases and transfers. Tourism revenue can also be affected by illegal dumps, which project to tourists that trash is not a concern of the community or the persons living there.

Illegal dumping also has social impacts on an area. When illegal dumping in neighborhoods and communities becomes status quo, quality of life is impacted and low-level property crime often increases.<sup>2</sup> This is what is referred to as the "broken window theory" developed originally by James Q. Wilson and George Kelling. The "broken window theory" suggests that neighborhood strategies help to deter and reduce crime by the fast clean up of illegally dumped items, litter, and spilled garbage, and by the prompt removal of disposed of items.<sup>3</sup>

#### **SURVEY METHOD**

#### **Definition of an Illegal Dumpsite**

One of the primary goals of an illegal dump survey is to ultimately address the trash in our communities; therefore, the following were considered illegal dumpsites and included in the survey:

- Areas of concentrated trash,
- Areas of scattered trash that:
  - are not considered roadside litter (bottles, fast food wrappers, cans, etc.)

<sup>&</sup>lt;sup>1</sup>PA CleanWays averaged cost from multiple cleanups throughout 2004 & 2005.

<sup>&</sup>lt;sup>2</sup> Wilson, James Q., Kelling, George L., "Broken Windows", <u>Atlantic Monthly</u>, March 1982.

<sup>&</sup>lt;sup>3</sup> Henry G. Cisneros, "Defensible Space: Deterring Crime and Building Community", January 1995.

- appear to have new trash thrown on them occasionally (more than twice a year)
- appear to have new trash thrown on them occasionally, but cleanup maintenance is prevalent to prevent accumulation,
- Areas containing only piles of yard waste (grass, leaves, branches, trees, etc.). These
  sites can often attract the dumping of other materials and can grow into major
  dumpsites, and,
- Areas containing isolated or solitary items, such as 1 or 2 appliances or tires that may or may not be dumped on in the future.

#### **Site Identification and Assessment**

PA CleanWays has learned through its experiences that, to effectively identify illegal dumpsites in an area, it is necessary to physically travel the roadways. By focusing on high probability areas for dump locations such as pull-offs, roads with hillsides, etc., efficient surveying can be done on large areas within a short amount of time.

Preliminary data gathering was conducted by sending a letter to every municipality within the county concerning the survey project. The letters detailed the survey purpose and plan, and asked for known illegal dumpsites to be reported back to PA CleanWays. Letters were also sent to environmental groups interested in conservation of this area, as well as to state agencies such as the Pennsylvania Department of Environmental Protection, Pennsylvania Department of Conservation and Natural Resources, the Pennsylvania Game Commission, and the Pennsylvania Fish and Boat Commission. Follow up phone calls were made to each municipality prior to beginning assessments in its area.

Once an illegal dumpsite was located, characteristics about the site itself were recorded and documented on standard forms (a copy of the Illegal Dump Survey Assessment Form and Instruction Sheet are available by contacting PA CleanWays). Pictures were also taken of the illegal dumpsites to further document the problem. GPS coordinates were recorded for each site in order to produce illegal dumpsite maps within the county based on municipalities, population density, and environmental features (see Attachments 1, 2, and 3).

#### Limitations

The primary limitation with road surveys is that they only permit discovery of sites visible from the public right-of-way, therefore, only those sites were assessed by PA CleanWays. PA CleanWays did not enter private property to assess sites. It can be presumed that there are significant numbers of illegal dumpsites out of sight on private property with limited access. Because safety considerations were a priority for this project, areas were not assessed in high crime/risk areas. Most surveying began after the foliage had thinned in the fall and visibility improved, however, some site assessments were limited due to high vegetation and snowfall.

Due to cleanup efforts after surveying occurred, some sites in this report may no longer be present.

#### Farm/Private Dumping

While PA CleanWays strives to include as many illegal dumpsites in each county as possible, there are two types of dump sites we do not include in our reports; farm dumps and private dumps. The survey process is to document sites where landowners have been the victim of illegal dumping from other parties, not sites where they have been doing the dumping themselves, or past owners did the dumping.

Farm dumping is still in practice today, although not to the extent it was decades ago. Typically, there was not a disposal plan in place for many areas in the state, therefore farmers disposed of their household garbage, empty chemical containers, yard waste, and other unneeded materials somewhere on their property. A majority of today's farmers have unfortunately inherited farm dumps on their properties, although some continue the practice to save money and time. Increased public awareness of environmental issues caused by dumpsites has shed light on the reasons not to continue to use farm dumps. Without regulations or enforcement in place to stop it, farm dumping is still an issue in Pennsylvania and many other agricultural states in the U.S. To learn more about how farmers can clean their own dumps and the legalities of farm dumping, contact the Penn State University Agricultural & Biological Engineering Extension at 814-865-7685.<sup>4</sup>

Private dumpsites, ones that are put on the property by the owners, are also not included. These include sites such as stockpiles of scrap, yard waste, household trash, and other things you may find in an illegal dumpsite. Usually these sites are determined private by its proximity to a residence, or marked private with no trespassing signs. There are many times when the surveyor is not able to distinguish between a private site and an illegal dumpsite. In these cases, the site is surveyed and sent to the PA CleanWays office where, based on the data gathered and photos taken, it is determined whether to include it in the final report as an illegal dumpsite. If a dumpsite in a published report is found to be a farm or private dumpsite, the site is immediately removed from the report.

#### SNYDER COUNTY ILLEGAL DUMPSITE SURVEY AREA AND RESULTS

#### **Survey Area**

Snyder County encompasses 331.20 square miles and is located in the central part of Pennsylvania. The county is bordered by Union County to the north, Northumberland County to the east, Juniata County to the south, and Mifflin County to the west. The county has four major watersheds within its boundaries; the Mahantango-Wiconisco Creeks Watershed, the Middle Creeks Watershed, the Kishacoquillas-Jacks Creeks Watershed, and the Tuscarora-Buffalo Creeks Watershed.

According to the Census Bureau, the 2000 census recorded the population as 37,546. The median household income is \$35,981. The per capita income is \$16,756. The percentage of individuals below poverty status is 9.9%, while 6.7% of families are below poverty status. The

<sup>&</sup>lt;sup>4</sup> Garthe, J. W. & Shufran, J. L. (1997). Farm Dumps: Problems and Solutions. Penn State Agricultural and Biological Engineering. Retrieved from http://www.abe.psu.edu/extension/factsheets/c/C28.pdf.

national average is 12.4% for individuals and 9.1% for families. The percent of high school graduates or higher is 73.2%, which is lower than the state average of 81.9%.

Snyder County is located about an hour north of Harrisburg, PA. It was first settled in the 1740's by Pennsylvania Germans from Berks and Lancaster Counties, and became its own county in 1855 from parts of Union County. Snyder County is named for its most famous citizen and political figure, Simon Snyder. His history in politics includes three terms as Governor of Pennsylvania, member of the State House of Representatives, member of the State Senate, and Speaker of the House for 3 terms. He was the only 3 term governor in the state's history. During his tenure as governor in 1812, the State Capitol was moved from Lancaster to Harrisburg.

Economically, Snyder County is known for its wood products, with Wood Mode Manufacturing being one if it's major employers. In 2005, manufacturing was the largest sector of employment, with health and education second.

Snyder County is known for its Pennsylvania German language and culture, its agricultural heritage, Susquehanna University, and the many fairs and festivals throughout the year. The county also has many outdoor activities and amenities. The west branch of the Susquehanna River has good bass fishing, and boating on the river is a popular activity. Smaller streams, such as White Deer and Penn's Creek, are known for excellent trout fishing. Hunters also come to the county each year to hunt whitetail deer, turkey, and black bear. Snyder County is also home to Middleswarth State Park and the Tall Timbers Natural Area, which is a national landmark. It is composed of 250 acres of old growth hemlock, white pine, pitch pine, and hardwoods. Some of these trees are over 150 feet high and over 40 inches in diameter. One downed tree counts 347 rings.

In Pennsylvania, municipal solid waste (msw) includes municipal waste, sewage sludge, construction and demolition waste, asbestos, and ash. In Snyder County, 1 municipality offers trash collection and 2 of Snyder County's municipalities (10%) have a curbside recycling program within their community. Seven municipalities (33%) have access to a recycling drop off program. Fourteen municipalities (67%) have illegal dumping activity. All 45 sites were located in municipalities without a curbside recycling program (see Attachment 4). In 2005, according to the Pennsylvania Department of Environmental Protection, Snyder County reported a total of 32,665.02 tons of municipal solid waste generated. Of that total, 6,592.2 tons were recycled giving Snyder County a 20% recycling rate. The county has an msw generation rate of 0.87 tons per person per year. The national average is 0.84 tons per person per year.

#### **Site Characteristics**

The Snyder County survey resulted in the identification of 45 illegal dumpsites totaling an estimated 58.13 tons of trash. The sites ranged in size from approximately .125 tons to 6 tons of waste. A chart of Site Characteristics by Municipality can be found as Attachment 5 of this report.

Of the 45 dump sites, 100% were in rural areas. The terrain of Snyder County is somewhat mountainous and hilly. Hillsides provide illegal dumpers with a convenient place for easy unloading. Ninety-six percent of the sites were considered to be a continuous problem where dumping occurs routinely. None of the sites had "No Dumping" signs present. Signs, although effective in some areas, often send a message that this is a "safe" place to dump. In some county surveys, the presence of signs resulted in the identification of sites that were not visible from the road. Concerning visibility, 56% of the sites were visible and 33% were partly visible from the road. This fact lends itself to the theory that illegally dumped trash will attract more trash.

#### **Impacts on Waterways**

Of all the illegal dumpsites, those posing the most direct and obvious threat to the environment were located in or near waterways. Sixteen, or 36%, of the surveyed sites were in the vicinity (50 feet and within) of some sort of waterway or body of water. Of those, 7 sites had waste materials directly in the waterway itself (see Attachment 5). It should, however, be noted that all illegal dumps contaminate our water supply.

#### **Waste Characteristics**

Snyder County illegal dumpsites contained a variety of waste types. In some areas, the common presence of a waste type may indicate the need for a refuse/recycling program for that particular material. All 45 dumpsites were located in a municipality without a curbside recycling program. Although there was a variety of refuse found in the illegal dumps, tires, household trash, and other bulky waste items were the most common waste type identified. Recyclables were also frequently found while surveying. Recyclables are defined as steel, bimetallic and aluminum cans, glass, plastic bottles, newspaper, magazines, and cardboard. These were usually mixed with other materials. A chart of the Waste Characteristics by Municipality can be found as Attachment 6, as well as a chart showing Illegal Dumpsite Characteristics Summary by County as Attachment 7 of this report.

#### POSSIBLE CAUSES AND SOLUTIONS

Illegal dumping occurs in every county of the state. There are a multitude of reasons and excuses why people dump: the cost or inconvenience of proper disposal; the lack of, or frustration in, finding proper disposal options; lack of public education; profit making; the result of other criminal activity or malicious mischief.

#### **Possible Causes**

• Municipal curbside trash collection is unavailable

Because it is not mandated by the state, trash collection options are dependent on the city or municipal government. As many rural and small-town municipalities lack funding for mandatory trash collection, it is up to the resident to pay for trash collection. Communities that depend on private subscription for waste collection services have reported greater dumping problems. Inherent inefficiencies and associated higher costs exist in almost all

private subscription systems because trucks must travel long distances between customers.<sup>5</sup>

#### • Recycling programs are unavailable or inconvenient

Act 101 dictates that all communities with populations over 10,000, and densely populated municipalities between 5,000 and 10,000, have recycling programs. Communities that fall outside of these parameters must pay for recycling on their own. Depending on the county, many or all of these communities don't have funding to support a curbside recycling program. Curbside recycling communities have reported a lower incidence of residential waste accumulation problems and a slightly lower incidence of dumping problems.<sup>6</sup>

#### • Disposal of Construction and Demolition debris (C&D)

C&D debris is a serious solid waste management issue because of the amount that is generated each year, along with the lack of convenient and or affordable disposal options available. C&D debris is often found in illegal dumps and creates a compounded problem because some of the materials may be hazardous, such as wood that has been chemically treated or painted with lead based paint, insulation containing asbestos, or shingles.

#### • Shortage of enforcement

Unfortunately, many communities cannot devote people and resources to effectively deal with illegal dumping. As a result, dumpers do not fear prosecution and have no reason to stop their habits.

#### • Education

Illegal dumping has been a learned habit for many. Prior to anti – dumping laws, it was common practice to use open town dumps, burn or bury trash, or dump in a convenient out of the way area. Today we know the harmful effects from illegal dumping. Education is key to diminish the habits learned and teach the public proper and safe disposal practices.

#### **Possible Solutions**

Organize a cleanup

Cleanups are an effective way to combat littering and illegal dumping. Cleanups help to build ownership, restore community pride, and send a message that dumping will no longer be tolerated.

#### • Organize a special collection event

Special one-day collection events are worthwhile. These special collection opportunities are very effective when routinely offered, such as each spring or fall as a community cleanup day, but are also successful when offered as community resources permit. These special collections commonly target hard-

<sup>&</sup>lt;sup>5</sup> PA CleanWays and PROP, "Factors Influencing Illegal Dumping in Pennsylvania Communities", Spring 2001.

<sup>&</sup>lt;sup>6</sup> PA CleanWays and PROP, "Factors Influencing Illegal Dumping in Pennsylvania Communities", Spring 2001.

to-dispose of materials such as tires, appliances, scrap metal, computers, electronics, and household hazardous waste. Most of these items account for what is found in illegal dumps.

#### • Physical deterrents

The placing of guard rails or mounds of dirt at pull-off areas, as well as the planting of trees, can help provide a barrier that will limit accessibility to a site for future dumping.

#### • Site monitoring and maintenance

It is important to monitor a site after an area has been cleaned in order to watch for subsequent dumping or littering, to keep the site clean, and to report any incriminating evidence to the proper enforcement agency. Keeping the site clean makes it easier to spot new trash and discourages subsequent dumping, since trash attracts trash.

Enforcement, with site monitor support, effectively decreases the incidents of dumping and littering. When word gets out that dumping activity will not be tolerated and violators will be caught and prosecuted, dumping decreases.

#### • Community education

Intentional illegal dumping and littering are social problems that require a shift in attitudes and practices. Education is the key to changing values, habits, and attitudes. Education programs should be tailored to inform the community and can take many forms, such as, school/community presentations, press releases, radio and newspaper ads, and publications.

#### • Enforcement of existing laws

Any improper disposal of trash is illegal and violators can be prosecuted. Numerous Pennsylvania agencies enforce laws addressing improper disposal of trash. The Pennsylvania General Assembly creates and enacts our littering and dumping laws.<sup>7</sup> County and municipal governments create and enact ordinances that are specific within their local boundaries.

#### **SUMMARY**

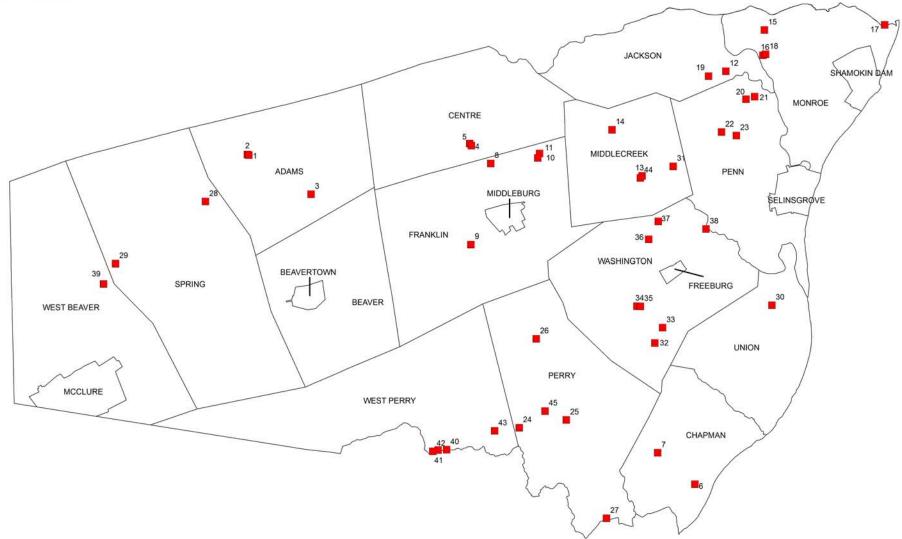
This survey accounted for 45 illegal dumpsites in Snyder County consisting of an estimated 58.13 tons of trash. This is not a comprehensive survey of the entire county as it is expected that there are many more illegal dumpsites on private lands, as well as ones on public lands that have gone undetected. However, the documentation and assessment of these 45 sites in Snyder County is a strong step forward in the fight against illegal dumping in Pennsylvania. By providing the needed data to address the problem of illegal dumping, constituents can begin doing so through public policy, resource allocation, community education, and cleanups.

<sup>&</sup>lt;sup>7</sup> Read about the Pennsylvania Code at www.pacode.com.



# Snyder County, Pennsylvania Illegal Dumpsites and Municipalities December 2008

## Attachment 1



## Legend

Illegal Dumpsites as of 12-10-08

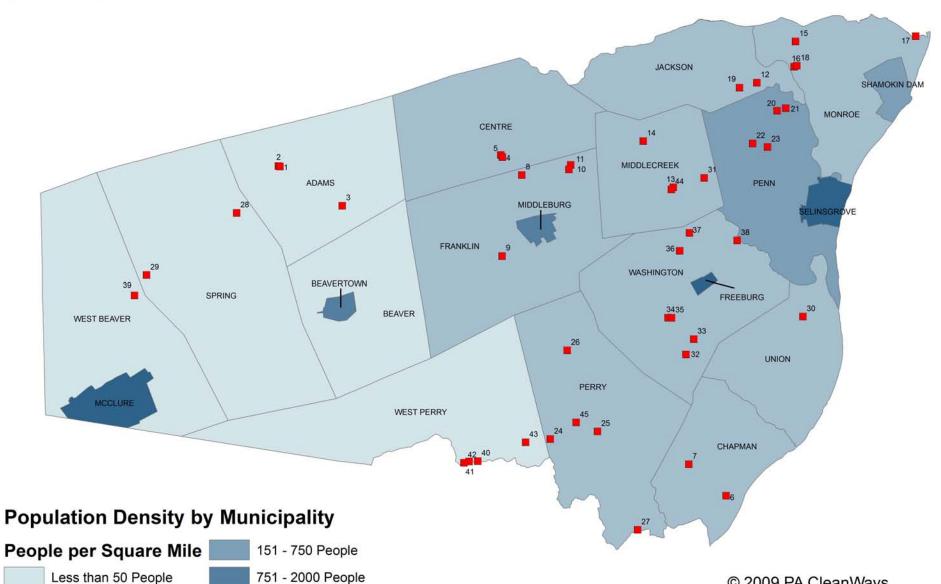
© 2009 PA CleanWays Map Prepared by Yongfei Zhao UCSUR, University of Pittsburgh





51 - 150 People

# Snyder County, Pennsylvania Illegal Dumpsites and Population Density December 2008



More than 2001 People

Illegal Dumpsites as of 12-10-08

© 2009 PA CleanWays Map Prepared by Yongfei Zhao UCSUR, University of Pittsburgh

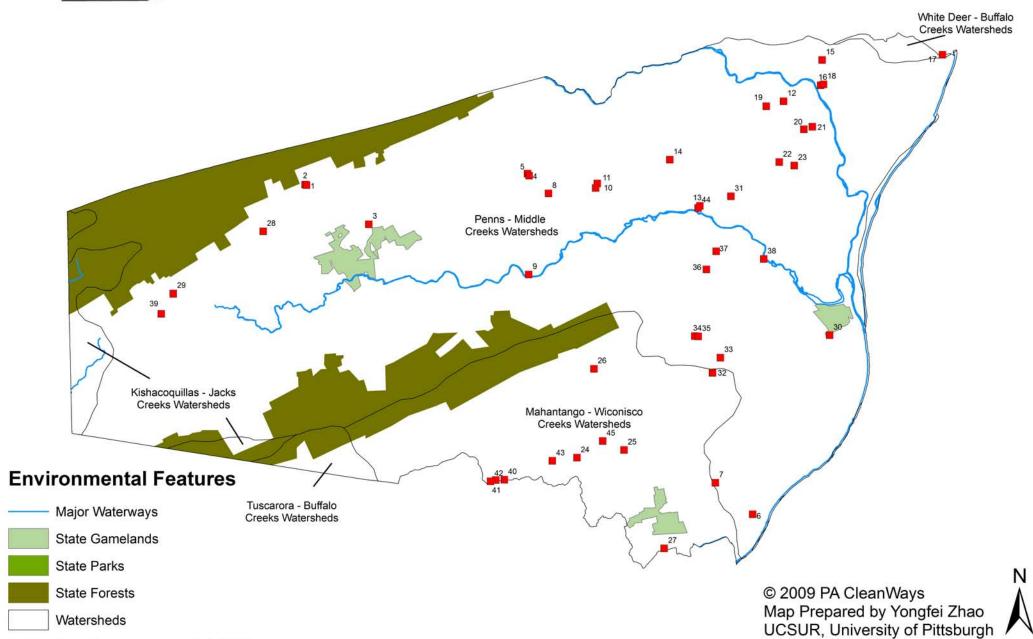


## PA CleanWays

Illegal Dumpsites, as of 12-10-08

# Snyder County, Pennsylvania Illegal Dumpsites and Environmental Features December 2008

## Attachment 3



#### Illegal Dumpsites and Trash Collection by Municipality\*\*

Municipality	Illegal Dumpsites	Calculated Tons*	Trash Collection	Curbside Recycling	Drop Off Recycling
Adams Township	3	5.25			
Beaver Township	0	0			
Beavertown Borough	0	0			
Center Township	2	1			
Chapman Township	2	5.5			
Franklin Township	4	7.5	Х		
Freeburg Borough	0	0			
Jackson Township	2	0.5			
McClure Borough	0	0			
Middleburg Borough	0	0			Х
Middlecreek Township	4	7.5			Х
Monroe Township	4	2.25			Х
Penn Township	4	0.875			Х
Perry Township	5	4.5			
Selinsgrove Borough	0	0		Х	Х
Shamokin Dam Borough	0	0		Х	
Spring Township	2	3.5			Х
Union Township	1	2			Х
Washington Township	7	15.25			
West Beaver Township	1	0.5			
West Perry Township	4	2			

Sixty-seven percent of Snyder County's municipalities have illegal dumping activity.

One of Snyder County's municipalities have trash collection.

Two of Snyder County's municipalities have a curbside recycling program.

One hundred percent of the sites were located in municipalites without a curbside recycling program.

<sup>\*</sup>Quantities assessed at time of survey were estimates based on what was visible.

<sup>\*\*</sup>Information concerning mandatory trash collection, curbside recycling, and drop off recycling is deemed correct at time of printing and cannot be guaranteed due to changes in ordinances and funding in each individual municipality. Data was gathered through phone calls to each municipality, county solid waste specialists, county recycling coordinators, and data taken from DEP's Recycling Page Resources.

## Snyder County IDS Site Characteristics by Municipality\*

			1					T	
Municipality	Site Name	Site Number	Calculated Tons	Demographics	Distance from Waterway	Visibility from Roadway	Road Ownership	Terrain Type	Active
Adams Township	Kuhns Road	0002	0.25	Rural	No waterway nearby	Yes	Municipal	Flat	Yes
Adams Township	Middle Road	0003	0.5	Rural	No waterway nearby	Yes	Municipal	Flat	No
Adams Township	SR 235	0001	4.5	Rural	Within 50 ft	Partial	State	Gently sloped	Yes
Center Township	Pitzer Road Site 1	0004	0.5	Rural	Within 50 ft	Yes	Municipal	Flat	Yes
Center Township	Pitzer Road Site 2	0005	0.5	Rural	In Waterway/Wetland	Partial	Municipal	Flat	Yes
Chapman Township	Grove Road	0007	1.5	Rural	No waterway nearby	Yes	Municipal	Flat	Yes
Chapman Township	Hoffer Road	0006	4	Rural	Within 50 ft	Yes	State	Flat	Yes
Franklin Township	Iron Bridge Road	0009	0.25	Rural	Within 50 ft	Yes	State	Flat	Yes
Franklin Township	Opossum Hollow Road Site 1	0011	5	Rural	No waterway nearby	No	County	Steep slope	Yes
Franklin Township	Opossum Hollow Road Site 2	0010	1.25	Rural	No waterway nearby	Partial	County	Flat	Yes
Franklin Township	SR 104	8000	1	Rural	50 to 100 ft	Yes	State	Flat	Yes
Jackson Township	Herman Road	0012	0.25	Rural	Within 50 ft	Yes	Municipal	Gently sloped	Yes
Jackson Township	Perkinson Road	0019	0.25	Rural	More than 100 ft	Yes	County	Flat	Yes
Middlecreek Township	Church Road	0031	0.5	Rural	No waterway nearby	Yes	State	Flat	Yes
Middlecreek Township	Ridge Road	0014	5	Rural	No waterway nearby	Yes	County	Medium slope	Yes
Middlecreek Township	Smalsh Barrick Road	0044	1	Rural	No Waterway Nearby	Yes	State	Flat	Yes
Middlecreek Township	SR 1009	0013	1	Rural	More than 100 ft	Yes	State	Flat	No
Monroe Township	County Line Road	0017	0.5	Rural	In Waterway/Wetland	Yes	Municipal	Flat	Yes
Monroe Township	Hallow Road Site 1	0015	0.5	Rural	In Waterway/Wetland	Partial	Municipal	Gently sloped	Yes
Monroe Township	Hallow Road Site 2	0018	0.25	Rural	In Waterway/Wetland	Yes	Municipal	Gently sloped	Yes
Monroe Township	Kratzerville Road	0016	1	Rural	50 to 100 ft	Partial	State	Medium slope	Yes
Penn Township	Fair Oak Road	0023	0.25	Rural	No waterway nearby	Yes	State	Gently sloped	Yes
Penn Township	Fetter Road Site 1	0020	0.25	Rural	50 to 100 ft	Yes	County	Gently sloped	Yes
Penn Township	Fetter Road Site 2	0021	0.125	Rural	Within 50 ft	Partial	County	Flat	Yes
Penn Township	Salem Road	0022	0.25	Rural	More than 100 ft	Yes	State	Flat	Yes
Perry Township	Backus Woods Road	0025	1	Rural	50 to 100 ft	Partial	Municipal	Gently sloped	Yes
Perry Township	Buckwheat Valley Road	0024	1.5	Rural	Within 50 ft	Yes	State	Gently sloped	Yes
Perry Township	Heister Valley Road	0026	0.5	Rural	More than 100 ft	Yes	State	Flat	Yes
Perry Township	Oriental Road	0027	1	Rural	50 to 100 ft	Yes	State	Gently sloped	Yes
Perry Township	Portzline Road	0045	0.5	Rural	More than 100 ft	Yes	Municipal	Flat	Yes
Spring Township	Mountain Road	0029	3	Rural	More than 100 ft	Partial	State	Flat	Yes
Spring Township	Sand Hill Road	0028	0.5	Rural	Within 50 ft	Yes	Municipal	Flat	Yes

## **Snyder County IDS Site Characteristics by Municipality\***

Municipality	Site Name	Site Number	Calculated Tons	Demographics	Distance from Waterway	Visibility from Roadway	Road Ownership	Terrain Type	Active
Union Township	Red Hill Road	0030	2	Rural	No waterway nearby	No	County	Steep slope	Yes
Washington Township	Creek Mountain Road	0038	6	Rural	Within 50 ft	No	County	Extremely steep	Yes
Washington Township	Flint Hill Road	0034	2	Rural	No waterway nearby	No	County	Medium slope	Yes
Washington Township	Horseshoe Bend Road	0036	0.75	Rural	More than 100 ft	Partial	County	Gently sloped	Yes
Washington Township	Lenig Road	0032	1.5	Rural	No waterway nearby	Partial	State	Steep slope	Yes
Washington Township	Miller Hill Road	0035	3	Rural	No waterway nearby	Partial	Municipal	Steep slope	Yes
Washington Township	Peach Orchard Road	0037	0.5	Rural	In Waterway/Wetland	Partial	Municipal	Extremely steep	Yes
Washington Township	Rownzy Road	0033	1.5	Rural	No waterway nearby	No	County	Gently sloped	Yes
West Beaver Township	Gilbert Road	0039	0.5	Rural	No waterway nearby	Yes	Municipal	Flat	Yes
West Perry Township	Daniels Road	0043	0.5	Rural	50 to 100 ft	Partial	Municipal	Steep slope	Yes
West Perry Township	Pine Swamp Road Site 1	0040	0.25	Rural	In Waterway/Wetland	Partial	State	Gently sloped	Yes
West Perry Township	Pine Swamp Road Site 2	0042	0.25	Rural	50 to 100 ft	Yes	State	Gently sloped	Yes
West Perry Township	Pine Swamp Road Site 3	0041	1	Rural	In Waterway/Wetland	Partial	State	Gently sloped	Yes

Total Number of Sites:	45	Total Calculated Tons:	58.13
La contraction de la		L	

<sup>\*</sup> Characteristics assessed at time of survey were based on what was visible.

### Attachment 6

## Snyder County Illegal Dump Survey Waste Characteristics by Municipality\*

		<u> </u>								l	•							
Municipality	Site Name	Site Number	Calculated Tons	Bagged Trash	Household Trash	Recyclables	HHW	Tires	Clean Fill	C _D Waste	Yard Waste	White Goods	Electronics	Televisions	Furniture	Mattresses	Vehicle Parts	Car Batteries
Adams Township	Kuhns Road	0002	0.25	Yes	Yes	Yes	No	0	No	No	No	0	0	0	0	0	No	0
Adams Township	Middle Road	0003	0.5	Yes	Yes	Yes	No	3	No	No	No	0	0	0	1	0	Yes	0
Adams Township	SR 235	0001	4.5	Yes	Yes	Yes	Yes	4	No	No	Yes	1	1	2	0	2	Yes	0
Center Township	Pitzer Road Site 1	0004	0.5	No	No	Yes	No	9	No	Yes	No	0	0	1	0	1	No	0
Center Township	Pitzer Road Site 2	0005	0.5	Yes	Yes	Yes	No	2	No	No	No	0	0	0	0	1	No	0
Chapman Township	Grove Road	0007	1.5	No	Yes	Yes	No	55	No	Yes	No	0	0	0	0	0	No	0
Chapman Township	Hoffer Road	0006	4	Yes	Yes	Yes	Yes	20	Yes	Yes	Yes	0	1	2	4	0	Yes	2
Franklin Township	Iron Bridge Road	0009	0.25	Yes	Yes	Yes	No	3	No	No	Yes	0	0	0	0	0	No	0
Franklin Township	Opossum Hollow Road Site 1	0011	5	Yes	Yes	Yes	Yes	100	No	Yes	Yes	0	2	4	1	3	Yes	0
Franklin Township	Opossum Hollow Road Site 2	0010	1.25	No	Yes	Yes	Yes	28	No	No	No	0	1	0	0	0	No	0
Franklin Township	SR 104	8000	1	Yes	Yes	Yes	No	6	No	Yes	No	0	0	0	1	0	Yes	0
Jackson Township	Herman Road	0012	0.25	No	Yes	Yes	No	0	No	No	No	0	0	1	0	0	No	0
Jackson Township	Perkinson Road	0019	0.25	No	Yes	Yes	No	0	No	No	No	0	0	0	0	0	No	0
Middlecreek Township	Church Road	0031	0.5	Yes	Yes	Yes	No	0	No	No	Yes	0	1	1	0	0	Yes	0
Middlecreek Township	Ridge Road	0014	5	Yes	Yes	Yes	Yes	15	No	Yes	Yes	4	2	3	0	0	Yes	0
Middlecreek Township	Smalsh Barrick Road	0044	1	Yes	Yes	Yes	No	12	No	Yes	No	0	0	0	0	0	Yes	0
Middlecreek Township	SR 1009	0013	1	No	Yes	Yes	No	9	No	Yes	Yes	0	0	0	0	1	Yes	0
Monroe Township	County Line Road	0017	0.5	No	Yes	Yes	No	5	No	Yes	No	0	1	1	0	0	No	0
Monroe Township	Hallow Road Site 1	0015	0.5	Yes	Yes	Yes	No	13	No	No	Yes	1	1	0	0	0	No	0
Monroe Township	Hallow Road Site 2	0018	0.25	Yes	Yes	Yes	No	0	No	No	No	0	1	0	0	0	No	0
Monroe Township	Kratzerville Road	0016	1	Yes	Yes	Yes	Yes	10	No	Yes	Yes	1	1	2	0	0	No	0
Penn Township	Fair Oak Road	0023	0.25	No	Yes	Yes	No	0	No	No	No	0	0	0	0	0	No	0
Penn Township	Fetter Road Site 1	0020	0.25	No	Yes	Yes	No	0	No	No	Yes	0	0	0	0	0	No	0
Penn Township	Fetter Road Site 2	0021	0.125	No	Yes	Yes	Yes	3	No	No	No	0	0	0	0	0	No	0
Penn Township	Salem Road	0022	0.25	No	Yes	Yes	No	2	No	Yes	Yes	0	0	0	0	0	No	0

**Attachment 6** 

## Snyder County Illegal Dump Survey Waste Characteristics by Municipality\*

Municipality	Site Name	Site Number	Calculated Tons	Bagged Trash	Household Trash	Recyclables	МНН	Tires	Clean Fill	C_D Waste	Yard Waste	White Goods	Electronics	Televisions	Furniture	Mattresses	Vehicle Parts	Car Batteries
Perry Township	Backus Woods Road	0025	1	No	Yes	Yes	Yes	5	No	No	No	0	0	0	0	0	No	1
Perry Township	Buckwheat Valley Road	0024	1.5	Yes	Yes	Yes	No	0	Yes	Yes	Yes	0	0	0	0	0	No	0
Perry Township	Heister Valley Road	0026	0.5	No	No	Yes	No	0	No	No	Yes	0	0	0	0	0	No	0
Perry Township	Oriental Road	0027	1	No	Yes	Yes	No	2	No	No	No	0	0	0	0	0	No	0
Perry Township	Portzline Road	0045	0.5	No	Yes	Yes	Yes	0	No	No	Yes	0	0	0	0	3	No	0
Spring Township	Mountain Road	0029	3	Yes	Yes	Yes	No	25	No	Yes	Yes	0	0	0	0	0	No	0
Spring Township	Sand Hill Road	0028	0.5	No	No	Yes	No	0	Yes	No	Yes	0	0	0	0	0	No	0
Union Township	Red Hill Road	0030	2	No	Yes	Yes	Yes	1	No	No	Yes	5	1	0	1	0	Yes	0
Washington Township	Creek Mountain Road	0038	6	Yes	Yes	Yes	Yes	50	No	Yes	Yes	5	3	5	4	2	Yes	0
Washington Township	Flint Hill Road	0034	2	Yes	Yes	Yes	Yes	8	No	Yes	Yes	3	1	2	1	0	Yes	0
Washington Township	Horseshoe Bend Road	0036	0.75	No	Yes	Yes	No	4	No	No	Yes	0	0	0	0	0	No	0
Washington Township	Lenig Road	0032	1.5	Yes	Yes	Yes	No	8	No	Yes	Yes	1	1	1	0	2	No	0
Washington Township	Miller Hill Road	0035	3	No	Yes	Yes	Yes	40	No	Yes	No	1	0	1	1	3	Yes	0
Washington Township	Peach Orchard Road	0037	0.5	Yes	Yes	Yes	No	3	Yes	No	Yes	0	0	0	0	0	No	0
Washington Township	Rownzy Road	0033	1.5	Yes	Yes	Yes	No	8	No	Yes	Yes	1	1	0	1	0	No	0
West Beaver Township	Gilbert Road	0039	0.5	Yes	Yes	Yes	No	0	No	No	Yes	0	0	0	0	0	No	0
West Perry Township	Daniels Road	0043	0.5	No	No	No	No	0	No	Yes	No	0	0	0	1	1	No	0
West Perry Township	Pine Swamp Road Site 1	0040	0.25	No	Yes	Yes	No	0	No	Yes	No	1	0	0	0	1	Yes	0
West Perry Township	Pine Swamp Road Site 2	0042	0.25	No	Yes	Yes	No	0	No	No	No	0	0	0	0	0	No	0
West Perry Township	Pine Swamp Road Site 3	0041	1	No	Yes	Yes	No	5	No	No	No	0	0	0	0	0	Yes	0

<b>Total Number of Sites:</b>	45	Total Calculated Tons:	58.13

<sup>\*</sup> Characteristics assessed at time of survey were based on what was visible.

Dumpsite Characteristics	Allegheny	Adams	Armstrong	Bedford	Berks	Butler	Centre	Clarion	Columbia	Crawford
Total Sites Surveyed	202	116	176	128	100	217	56	102	39	82
Estimated Tons	344	218	585	870	185	317	128	263	382	115
Location Demographics										
Rural	15%	94%	99%	90%	73%	88%	96%	100%	100%	95%
Suburban	70%	6%	1%	10%	25%	11%	4%	0%	0%	5%
Urban	15%	0%	0%	0%	2%	1%	0%	0%	0%	0%
Visible from Road										
Yes	62%	35%	37%	70%	63%	60%	73%	52%	85%	48%
No	11%	22%	11%	7%	10%	6%	7%	13%	2%	33%
Partial	27%	42%	52%	23%	27%	34%	20%	35%	13%	19%
Distance from Waterway										
Directly In Waterway/Wetlands Within 50 Feet and/or Directly	24%	9%	14%	6%	7%	16%	5%	6%	12%	6%
in Waterway/Wetlands	45%	35%		22%			16%		32%	43%
Over 50 Feet or No Waterway  Road Type	55%	65%	68%	78%	63%	73%	13%	85%	68%	57%
State	270/	220/	00/	240/	100/	20/	100/	60/	120/	60/
Municipal/County	37% 49%	22% 64%	8% 90%	<ul><li>24%</li><li>73%</li></ul>	18% 81%	3% 97%	18% 67%	6% 93%	13% 87%	6% 93%
Forest/Park	0%	13%	1%	0%	1%	0%	13%	1%	0%	1%
Private/Undetermined	14%	1%	1%	3%	0%	0%	2%	0%	0%	0%
Terrain	/ 3	. 70	. 70	0 70	3 / 0	0 /0		0 70	70	0 70
Flat	52%	65%	10%	24%	30%	15%	32%	12%	23%	28%
Gently Sloped	22%		20%				27%		41%	28%
Medium Sloped	14%		28%				20%		23%	24%
Steep	12%	3%		27%					13%	20%

Dumpsite Characteristics  Total Sites Surveyed  Estimated Tons	Cumperland 37	138 468	<b>¥</b> 79 119	83 121	<b>Eavette</b> 163	15 64	821 181	19 169	<b>9</b> 49 450	pul 114 680
Location Demographics										
Rural Suburban	78% 19%	61% 16%	96% 1%	71% 16%	93% 7%	100% 0%	77% 13%	100% 0%	100%	99% 1%
Urban Visible from Road	3%	23%	3%	13%	0%	0%	10%	0%	0%	0%
Yes	46%	53%	71%	53%	73%	33%	33%	90%	84%	53%
No	11%	10%	8%	27%	10%	34%	14%	5%	8%	31%
Partial	43%	37%	21%	20%	17%	33%	53%	5%	8%	16%
Distance from Waterway  Directly In  Waterway/Wetlands  Within 50 Feet and/or Directly in Waterway/Wetlands	11%	10%	7% 23%	19%	16%	0%	13% 49%	0% 5%	8% 22%	15% 37%
Over 50 Feet or No Waterway	76%	75%	77%	70%	63%	87%	51%	95%	78%	63%
Road Type										
State  Municipal/County	11% 89%	8% 76%	23% 66%	20% 78%	24% 72%	33% 40%	23% 64%	47% 48%	4% 94%	4% 90%
Forest/Park	0%	0%	7%	0%	0%	27%	12%	5%	0%	0%
Private/Undetermined	0%	16%	4%	2%	4%	0%	1%	0%	2%	6%
Terrain										
Flat	14%	46%	26%	45%	32%	40%	36%	26%	22%	25%
Gently Sloped	32%	20%	37%	22%	17%	0%	35%	10%	29%	20%
Medium Sloped	32%	9%	23%	14%	21%	20%	14%	32%	27%	28%
Steep	22%	25%	14%	19%	30%	40%	14%	32%	22%	27%

									σ	
Dumpsite Characteristics	Jefferson	Lackawanna	Lancaster	Lawrence	Luzerne	McKean	Mercer	Montgomery	Northumberland	Perry
Total Sites Surveyed	67	92	16	31	159	73	143	19	125	105
Estimated Tons	541	424	74	112	1723	165.5	154	17	1634	107
Location Demographics										
Rural	100%	45%	87%	68%	75%	100%	99%	68%	99%	100%
Suburban	0%	30%	13%	19%	23%	0%	1%	11%	1%	0%
Urban	0%	25%	0%	13%	2%	0%	0%	21%	0%	0%
Visible from Road										
Yes	85%	66%	56%	71%	59%	52%	60%	84%	62%	79%
No	15%	8%	6%	3%	18%	29%	13%	0%	8%	9%
Partial	0%	26%	38%	26%	23%	19%	27%	16%	30%	12%
Distance from Waterway										
Directly In Waterway/Wetlands Within 50 Feet and/or Directly	12%	7%	13%	26%	5%	12%	13%	0%	11%	5%
in Waterway/Wetlands	25%	23%	31%	48%	11%	26%	34%	16%	19%	39%
Over 50 Feet or No Waterway	75%	77%	69%	52%	89%	74%	66%	84%	81%	61%
Road Type										
State	14%	32%	6%	20%	32%	29%	5%	11%	16%	23%
Municipal/County	82%	68%	88%	74%	32%	60%	94%	89%	50%	77%
Forest/Park	0%	0%	0%	3%	0%	11%	0%	0%	0%	0%
Private/Undetermined	4%	0%	6%	3%	36%	0%	1%	0%	34%	0%
Terrain										
Flat	54%	47%	44%	32%	40%	10%	55%	79%	31%	29%
Gently Sloped	25%	15%	19%	19%	32%	31%	20%	0%	29%	34%
Medium Sloped	9%	13%	25%	23%	17%	18%	18%	0%	18%	17%
Steep	12%	25%	12%	26%	11%	41%	7%	21%	22%	20%

Dumpsite Characteristics	Schuylkill	Snyder	Somerset	Venango	Warren	Washington	Westmoreland
Total Sites Surveyed	74	45	210	174	59	126	310
Estimated Tons	523	58	543	386	292	317	335
Location Demographics							
Rural	96%	0%	95%	98%	95%	100%	89%
Suburban	4%	0%	5%	2%	5%	0%	8%
Urban	0%	100%	0%	0%	0%	0%	3%
Visible from Road							
Yes	47%	56%	42%	90%	49%	60%	83%
No	7%	11%	22%	2%	12%	27%	6%
Partial	46%	33%	36%	8%	39%	13%	11%
Distance from Waterway							
Directly In Waterway/Wetlands Within 50 Feet and/or Directly in Waterway/Wetlands	5% 28%	16% 36%	5% 15%	13% 44%	7% 15%	6% 41%	31% 44%
Over 50 Feet or No Waterway	72%	64%	85%		84%	59%	56%
Road Type	1270	0-7/0	00 70	3070	0 7 70	3370	3070
State	42%	40%	27%	19%	14%	77%	26%
Municipal/County	58%	60%	72%	78%	76%	23%	73%
Forest/Park	0%	0%	1%	3%	10%	0%	>1%
Private/Undetermined	0%	0%	0%	0%	0%	0%	1%
Terrain							
Flat	43%	47%	33%	26%	25%	48%	24%
Gently Sloped	23%	31%	20%	23%	14%	43%	25%
Medium Sloped	14%	7%	23%	25%	24%	7%	26%
Steep	20%	15%	24%	26%	37%	2%	25%

## Snyder County Illegal Dumpsite Survey Acknowledgements

Produced by PA CleanWays

George Wenrich, Surveyor, PA CleanWays

Yongfei Zhao, University Center for Social and Urban Research, University of Pittsburgh

A special thanks to the rest of the PA CleanWays staff for their various contributions of report design, data management, and editing.

This report was produced with funding through:

A grant from the Pennsylvania Department of Environmental Protection





#### PA CleanWays

105 West Fourth Street, Greensburg, PA 15601 Phone: 724-836-4121 • Toll Free: 877-772-3673 Fax: 724-836-1980 • www.pacleanways.org