

WESTTOWN TOWNSHIP

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West Chester, PA 19382
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Westtown, PA 19395
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www.westtownpa.org

AGENDA Westtown Township Board of Supervisors Workshop

**Westtown Township Municipal Building
1039 Wilmington Pike, Westtown**

Tuesday, February 19, 2019

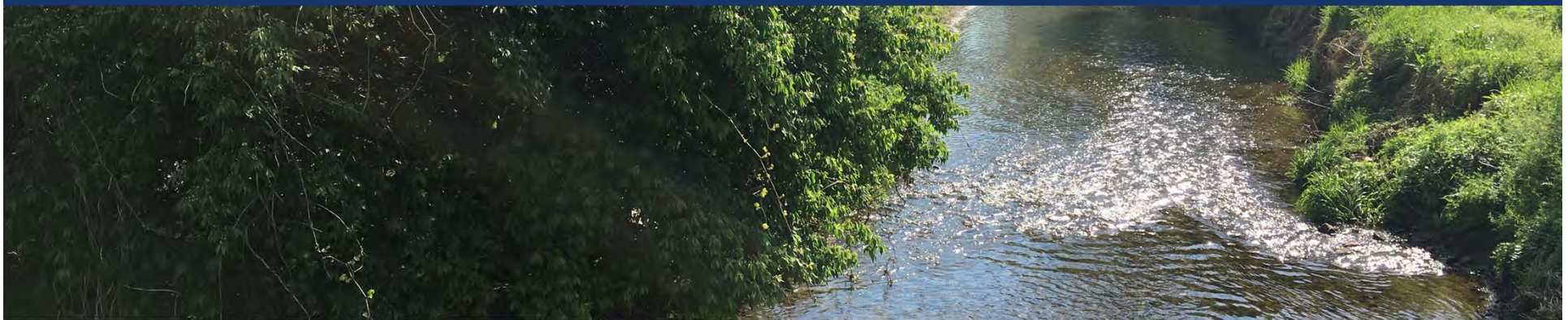
Executive Session at 5:30 pm

Public Session at 6:30 pm

- 1. Executive Session**
- 2. Goose Creek TMDL & Township-wide Pollution Reduction Plan**
- 3. Traffic speed enforcement**
- 4. Exclusion of Harmful Waste Ordinance**



Westtown Township TMDL / Pollutant Reduction Plan



Beth Uhler, MS4 Program Manager

159 E. High Street, Suite 500

Pottstown, PA 19465

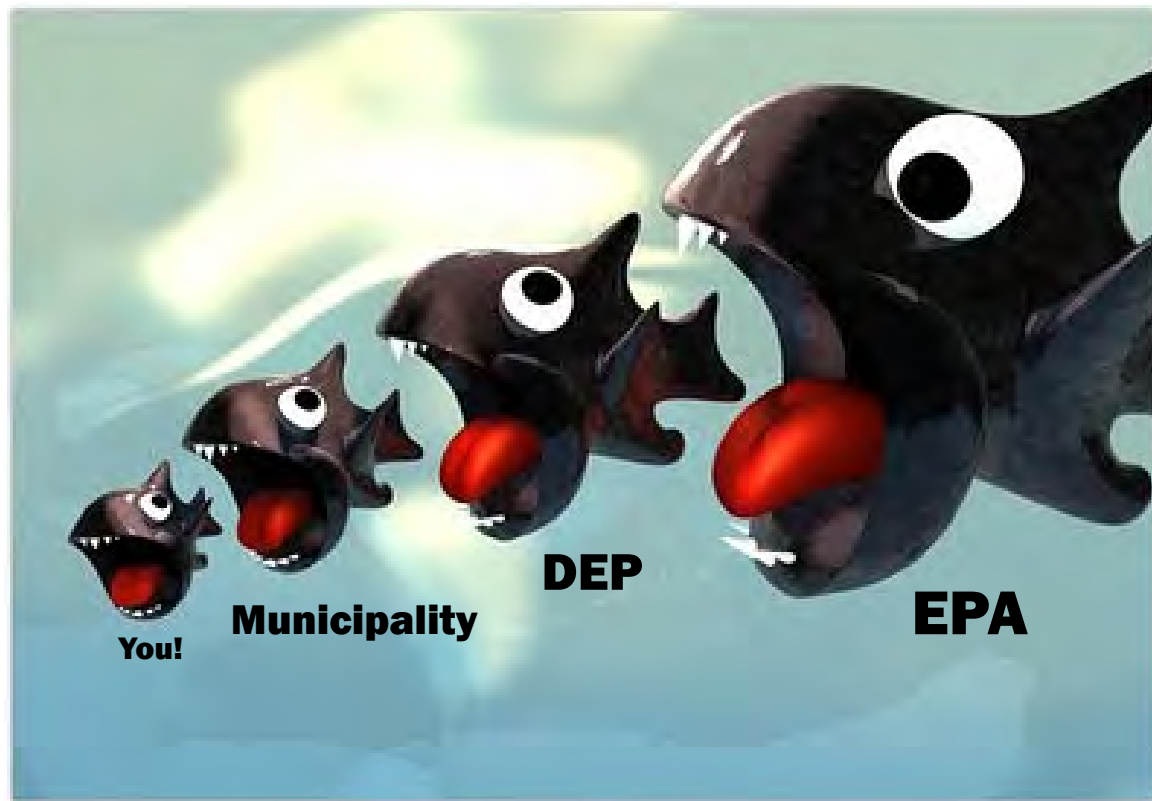
Ph: 610-705-4500

buhler@cedarvilleeng.com



National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4)

**UNFUNDED
MANDATE**





What is the NPDES MS4 Program?

- **Five (5) year Permit Terms**
- **Ultimate goal for this Program**
 - Recognize and increase awareness of stormwater as a point-source pollutant
 - Manage stormwater as you would any other point-source pollutant (like sewage)



Minimum Control Measures

- 1. Public Education & Outreach**
- 2. Public Involvement & Participation**
- 3. Illicit Discharge Detection & Elimination**
- 4. Construction Site Stormwater Runoff Control**
- 5. Post Construction Stormwater Management for Development & Redevelopment**
- 6. Pollution Prevention/Good Housekeeping**



TMDL Plan and Pollutant Reduction Plan

➤ Total Maximum Daily Load (TMDL) Plan

- GOOSE CREEK TMDL (Phosphorous)

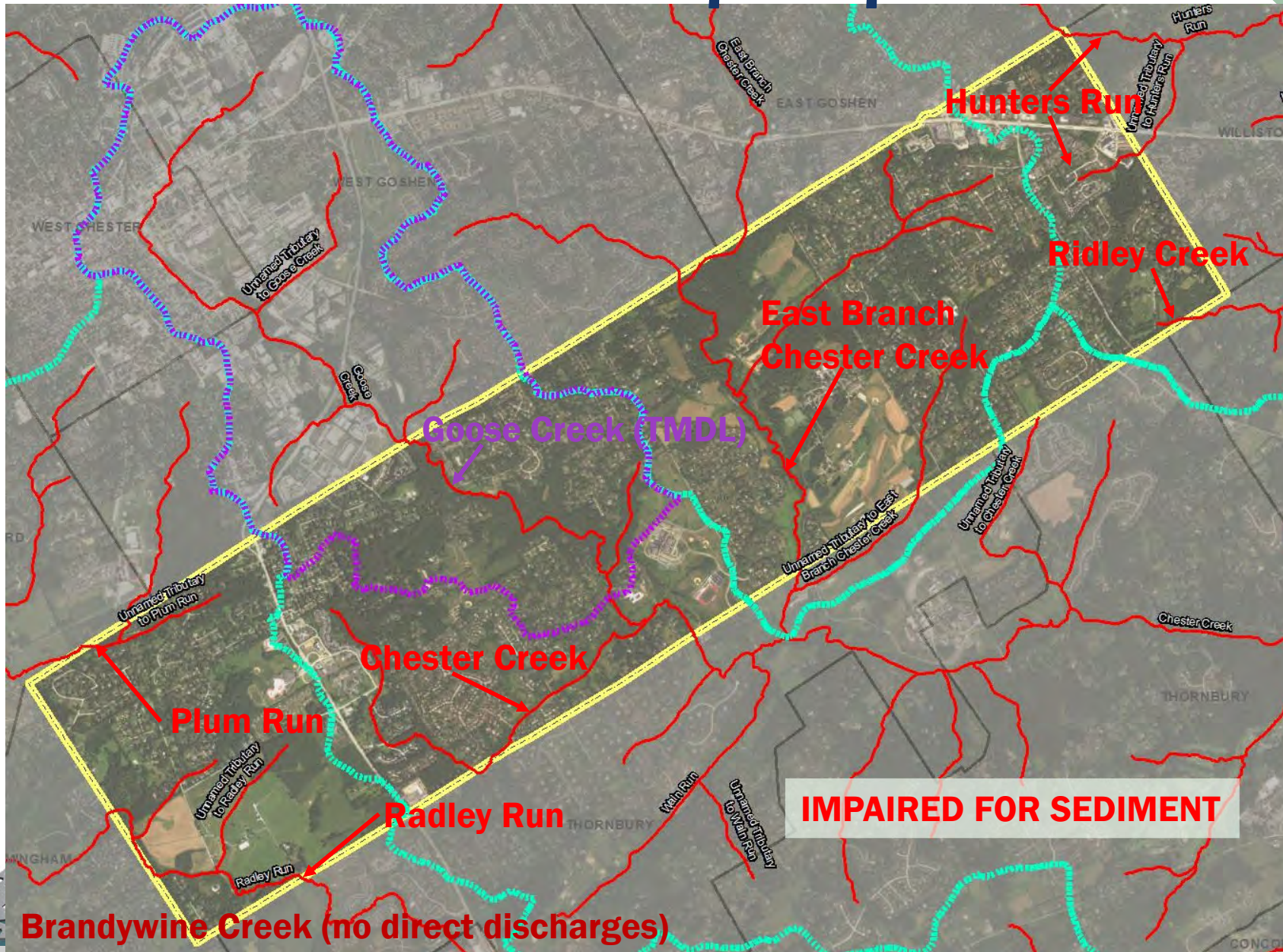
➤ Pollutant Reduction Plan (Sediment)

- PLUM RUN
- RADLEY RUN
- CHESTER CREEK (INCLUDES GOOSE CREEK)
 - EAST BRANCH CHESTER CREEK
 - HUNTERS RUN
 - RIDLEY CREEK

COMING SOON

➤ Pollutant Control Measures (Bacteria)

Westtown Township Requirements





What is a TMDL Plan?

Projects (i.e. BMPs) that will reduce the **PHOSPHOROUS** load to **GOOSE CREEK** by amounts set in an **EPA established report**:

- **Overall TMDL Requirement:**
53.9% phosphorous reduction
- **Short-term (5-year permit term):** **5% reduction**
- **Long-term (>5 years):** Remaining **48.9%**

Examples include:

- Rain Gardens
- Basin Retrofits
- Stream Restoration
- Porous Pavement
- Green Roofs
- Riparian Buffer Enhancement





What is a Pollutant Reduction Plan?



Projects (i.e. BMPs) that will reduce the **SEDIMENT** load to **ALL SEDIMENT-IMPAIRED STREAMS** by:

- **10%** over the 5-year permit term
- **No long-term objectives**

Examples include:

- Rain Gardens
- Basin Retrofits
- Stream Restoration
- Porous Pavement
- Green Roofs
- Riparian Buffer Enhancement



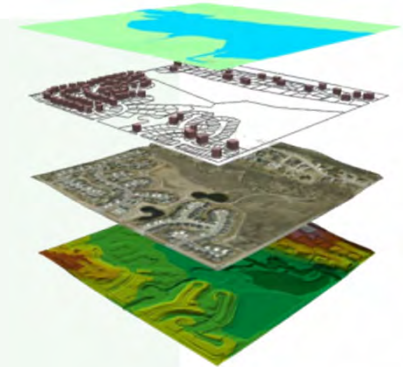
TMDL/Pollutant Reduction Plan Status

- **Submitted TMDL/Pollutant Reduction Plan with NPDES MS4 Permit Application in **September 2017.****
- **Application and Plan approval is **PENDING****
- **DEP Comment Letter received **January 30, 2018.****
- **CEG has worked closely with Township on Proposed BMP locations**

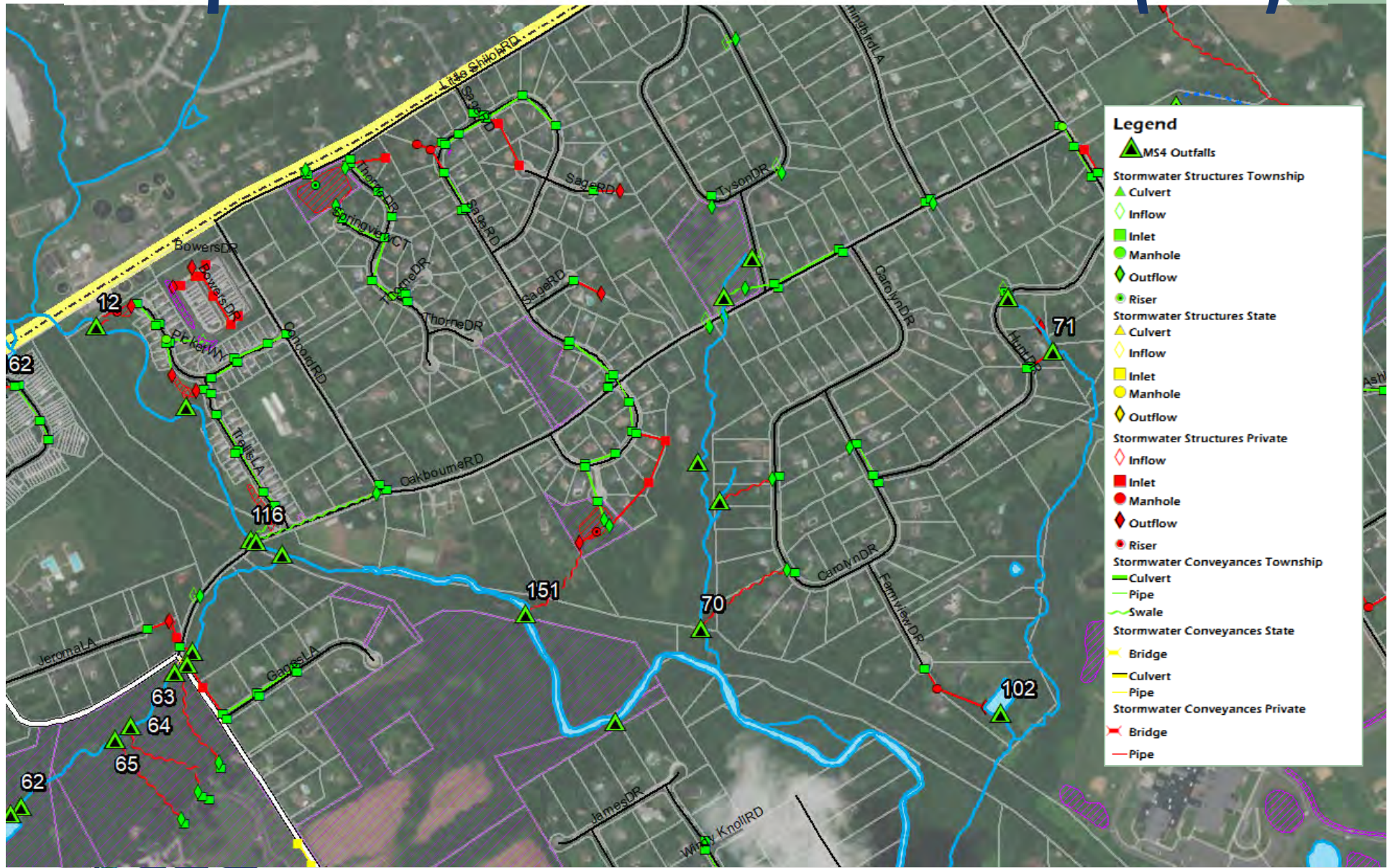


TMDL/Pollutant Reduction Plan Process

- 1. Map Stormwater Infrastructure (GIS)**
- 2. Delineate Storm Sewersheds**
- 3. Calculate Existing Pollutant Loads**
- 4. Identify Potential BMPs**
 - a) Desktop Review
 - b) Field Investigations for Site Suitability
 - c) Coordination with Township
- 5. Propose BMPs/Quantify Pollutant Load Reductions**
- 6. Finalize Report**
- 7. Public Participation**



Map Stormwater Infrastructure (GIS)

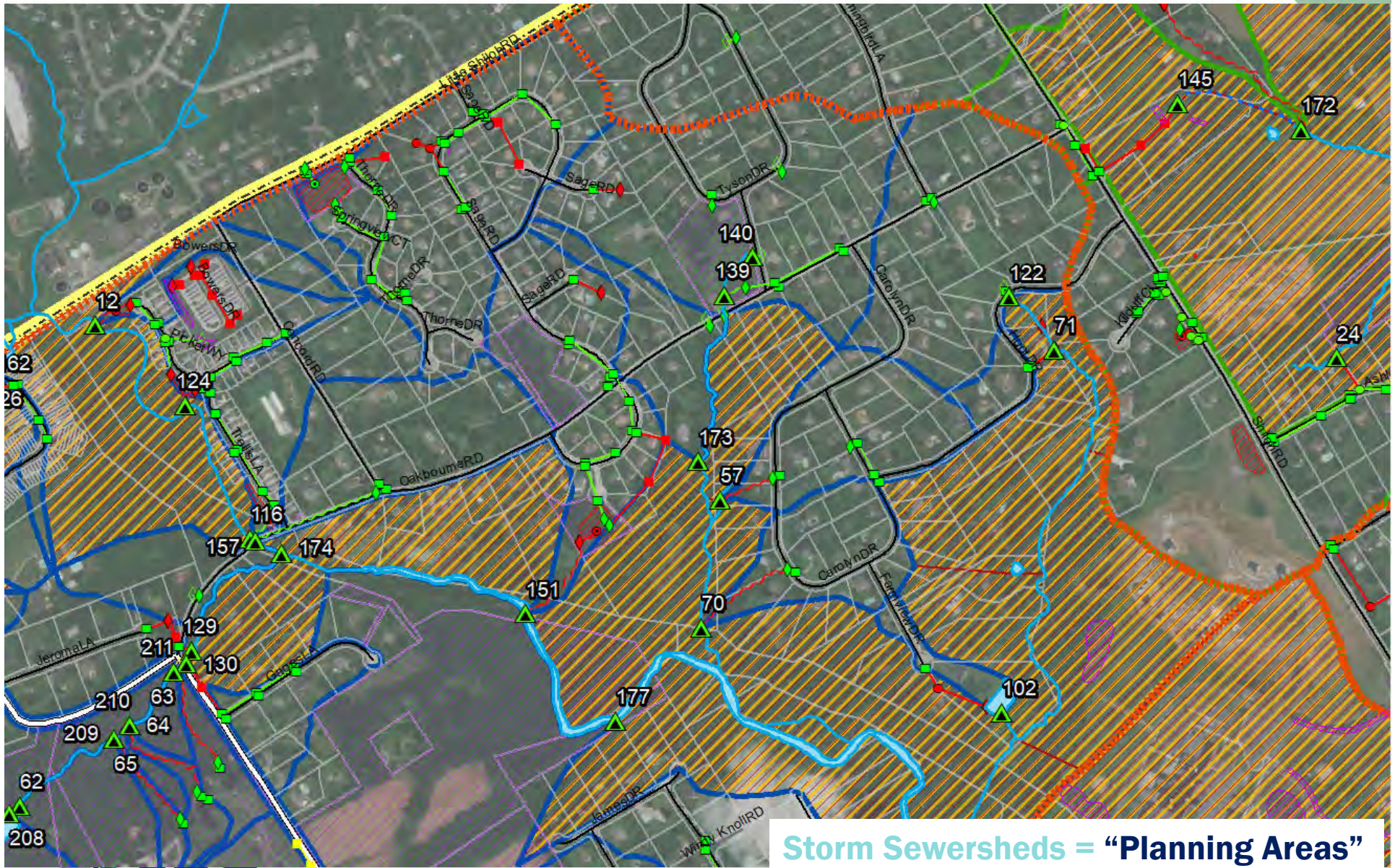


Legend

- ▲ MS4 Outfalls
- Stormwater Structures Township
 - ▲ Culvert
 - ◇ Inflow
 - Inlet
 - Manhole
 - ◇ Outflow
 - Riser
- Stormwater Structures State
 - ▲ Culvert
 - ◇ Inflow
 - Inlet
 - Manhole
 - ◇ Outflow
- Stormwater Structures Private
 - ◇ Inflow
 - Inlet
 - Manhole
 - ◇ Outflow
 - Riser
- Stormwater Conveyances Township
 - Culvert
 - Pipe
 - Swale
- Stormwater Conveyances State
 - Bridge
 - Culvert
 - Pipe
- Stormwater Conveyances Private
 - Bridge
 - Pipe



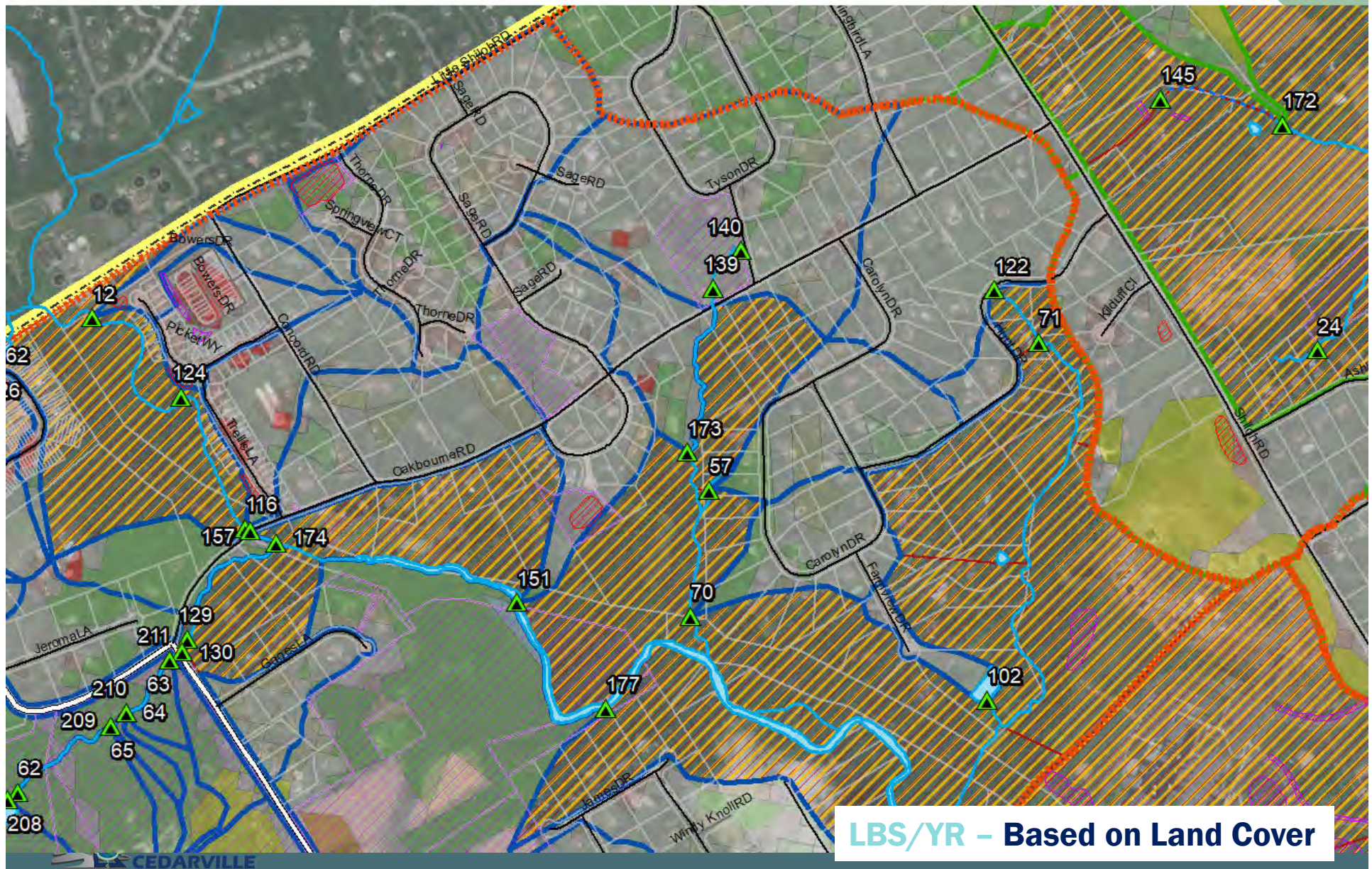
Delineate Storm Sewersheds



Storm Sewersheds = "Planning Areas"



Determine Existing Sediment Load





Identify Potential BMPs

Existing BMPs within the Planning Area



Existing Basins Township-Owned Properties within the Planning Area



New BMPs on Township-Owned Property within the Planning Area



***Same process but outside of Planning Area**

Other Factors:

- Larger Drainage Area
- Space/Capacity
- Real-World Benefits
- **COST**



CEG
CEDARVILLE

CEDARVILLE Engineering Group, LLC



Goose Creek TMDL Phosphorous Load Reductions from Proposed BMPs

**Implement 4 BMPs within 5 years
+ Stream Restoration > 5 years**

**Meets/exceeds the 5%
required reduction**

Timeline	BMP Name	Drainage Area (ac)	TP Reduction		
			lbs/yr	% Reduction	% of Required Reduction to meet 53.9%
2019-2024	Tyson Park Bioswale (installed 2015)	41.4	17.01	5.57	10.32
	Thorne Drive Basin Retrofit	19.86	9.02	2.95	5.47
	Sage Road Basin Retrofit	22.44	9.65	3.16	5.86
	Wild Goose Farms Basin B Retrofit	9.95	5.04	1.65	3.06
	Wild Goose Farms Basin A Retrofit	14.29	7.32	2.39	4.
SUB-TOTAL:		107.94	48.04	15.72	29.16
>2024	Stream Restoration	1750 LF	119.0	38.93	72.23
SUB-TOTAL:			115.6	38.93	72.23
TOTAL:		107.94	167.04	54.65	101.39

Meets/exceeds the 53.9% required reduction



Total Sediment Load Reductions from Proposed BMPs

Same 4 BMPs + 5 additional BMPs within 5 years

PRP Planning Area	BMP Name	Drainage Area (ac)	TSS Reduction		
			lbs/yr	% Reduction	% of Required Reduction
Chester Creek/ East Branch Chester Creek/ Ridley Creek (contains Goose Creek TMDL Planning Area)	Tyson Park Bioswale (installed 2015)	36.63	11,516.31	1.33	13.31
	Thorne Drive Basin Retrofit	19.86	7,389.28	0.72	7.23
	Sage Road Basin Retrofit	22.44	8,212.53	0.80	8.04
	Wild Goose Farms Basin B Retrofit	9.95	4,645.54	0.45	4.55
	Wild Goose Farms Basin A Retrofit	14.29	6,550.35	0.64	6.41
	Pleasant Grove Stream Restoration	1600 LF	71,808.00	7.03	70.30
TOTAL:		107.94	94,248.87	10.99	109.9
Middle Brandywine Creek/Upper Brandywine Creek	Dunvegan Road Basin Retrofit	9.9	3,342.41	1.77	17.67
	General Greene Basin B Retrofit	12.39	3,204.12	1.69	16.94
	General Greene Basin A Retrofit	9.76	3,857.06	2.04	20.39
	Radley Run Stream Restoration	190 LF	8,527.20	4.51	45.08
TOTAL:		32.04	18,930.79	10.01	100.08

Meets/exceeds the 10% required reduction

Meets the 10% required reduction



Existing BMP- Tyson Park Bioswale

NOTES:

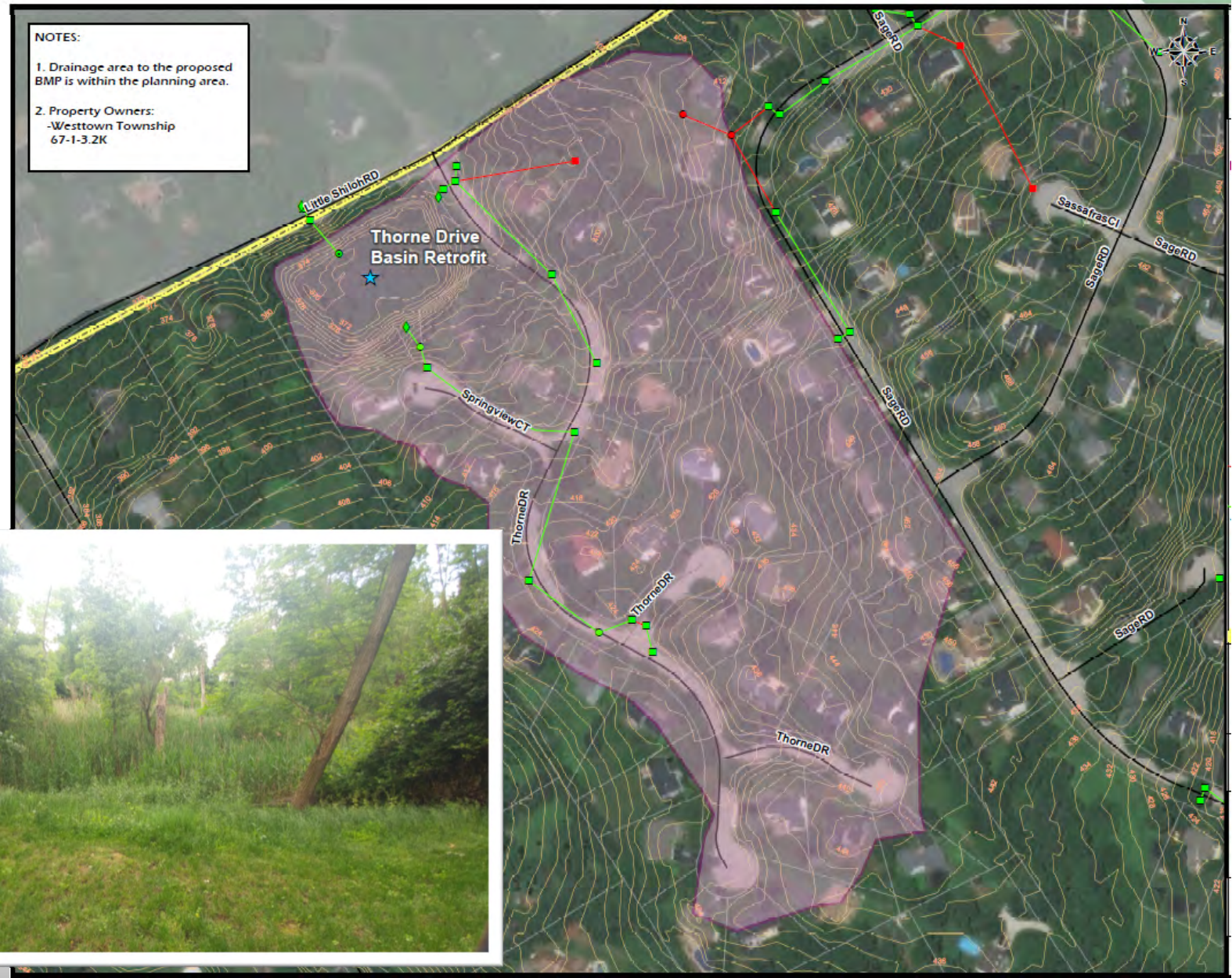
1. Drainage area to the proposed BMP is within the planning area.
2. Property Owners:
-Westtown Township
67-2-1.29





Proposed BMPs- Thorne Drive Basin Retrofit

NOTES:
1. Drainage area to the proposed BMP is within the planning area.
2. Property Owners:
-Westtown Township
67-1-3.2K



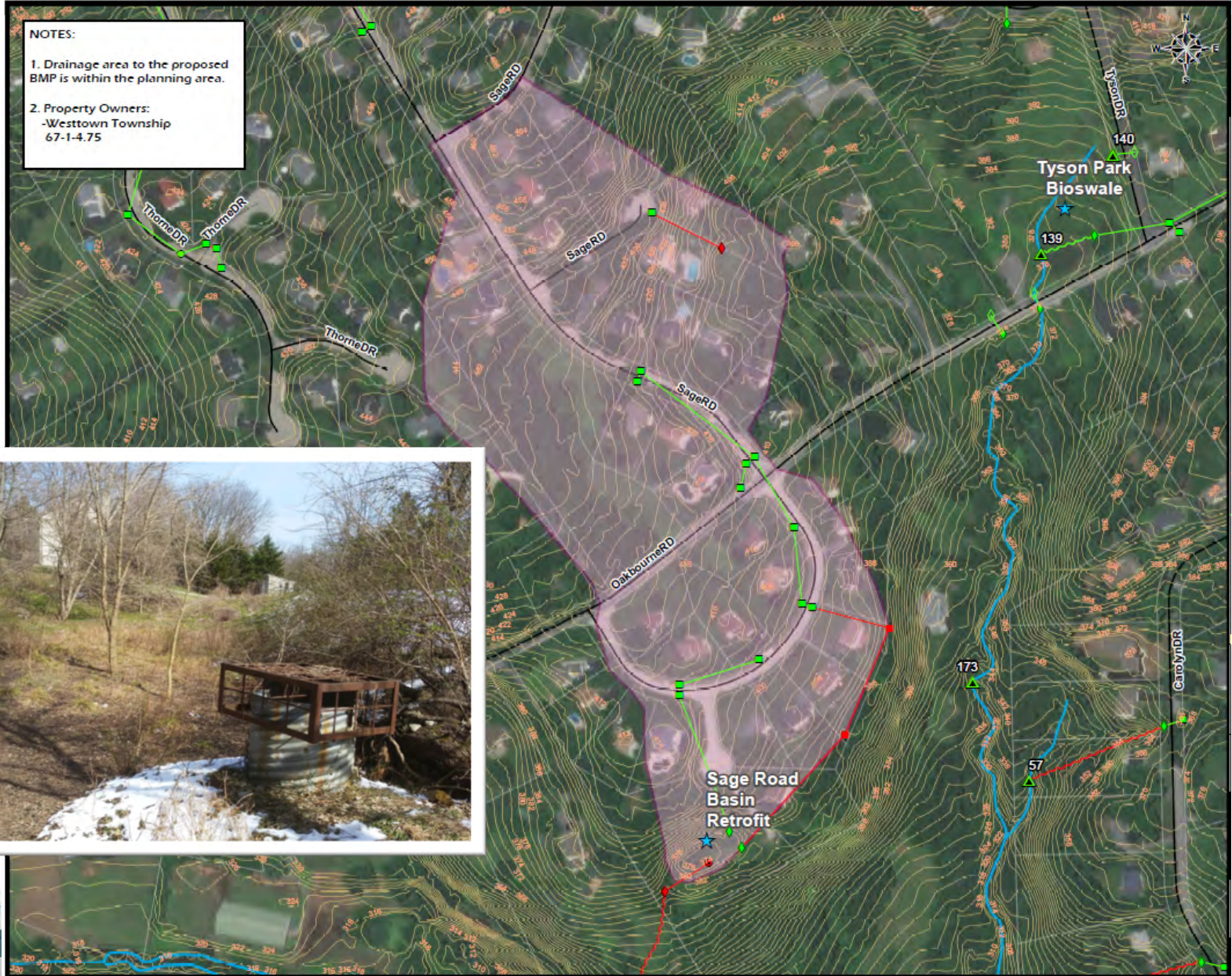


Proposed BMPs- Sage Road Basin Retrofit

NOTES:

1. Drainage area to the proposed BMP is within the planning area.

2. Property Owners:
-Westtown Township
67-1-4.75



Proposed BMPs- Wild Goose Farms Basin Retrofits



NOTES:

1. Drainage area to the proposed BMP is within the planning area.
2. Property Owners:
-Wild Goose Farms HOA
67-4D-76

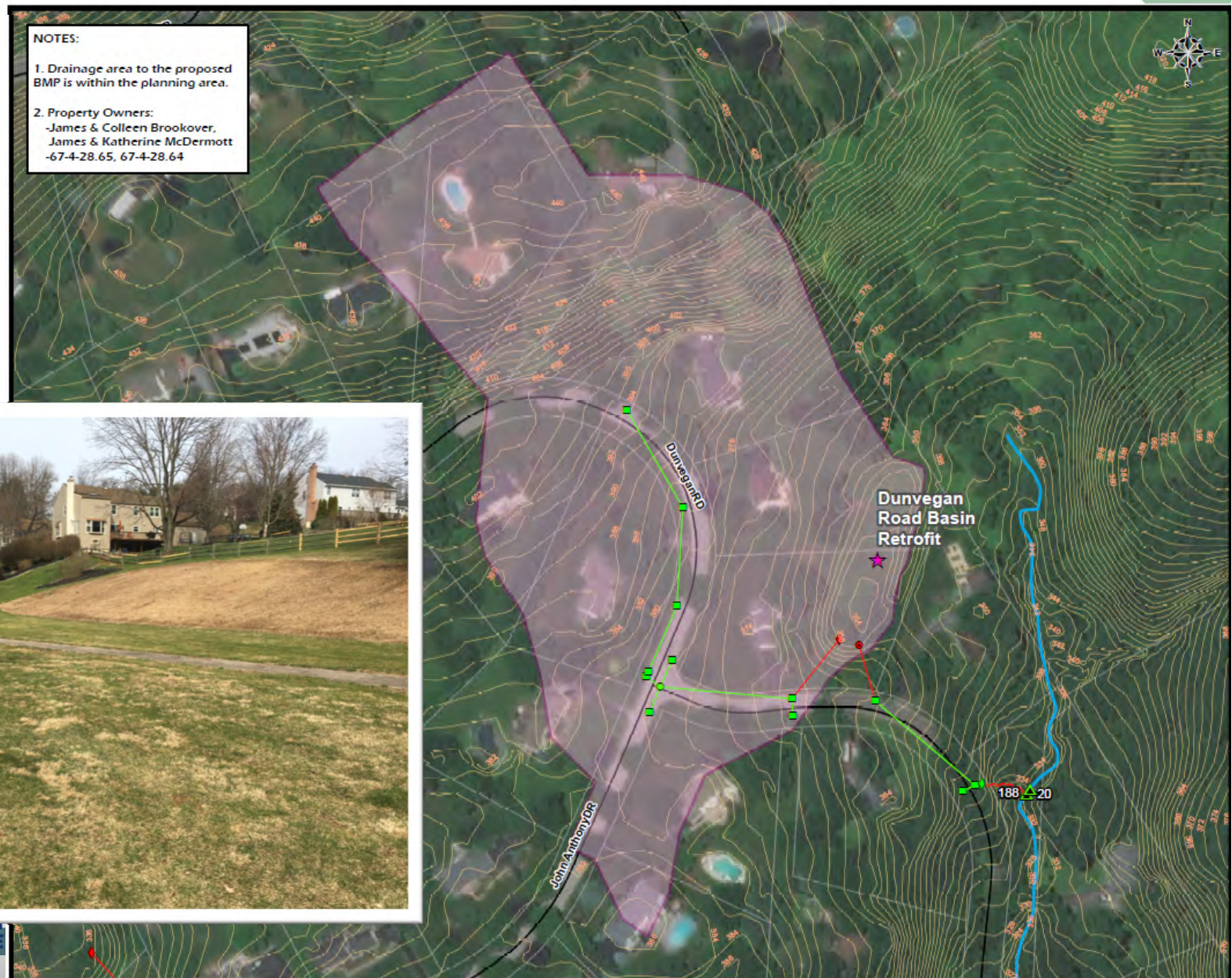




Proposed BMPs- Dunvegan Road Basin Retrofit

NOTES:

1. Drainage area to the proposed BMP is within the planning area.
2. Property Owners:
-James & Colleen Brookover,
-James & Katherine McDermott
-67-4-28.65, 67-4-28.64

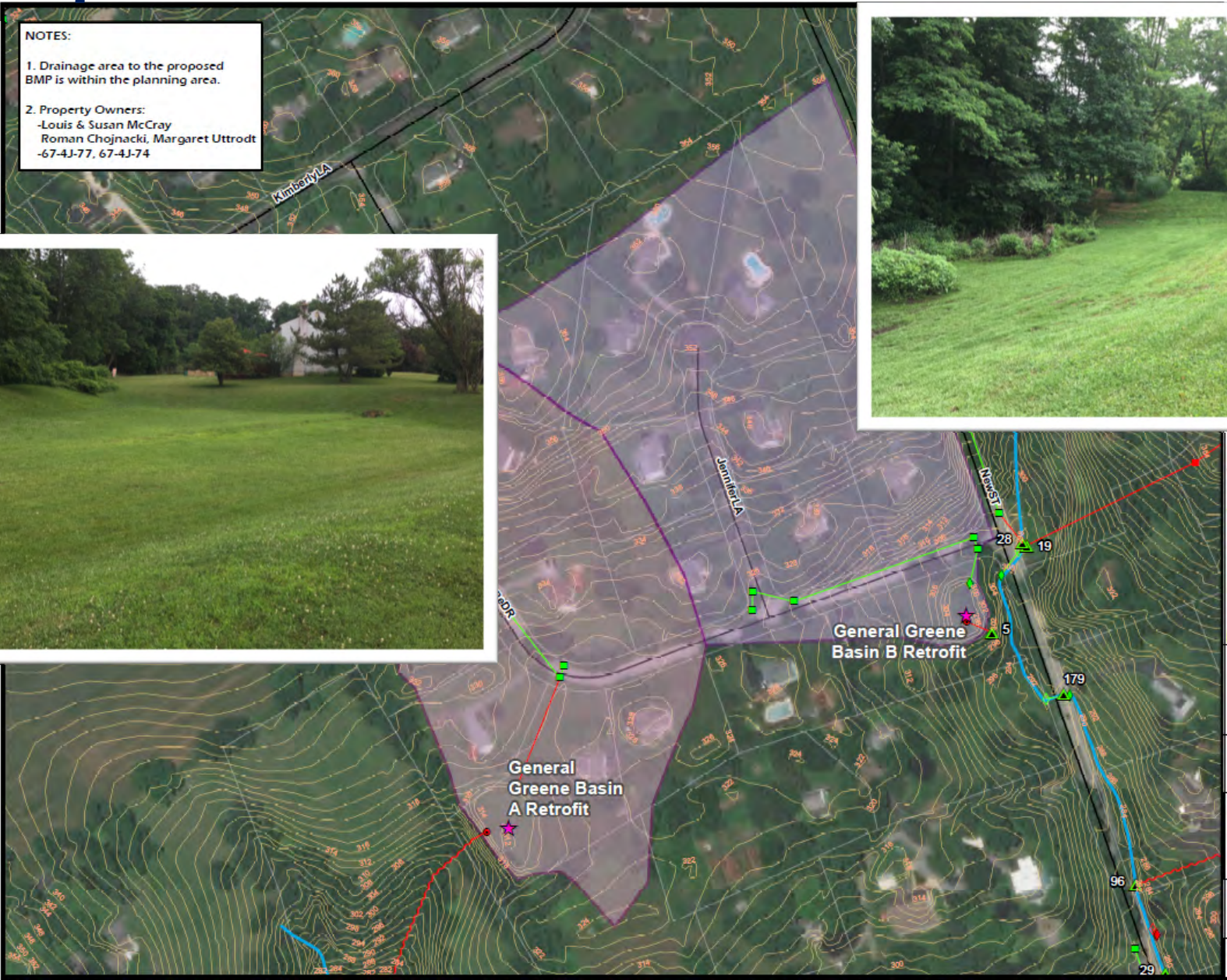




Proposed BMPs- General Greene Drive Basin Retrofits

NOTES:

- 1. Drainage area to the proposed BMP is within the planning area.
- 2. Property Owners:
 - Louis & Susan McCray
 - Roman Chojnacki, Margaret Uttrodt
 - 67-4J-77, 67-4J-74



Proposed BMPs- Radley Run Stream Restoration



NOTES:

1. Drainage area to the proposed BMP is within the planning area.
2. Stream restoration length of approximately 190 L.F.
3. Property Owners:
-Brent & Celeste Celek
-67-4-4.3





Operations and Maintenance of BMPs

- Identify **RESPONSIBLE PARTY**.
 - HOA-owned BMPs- HOA or Township?
 - If Township, then permanent easements
- List what **O&M** is needed for each BMP.

Stream Restoration	Basin Retrofit
<ul style="list-style-type: none">• Inspect at least 2x per year• Avoid excess use of fertilizers, pesticides, or other chemicals• Mow surrounding area as appropriate (remove clippings)• Remove invasive species• Remove debris	<ul style="list-style-type: none">• Inspect at least 2x per year• Clean inlets at least 2x per year• Maintain vegetation• Remove invasive species• Prohibit vehicular access• Avoid excessive compaction by mowers• Drain-down time < 72 hours• Mow as appropriate (remove clippings)• Remove accumulated sediment





Funding Mechanisms

Proposed BMP	Property Owner	Funding Mechanism	Total Estimated Cost (Low)	Total Estimated Cost (High)	Total Estimated Cost (Median)	% Sediment Reduction
Tyson Park Bioswale	Westtown Township	Existing BMP	n/a	n/a	n/a	1.33%
Thorne Drive Basin Retrofit	Westtown Township	Westtown Township	\$98,728	\$148,093	\$123,411	0.72%
Sage Road Basin Retrofit	Westtown Township	Westtown Township	\$47,625	\$71,438	\$59,532	0.80%
Wild Goose Farms Basin B Retrofit	Wild Goose Farms HOA	Westtown Township	\$49,299	\$73,948	\$61,624	0.45%
Wild Goose Farms Basin A Retrofit	Wild Goose Farms HOA	Westtown Township	\$37,290	\$55,936	\$46,613	0.64%
Pleasant Grove Stream Restoration	Westtown Township	Westtown Township	\$438,811	\$658,217	\$548,514	7.03%
Dunvegan Road Basin Retrofit	Perry & Anna Marie Cozzone	Westtown Township	\$64,324	\$96,486	\$80,405	1.77%
General Greene Basin B Retrofit	Louis & Susan McCray	Westtown Township	\$52,837	\$79,256	\$66,046	1.69%
General Greene Basin A Retrofit	Roman Chojnacki & Margaret Uttrodt	Westtown Township	\$58,672	\$88,008	\$73,340	2.04%
Radley Run Stream Restoration	Brent & Celeste Celek	Westtown Township	\$58,222	\$69,866	\$72,778	4.51%
TOTAL:			\$905,809	\$1,358,714	\$1,132,262	

Public Participation



GHS #Jhtxluhp hqw

Make a complete **copy of the TMDL/Pollutant Reduction Plan available for public review**

Publish a public notice containing a statement describing the plan, where it may be reviewed by the public, and the length of time the permittee will provide for the receipt of comments

Accept written comments for a minimum of 30 days from the date of public notice.

Accept comments from any interested member of the public at a **public meeting or hearing**, which may include a regularly scheduled meeting of the governing body of the municipality or municipal authority that is the permittee.

Record consideration of each timely comment received from the public during the public comment period concerning the plan, identifying any changes made to the plan in response to the comment.



Next Steps

- 1) **Submit-** updated TMDL/Pollutant Reduction Plan to DEP.
- 2) **Feedback-** Public Participation process once informally approved by DEP.
- 3) **Implement-** The 5-year Implementation Period begins once approval is received and permit is issued.

Additionally:

- **TMDL/Pollutant Reduction Plan** is a dynamic document and can be revised at any time.
- Township may want to consider **potential funding sources**.





Funding Options

1) GRANTS

- a) **Watershed Resource Protection Program (WRPP) – Open NOW, due May 31.**
- b) **Growing Greener Watershed Protection – anticipated in July.**



2) LOW-INTEREST LOANS

- a) **PENNVEST**

3) Stormwater Fee



Exclusion of Harmful Waste

Proposed Amendments

Definitions

GREASE TRAP/INTERCEPTOR. The indoor/outdoor above/below ground device designed to use differences in specific gravities to separate and retain light density liquids, waterborne fats, oils, and greases prior to the wastewater entering the sanitary sewer collection system. These devices also serve to collect settleable solids, generated by and from food preparation activities, prior to the water exiting the trap and entering the sanitary sewer collection system.

GREASE/MOTOR OIL CONTAINER. The outdoor above ground unit designed to provide safe and simple temporary storage of used food grease, motor oil and other waste. They are easy to empty, and might feature the grease vault lid and grate system to prevent spills.

OIL/WATER SEPARATOR. Large-capacity units frequently installed underground between a drain and the connecting sewer pipe designed to trap sediments and retain floating oils.

Applicability

- No person shall discharge into the sewer system any exhaust steam, any oils, tar, grease, gas, benzene or other combustible gases or liquids, any garbage (unless treated in an approved manner), offal, insoluble solids or other dangerous or harmful substances which would adversely affect the functioning of the sewer system or the processes of sewage treatment. This restriction shall be in addition to the discharge restrictions that appear in Article IV of this chapter. [Amended 2-7-2005 by Ord. No. 2005-2]
- The provisions of this Chapter shall apply to all commercial, industrial, and institutional establishments located within and outside the Westtown Township boundary, which discharge into the Township sewer system, are required by this Chapter to install a grease trap/interceptor, and/or grease/motor oil separator.
- Grease trap/interceptor trap systems, except as may be modified by the provisions of the Uniform Construction Code, are required for all restaurants, food preparation facilities, or other establishments that have the potential to discharge oil, and/or grease into the sanitary sewer system.
- Oil/water separators are required for all motor vehicle service stations, automobile sales agency that provide services to vehicles and have the potential to discharge oil and sediment in the public sewer.

Permits

- No person shall install, construct or alter a grease trap/interceptor or oil/water separator or occupy or utilize any structure in which grease trap/interceptor or oil/water separator system without first receiving a permit from Westtown Township, which identifies the site and provides the plans and specifications so as to ensure compliance with the provisions of this Chapter.

- All grease trap/interceptor or oil/water separator constructed or altered, shall be inspected by the Building Code Official.

Design and Installation

New Facilities

- All commercial, industrial, and institutional establishments which are newly proposed or constructed, or existing facilities which will be expanded or renovated to include a food preparation facility or motor vehicle service station, where such facility did not previously exist, shall be required to design, install, operate and maintain a grease trap/interceptor or oil/water separator in accordance with this Chapter.
- Grease traps/interceptors and/or oil/water separators shall be installed and inspected prior to issuance of a certificate of occupancy.

Existing Facilities

- All existing commercial, industrial, and institutional establishments, which include a food preparation facility, shall install a grease interceptor/trap. The type of installation shall be approved by the Building Code Official.
- All existing commercial, industrial, and institutional establishments, which include a motor vehicle service station, shall install an oil/water separator. The type of installation shall be approved by the Building Code Official.
- All existing commercial, industrial, and institutional establishments, which include a food preparation facility or a motor vehicle service station, shall have an access to an outdoor grease/motor oil container to dispose of used food oil, motor oil and other waste.
- All existing commercial, industrial, and institutional establishments that don't currently have a required trap/interceptor will be given a compliance deadline not to exceed three months from date of notification to have approved and installed those to be considered compliant with this Chapter. Failure to do so will be considered a violation of the Township Code and will subject the establishment to penalties.
- All existing traps/interceptors and grease/motor oil containers must be operated and maintained in accordance with this Chapter, unless specified in writing and approved by the Township.

Maintenance and Operation

- All grease trap/interceptor or oil/water separator shall be maintained in an efficient operating condition at all times.
- All existing commercial, industrial, and institutional establishments containing a grease trap/interceptor or oil/water separator system shall have it cleaned and inspected by a qualified sewage waste hauler licensed in the Commonwealth of Pennsylvania within sixty (60) days of the effective date of this Chapter. Thereafter, all such establishments are required to clean their grease trap/interceptor or oil/water separators at least once every 30 days or within a frequency determined by the Township in consultation with the sewage waste hauler servicing the establishment.

- The required cleaning frequency may be modified by the Township as necessary to maintain proper functioning of a public sewer system and with a written notice to the establishment.

Inspections

- The Township may conduct annual inspections to determine if the cleaning schedule shall be adjusted and if any repairs are needed.
- The Township may conduct inspections of grease trap/interceptors or oil/water separators at any time after notice to the user and may require the user to submit additional reports or conduct cleanings more frequently than monthly at its own expense if the Township finds or suspects that grease trap/interceptors or oil/water separators have not been properly cleaned.

Reporting

- All existing commercial, industrial, and institutional establishments containing a grease trap/interceptor or oil/water separator system shall submit to the Township receipts every 30 days or within a frequency determined by the Township confirming the cleaning of the grease trap/interceptor or oil/water separator. The receipts shall be submitted within 30 days after the removal of the accumulated grease, oil, and motor oil.
- The receipt should at the minimum include the following:
 - The name of the person or contractor who performed the cleaning
 - The date of the cleaning
 - The location where the material is disposed of
 - Condition of the grease trap tank, baffles, and the tank lid
 - Any recommended repairs
- Any establishment where interceptor/traps are determined by a qualified sewage waste hauler to need repairs or replacement are required to complete those within 30 days after the written notice from the Township.

Establishments Located Outside the Township

- Any establishment, which owns a building or structure containing an oil and grease interceptor/trap that lies outside the Township and utilizes the Township's sewer system must comply with the provisions of this Chapter.

Penalties and Violations

- In addition to a proceeding under any other remedy available to the Township at law or in equity for a violation of any provision of this Chapter or any rule or regulation promulgated under this Chapter or any order issued by the Township pursuant to this Chapter, the Township, after notices and hearing, may assess a civil penalty against any establishment for that violation.

- Any establishment that violates or fails to comply with any provision of this Chapter shall be subject to the following fines, which may be amended, as needed, from time to time, by ordinance or resolution:

Fine Fee Schedule:

- (1) First offense: \$500
 - (2) Second offence: \$750
 - (3) Third and subsequent offenses: \$1,000
- In addition to the above fines, the owner of the establishment shall pay, or reimburse the Township for, all cleanup costs, any costs to remedy any damages incurred, any inspection costs, and the costs of prosecution, including filing fees, and any engineer, attorney, employee or representative fees, and any other Township expenses related to the violation. If the owner fails to pay the expenses, then the expenses shall be collectible from the owner of the establishment by any method available at law or in equity, including a municipal claim.

DRAFT

§ 132-7. Exclusion of harmful waste. [Amended 9-20-2004 by Ord. No. 2004-7]

- A. No person shall discharge into the sewer system any exhaust steam or any oils, tar, grease, gas, benzine or other combustible gases or liquids, or any garbage (unless treated in an approved manner), offal, insoluble solids or other dangerous or harmful substances which would adversely affect the functioning of the sewer system or the processes of sewage treatment. This restriction shall be in addition to the discharge restrictions that appear in Article IV of this chapter. **[Amended 2-7-2005 by Ord. No. 2005-2]**
- B. Reporting. The owners and/or operators of a motor vehicle service station, automobile sales agency which provides services to vehicles, eating or drinking establishment and other commercial establishments which are required to install a grease, oil or sand interceptor or reclaimer and/or a hair trap must submit written verification to the Township that the grease, oil or sand interceptor or reclaimer was properly cleaned and emptied by a sewage waste hauler licensed in the Commonwealth of Pennsylvania at least once a month. Every month, the owners and operators shall send written notice to the Township which states the following: the name of the person or contractor who performed the cleaning of the grease, oil or sand interceptor or reclaimer and/or a hair trap; the date of cleaning; and the location where the material is disposed. The Township may conduct inspections of the interceptors, reclaimer and/or traps at any time after notice to the user and may require the user to submit additional reports or conduct tests more frequently than monthly at its own expense if the Township finds or suspects that the interceptor, reclaimer and/or trap has not been properly cleaned.

§ 132-15. Violations and penalties.

Any person who violates or permits a violation of this article shall, upon conviction in a summary proceeding brought before a District Justice under the Pennsylvania Rules of Criminal Procedure, be guilty of a summary offense and shall be punishable by a fine of not more than \$1,000, plus costs of prosecution. In default of payment thereof, the defendant may be sentenced to imprisonment for a term not exceeding 90 days. Each day or portion thereof that such violation continues or is permitted to continue shall constitute a separate offense, and each section of this article that is violated shall also constitute a separate offense.