

WELCOME

Concerned Citizens Meeting

Wednesday, December 14, 2022, 6:30 pm

Protecting Lower Saucon's Natural Beauty

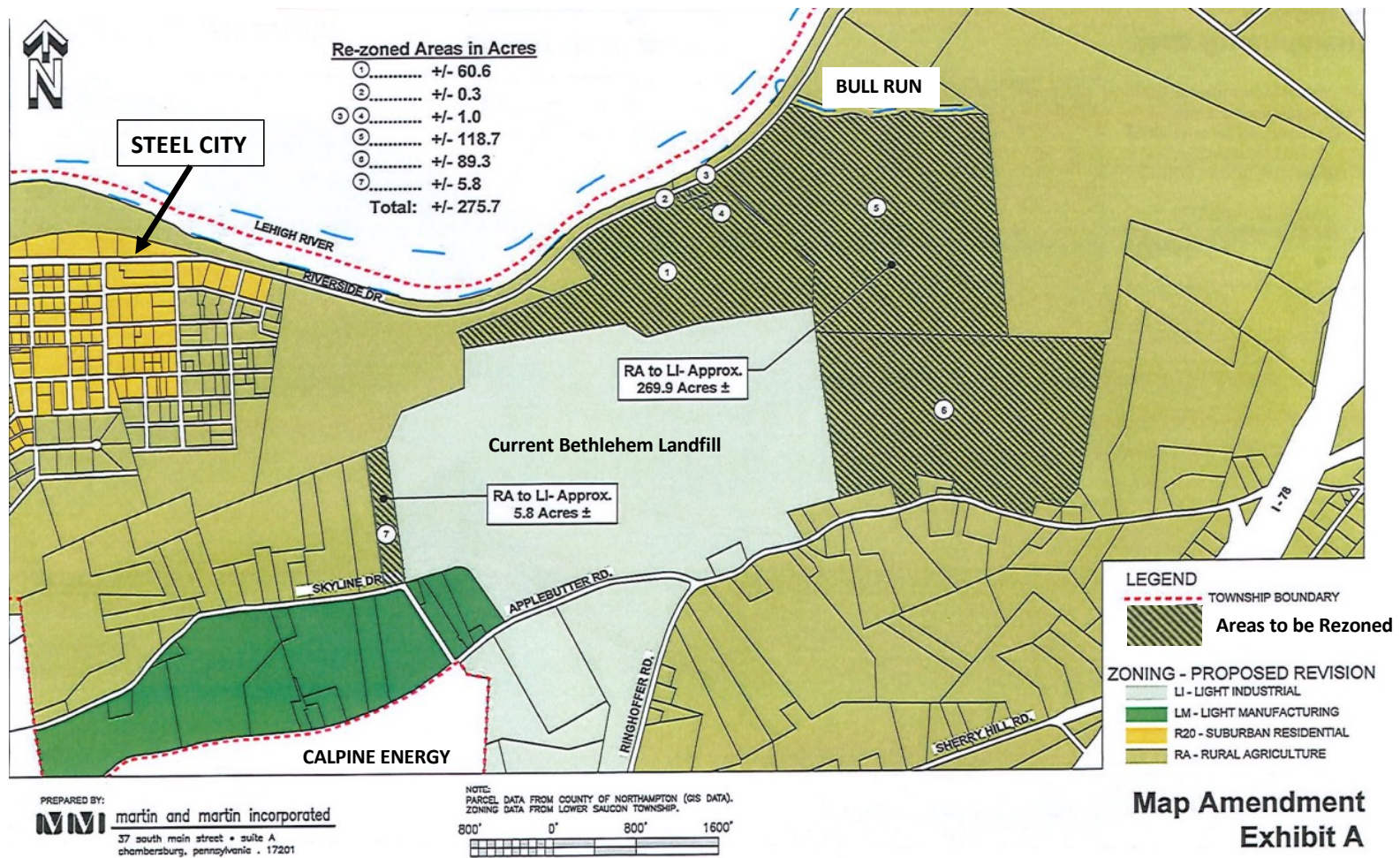
Thank you to Steel City Mennonite Church for the use of their facility



It is horrifying that we
have to fight our own
government to save the
environment.

Ansel Adams

What Zoning Map Changes are Proposed?



From the
Home page
on the
Township's
website
Click Here

To find
some of the
documents



Bethlehem Landfill Proposed Zoning Amendment Information

- [October 2022-02 Draft Zoning Ordinance with Exhibit A and B - Hearing Scheduled for December 21, 2022](#)
- [Urban Research and Development Corporation](#)

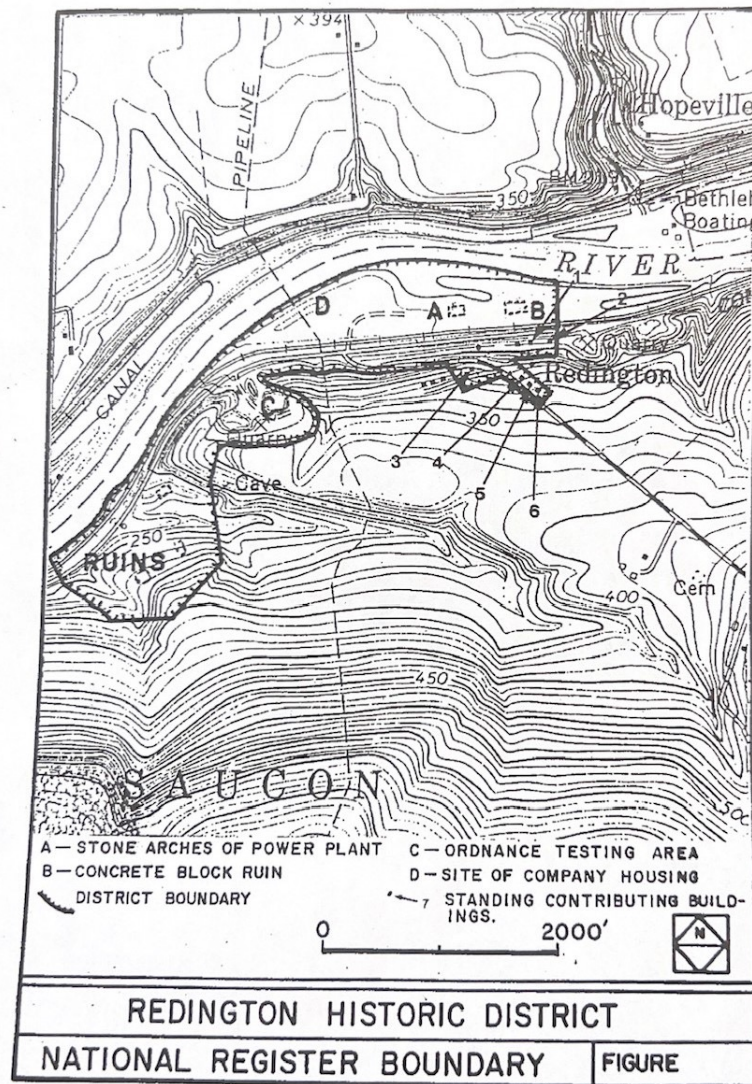
If rezoning is approved,

- [November 16 2022 - Existing Conditions Map Provided by the Landfill](#)
- [November 16 2022 - Proposed Conservation Plan - Updated November 28, 2022 Listing Property Owners](#)
- [November 16 2022 - Side-by-Side Image of 1 and 2 Maps](#)

1990

Redington Historic District
was determined eligible for
listing in the National
Register of Historic Places

Criteria A:
Nationally Significant,
As per the Keeper of the
National Register



Reporting Odors is Important!

If odors are detected, individuals should call the PA DEP Environmental Complaint Hotline (Emergency) for the Northeast Region at **(866) 255-5158, Press Option #2**.

PLEASE NOTE that even those the recording says it is for emergencies, ALL odor complaints should still be recorded at this number.

Sample from Bethlehem Landfill ODOR COMPLAINT LOG:

04/29/22 Easton Avenue, Bethlehem

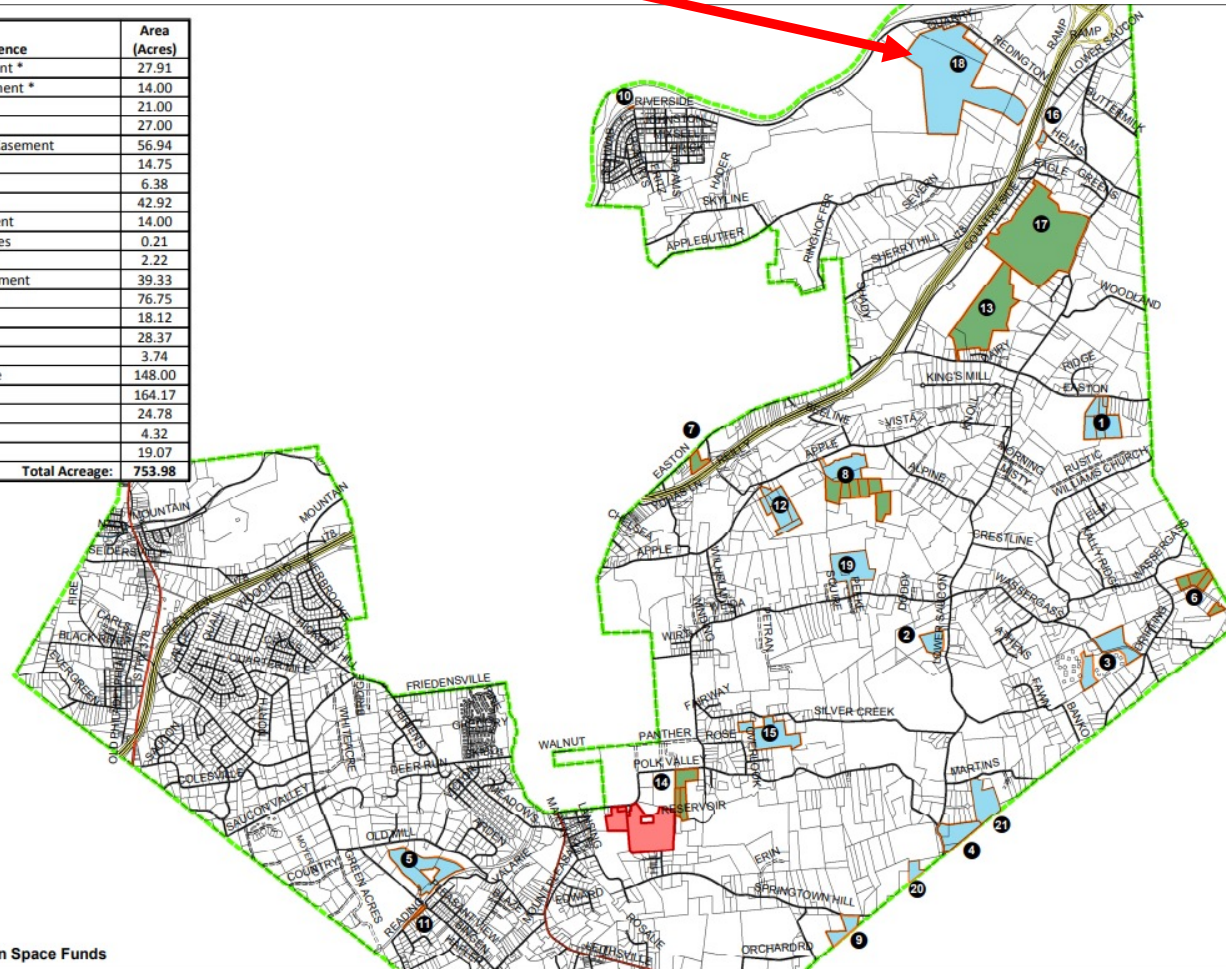
While walking on the D&L trail they could smell a terrible odor coming from the Bethlehem Landfill. By Nagy's landing and Freemansburg Avenue.

Sample from 11/22/2022 DEP Site Tour:

A slight intermittent odor of landfill gas was detected on Redington Road adjacent to the railroad tracks near to split with Riverside Drive. Gas odors were detected on the northern access road opposite the final cap liner. In response to landfill gas exceedances from last month's surface monitoring event, BLC applied soil and bentonite to identified areas. SCS completed 10-day rechecks on October 28.

PETRIE EASEMENT 164.17 ACRES – THE LARGEST OPEN SPACE PROPERTY

Map #	Name – Common Reference	Area (Acres)
1.	Yerger Property Easement *	27.91
2.	Hidden Meadows Easement *	14.00
3.	Long Ridge Easement *	21.00
4.	Siefert-Ray Easement *	27.00
5.	Dyer, Bracalenti, Noble Easement	56.94
6.	Clover View	14.75
7.	Easton Road Fields	6.38
8.	Apple Street – Dravec	42.92
9.	Mease Property Easement	14.00
10.	Riverside Drive Properties	0.21
11.	Reading Drive – Timko	2.22
12.	Whitetail Bowman Easement	39.33
13.	Benner / Whitmore	76.75
14.	Townsend / Savitske	18.12
15.	Martin Easement	28.37
16.	Elysium Easement *	3.74
17.	Woodland Hills Preserve	148.00
18.	Petrie Easement	164.17
19.	Marson Easement	24.78
20.	Reimann Easement	4.32
21.	Seifert Easement	19.07
Total Acreage:		753.98



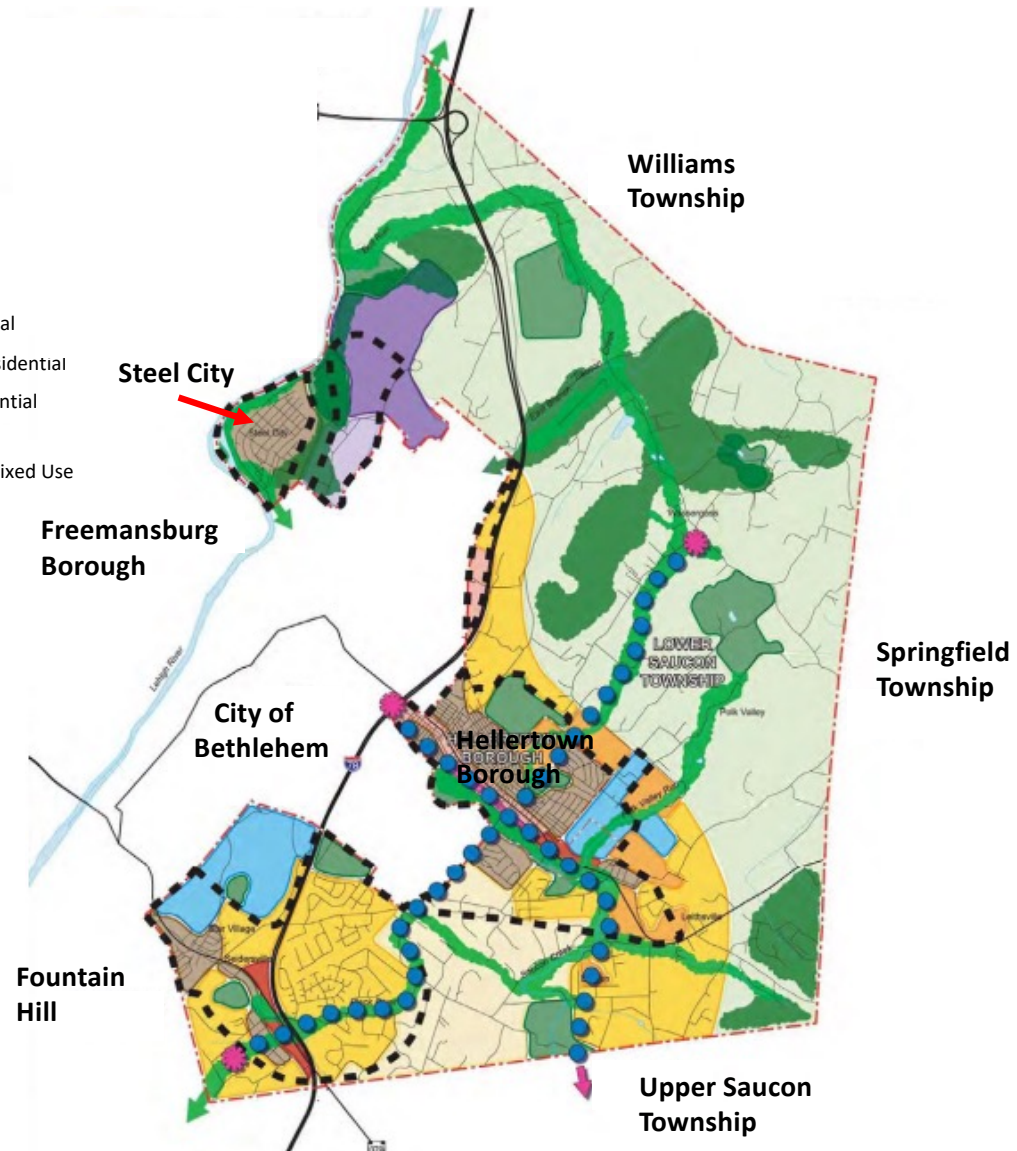
TOWNSHIP OPEN SPACE MAP LOWER SAUCON TOWNSHIP

Prepared by the Zoning Department
August 19, 2010
REVISED 02/22/2018

Map 7: Comprehensive Plan

LEGEND

- | | | | |
|--|---------------------------------------------------------|--|--------------------------------|
| | Study Area Boundary | | Rural Residential |
| | Municipal Boundary | | Open Space |
| | US / Interstate Highway | | Estate Residential |
| | Major Thoroughfares | | Low Intensity Residential |
| | Minor Thoroughfares | | Moderate Intensity Residential |
| | Rivers Lakes Streams | | Higher Intensity Residential |
| | Local Greenway Corridors | | Neighborhood Scale Mixed Use |
| | Regionally Significant Sensitive Natural Resource Areas | | Mixed Reinvestment |
| | Key Bicycle/Pedestrian Corridors | | General Commercial |
| | Trailhead | | Business Enterprise |
| | Municipal Service Boundary | | Industrial |
| | | | Institutional |





General Stats for Bethlehem Landfill



Permitted to receive 1800 tons/day

About 3000 trucks per month bring trash

On average 50-60 of them are overweight

About 55 – 60% of waste is from out of state

What goes into the Landfill?

It is much more than just your average household waste.



Ceramic Wastes

Contaminated Soil

Sewage Sludge

Asbestos

Radioactive Materials

Pharmaceuticals

Industrial Chemicals



December 2021 - 9 Loads of Radioactive material

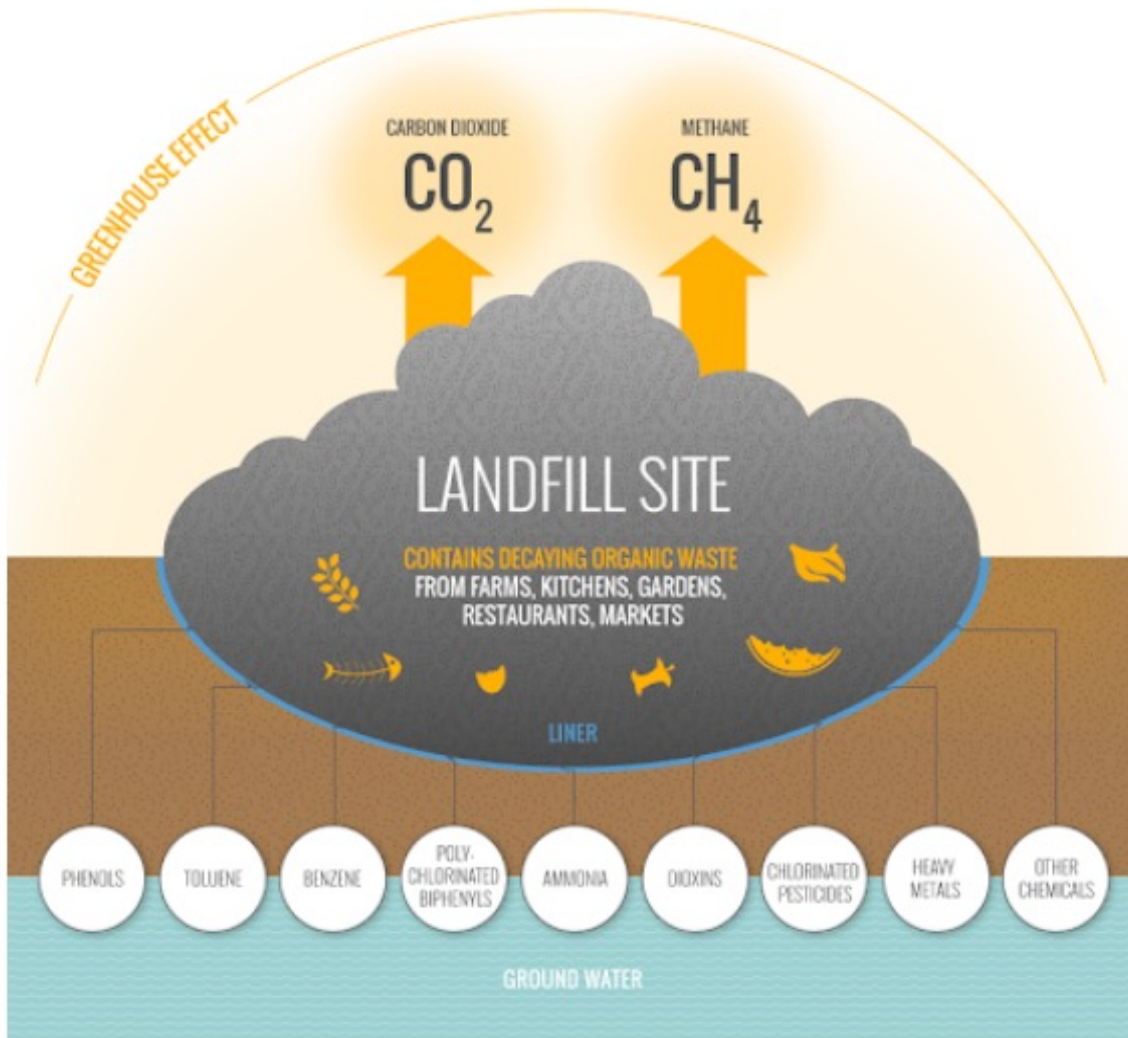
What comes out of the Landfill?

BAD WATER

- Leachate toxic liquid composed of rainwater and garbage by-products
- > 1.5 million gallons monthly going to the Bethlehem Sewage Plant
- U.S. Geological Survey is researching 190 contaminants of concern (CEC)
- Sewage plants cannot treat many of the CECs
- How much leachate does not get any treatment?

BAD AIR

- Primary gases: Methane (50%) & Carbon Dioxide
- Particulates of landfill trash as well as toxic chemicals and gases are hurled into the air when burned by methane fires



Methane

- Landfills are 3rd largest human-related source
- Highly flammable
- Can build up & be explosive
- DEP inspects for methane > 500 ppm
 - Oct 2022 – 8 sites tested at Bethlehem Landfill were reported
 - 2 of those sites were at **10,000 !!!**
 - Average overage was 4,316 ppm

What Zoning Changes are Proposed?

Light Industrial

Special Exception Use (Approved by Zoning Board)

Salvage yard

Railroad & motor freight transportation
& warehousing

Mineral extraction

Concrete and asphalt plants

Landfill & waste disposal facilities

Petroleum & hazardous substance storage

Light manufacturing

Production of chemical products

Printing & publishing

Waste transfer facility/recycling facility

Club with shooting range

Adult-oriented establishment

Intensive agricultural uses

Conditional Use (Approved by Council)

Tower-based commercial communication facilities

Landfill & waste disposal facilities



What Zoning Changes are Proposed?



Site Plan Approval will **not be required** for Landfills and Waste Disposal Facilities when land development approval under SALDO & DEP permit required

Council can give approval to an industry in a Light Industrial zone, to **develop as much of the property as it wants** regardless of resource protection standards that would normally apply when developing a property.

In exchange the business can donate other land within the Township (that does **not** have to have the same environmental features) OR pay a fee/acre for any land they develop which normally would have been protected under the resource protection standards.

Let's Talk Money



Past 7 years of Landfill fee revenue:

	Landfill Host Fees	% of total revenue
2017	\$ 1,867,603	23%
2018	\$ 2,363,405	26%
2019	\$ 2,323,626	25%
2020	\$ 2,545,992	26%
2021	\$ 2,181,232	23%
2022*	\$ 2,612,945	24%

*Projected



Let's Talk Money



Lower Saucon Township's primary sources of revenue:

Enabling taxes (EIT) – 40%

Landfill host fees – 24.9%

Real estate taxes – 22.5%

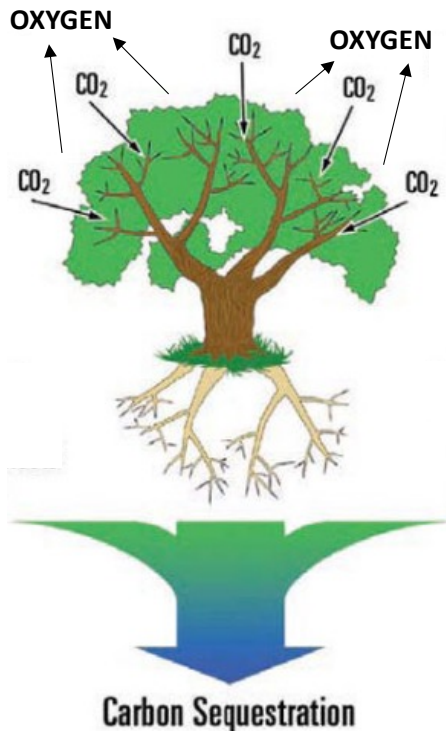


	2018	2019	2020	2021	2022* projected
Tot Revenue	\$ 9,078,540.00	\$ 8,665,510.00	\$ 9,623,509.08	\$ 9,887,546.29	\$ 10,937,839.03
Tot Expenses	\$ 7,324,832.00	\$ 7,503,626.00	\$ 7,402,002.06	\$ 7,644,325.21	\$ 8,777,957.64
Excess Balance	\$ 1,753,708.00	\$ 1,161,884.00	\$ 2,221,507.02	\$ 2,243,221.08	\$ 2,159,881.39
Excess %	19.3%	13.4%	30%	29.3%	24.6%
	paid down debt	all debt paid off			

Forests provide one of the highest natural system services on a per acre basis. Maintaining and restoring connected habitats and corridors will provide the full potential value of natural system services.

- The current green infrastructure along streams in the Lehigh Valley reduces tax dollars by avoiding > \$110.3 million in expenditures:
 - \$45.0 million – water supply
 - \$50.6 million - disturbance (flood) mitigation
 - \$14.7 million - water quality
- Natural areas provide
 - > \$22.4 million annually in pollination service
 - \$2.5 million in biological control services to agriculture, backyards and the natural landscape
 - \$219.5 million annually in habitat for insects, birds, animals and plants
 - \$0.8 million annually in soil formation/retention

Source LVPC ROE 2014 study pg 2



181,189 tons of carbon/year

Air quality services provided by trees removing pollutants are estimated at \$48.2 million annually.

Providing health and other benefits of about \$3.6 million per year.

Tree-covered open space stores 5,496,069 tons of carbon over the life of the current forest in the Lehigh Valley.

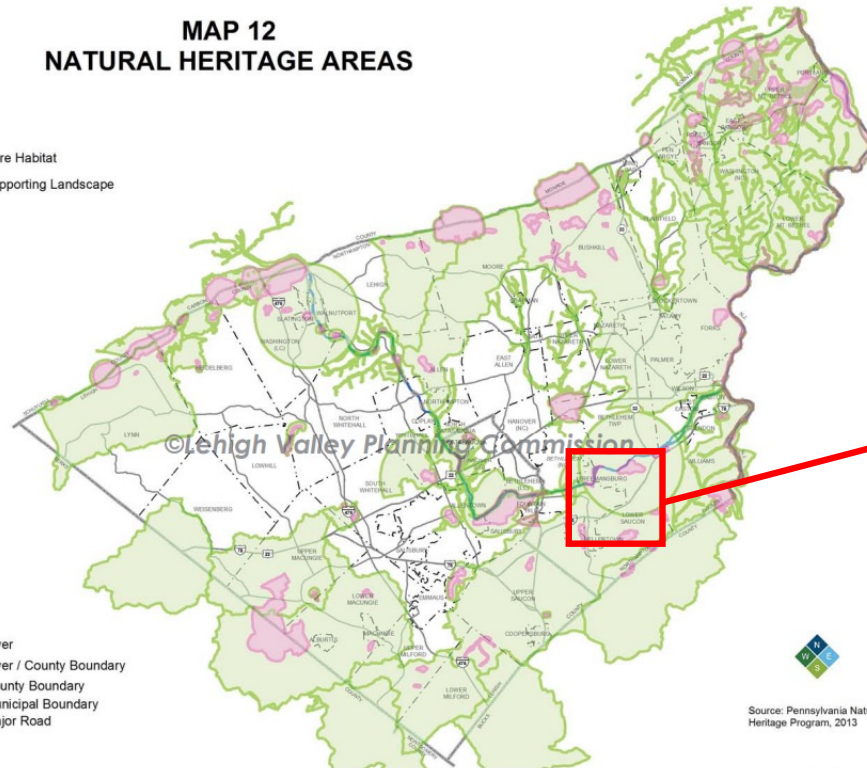
Without carbon storage by trees, damage due to increased carbon emissions would cost \$111.2 million to mitigate in the Lehigh Valley, which, if divided by an assumed average tree life of 50 years, represents a value of about \$2.2 million annually.

Source LVPC ROE 2014 study pg 3

MAP 12 NATURAL HERITAGE AREAS

Core Habitat
Supporting Landscape

River
River / County Boundary
County Boundary
Municipal Boundary
Major Road



The proposed area to be rezoned is identified as an area of core habitat



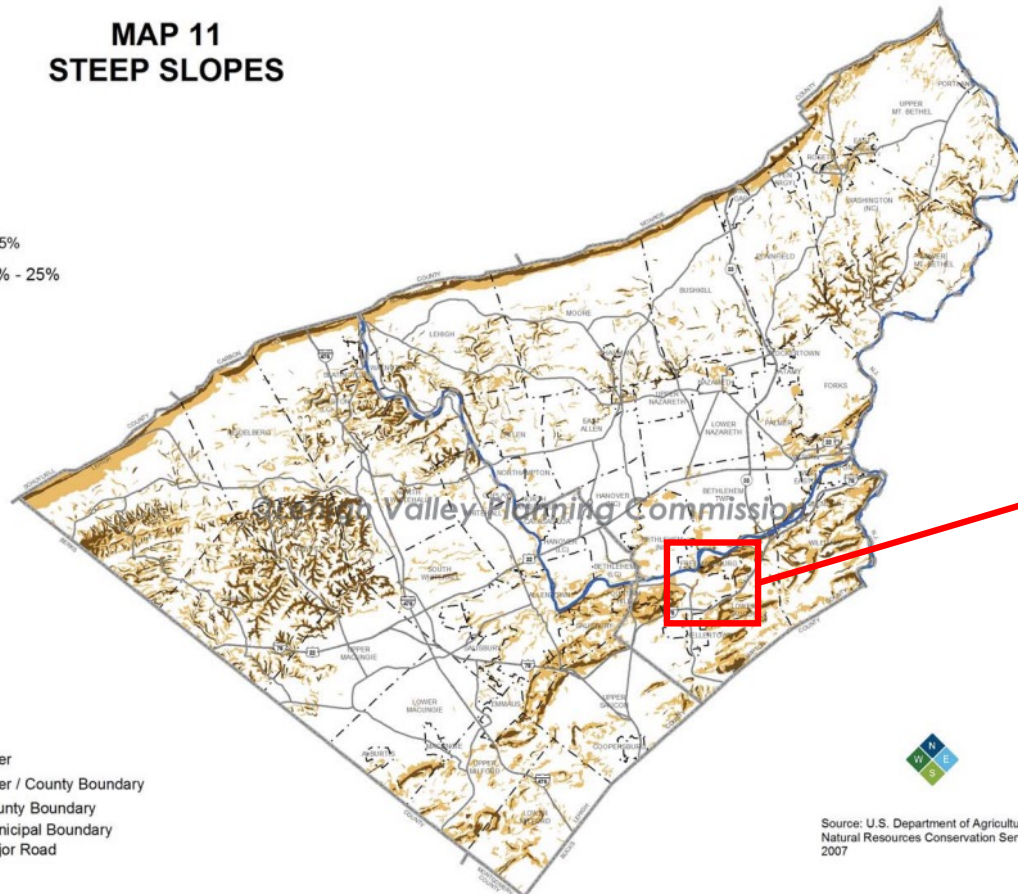
Source: Pennsylvania Natural
Heritage Program, 2013



MAP 11 STEEP SLOPES

■ > 25%
■ 15% - 25%

— River
— River / County Boundary
— County Boundary
- - - Municipal Boundary
— Major Road

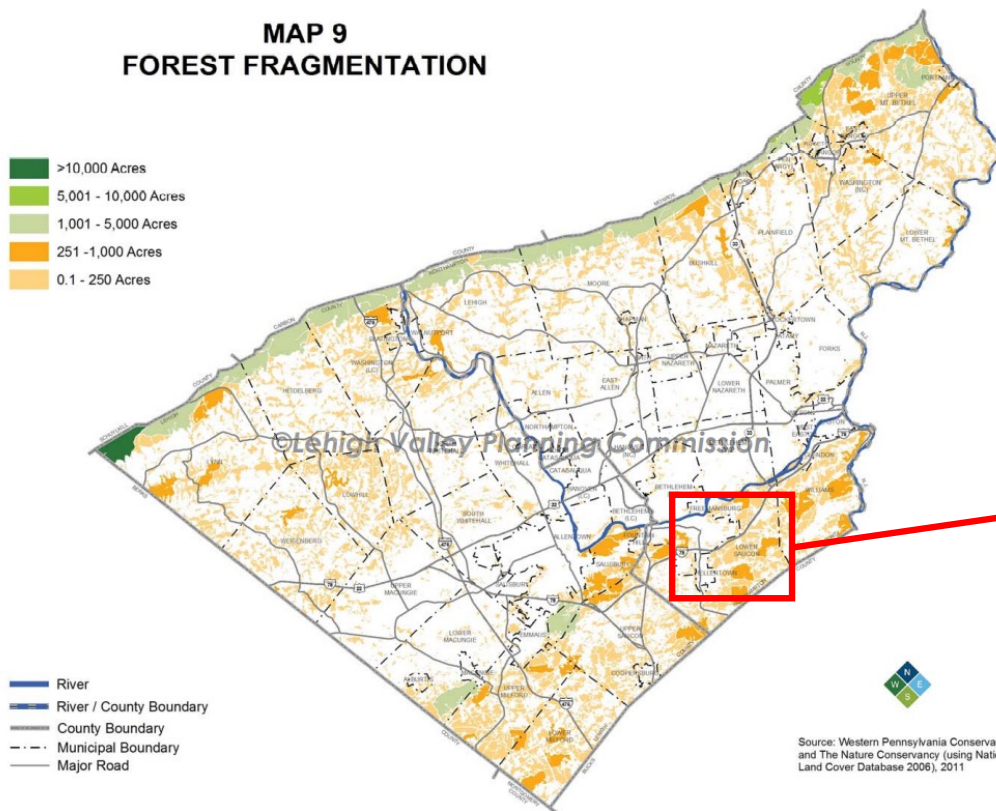


The area is designated as containing steep slopes

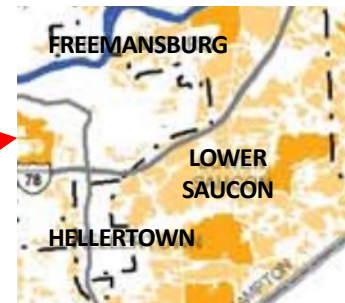


Source: U.S. Department of Agriculture,
Natural Resources Conservation Service,
2007

**MAP 9
FOREST FRAGMENTATION**



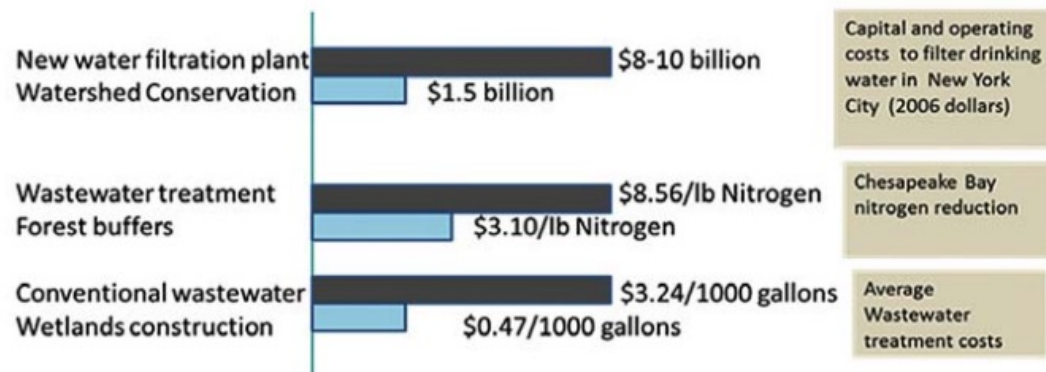
The area is one of only 2 along the entire Lehigh River that contains greater than 250 acres of forested land.



Numerous examples exist of how local decision-makers have elected to restore the environment instead of spending more money on traditional gray infrastructure (e.g., pipes and treatment plants). In some cases, decision-makers have found that the environment creates green infrastructure solutions that are less expensive and more reliable. (34)

The natural environment can help keep the cost of living low. The World Resources Institute shows comparisons between green and gray infrastructure costs (Figure 9).

Figure 9. Watershed Protection Costs Compared to Gray Infrastructure



Source: Hanson, et al. 2011 (34)

34. Hanson, Craig, John Talberth, and Logan Yonavjak. 2011. *Forests for Water: Exploring Payments for Watershed Services in the U.S. South*. World Resources Institute Issue Brief 2.

In a study of 27 U.S. water suppliers, researchers found that protecting forested watersheds used for drinking water sources can reduce capital, operational and maintenance costs for drinking water treatment. (35)

Researchers found that watersheds with greater percentages of protected forest correlate to fewer water treatment expenditures: for each 10% increase in watershed forest cover, there is about a 20% decrease in treatment costs (Table 2).

An Environmental Protection Agency (EPA) study of drinking water source protection efforts concluded that, **for every \$1 spent on source-water protection, an average of \$27 was saved in water treatment costs.** (36)

Table 2
Impacts of Forest Cover on Water Treatment

Watershed Forest Cover	Average Annual Water Treatment Cost	Incremental Cost Decrease as Forest Cover Increases
10%	\$923,450	-19.1%
20%	\$746,790	-21.5%
30%	\$586,190	-20.5%
40%	\$465,740	-20.7%
50%	\$369,380	-19.6%
60%	\$297,110	

Source: Ernst, et al. 2002 (35)

35. Ernst, Caryn, Richard Gullick, and Kirk Nixon. 2004. "Conserving Forests to Protect Water." *Opflow* 30:1,4-7.

36. U.S. Environmental Protection Agency. 2012. *The Economic Benefits of Protecting Healthy Watersheds*. EPA 841-N-12-004.

- Forested area results in economic savings to the tune of \$1,299.00 per acre
- The proposed area to be rezoned currently generates \$448,367.90 in economic value to the Lehigh Valley

Source: LVPC 2014 Return on Environment



Photo courtesy of Maria Bentzoni

Part of the Lehigh Valley's attraction for growth is the region's scenic mountains and farmland views, river corridors, pristine groundwater, large forest habitat and a variety of outdoor recreation opportunities. All of this is provided by open space.

127,850 single family homes are within 1/4 mile of protected open space in the Lehigh Valley

Steel City is just across the Freemansburg bridge where there is a trail head to the Delaware & Lehigh canal path. There is also a canoe launch nearby.

The average real estate premium attributed to their proximity to protected open space for all single-family homes within 1/4 mile of protected open space in the Lehigh Valley is **\$14,600**.

The total real estate premium attributed to proximity to protected open space for all single- family homes within 1/4 mile of protected open space in the Lehigh Valley is **\$1.8 billion**.



Open Space

**Property
Values**



Industrial Areas

Source LVPC 2014 Return on Environment pg 69-70

What Can You Do?

Attend the hearing on Dec. 21 - 6:30 pm
at Lower Saucon Town Hall - **Show up EARLY!**

Share this information with your neighbors and friends



Citizens for Responsible
Development
by Leigh Petrie

\$300 raised

Please contribute to our GoFundMe
www.GoFundMe.com
search for:
Citizens for Responsible Development



Keep up to Date:

LSTLandfillExpansion.org

LSTLandfillExpansion@gmail.com



Search Facebook



Fighting Landfill Expansion in
Lower Saucon Township