



# **Worcester Township**

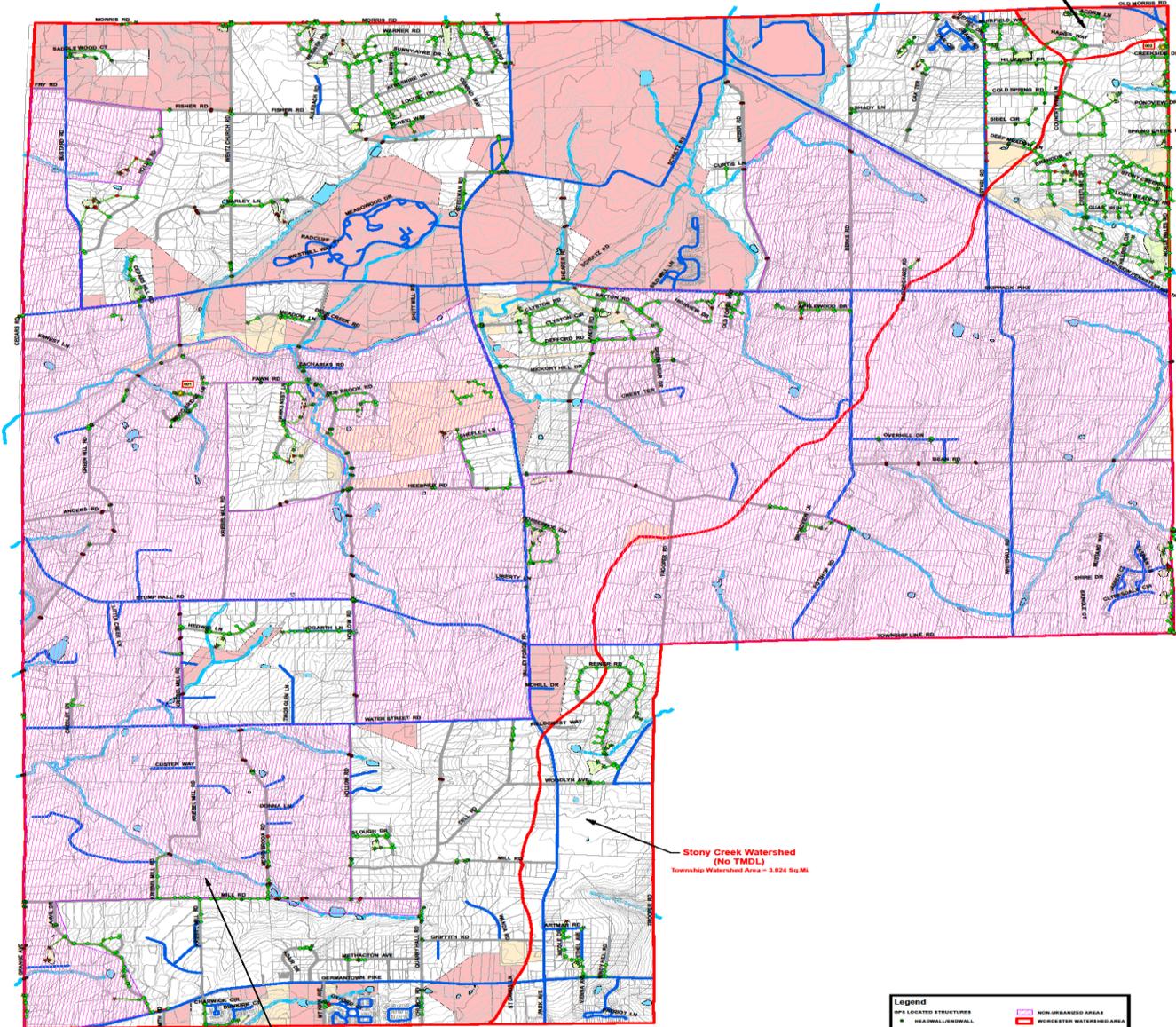
## **16 Square Miles**

**Skippack Watershed: 75.82%**

**Stony Creek Watershed: 23.56%**

**Wissahickon Watershed: 0.62%**

**Wissahickon Watershed**  
**(TMDL Watershed, WLA)**  
 Township Watershed Area = 0.107 Sq. Mi.  
 Urbanized Area = 0.101 Sq. Mi.  
 Township MS4 Watershed Area = 0.030 Sq. Mi.



**Stony Creek Watershed**  
**(No TMDL)**  
 Township Watershed Area = 3.824 Sq. Mi.

**Skippack Watershed**  
**(TMDL Watershed, WLA)**  
 Township Watershed Area = 12.283 Sq. Mi.  
 Urbanized Area = 6.209 Sq. Mi.  
 Township MS4 Watershed Area = 4.130 Sq. Mi.

Legend	
♦ OPS LOCATED STRUCTURES	■ NON-URBANIZED AREAS
■ HEADWALL/ENDWALL	■ WORCESTER WATERSHED AREA
■ BULEY	■ NON-TOWNSHIP ROADS
■ MANHOLE	■ TOWNSHIP ROADS
▲ OUTLET STRUCTURE	■ BASINS
■ OUTFALL	■ SHED OF WATER
■ APPROXIMATE STRUCTURES	■ STREAMS
■ HEADWALL/ENDWALL	■ WORCESTER TWP. PARCELS
■ BULEY	■ TOWNSHIP OWNED PROPERTIES
■ MANHOLE	■ AREA OUTSIDE SEA AREA
▲ OUTLET STRUCTURE	■ STORMWATER OUTFALL
■ OUTFALL	■ OUTFALL I.D. NUMBER
■ STORM SEWER	
■ APPROX. STORM SEWER	
■ PENNDOT STORM SEWER	
■ APPROX. PENNDOT STORM SEWER	

# **What is a TMDL?**

**“Total Maximum Daily Load”**

**Is A Wasteload Allocation For Non- Point  
Sources Of Pollution In Defined Impaired  
Waterbodies**

**For Worcester, That Pollutant Is  
Sediment In the Skippack and Wissahickon  
Watersheds**

# **NOTICE OF INTENT**

- **NOTICE OF INTENT AND INITIAL TMDL STRATEGY WAS SUBMITTED TO DEP IN SEPTEMBER 2012**
- **REVIEW COMMENTS AND ADDITIONAL REQUIRMENTS WERE RECEIVED IN FEBRUARY 2015**
- **REVISED TMDL STRATEGY IS DUE BY DECEMBER 31, 2015**

# TMDL STRATEGY

- **TOWNSHIP MUST ADOPT A NEW STORMWATER MANAGEMENT ORDINANCE TO MEET NEW DEP REQUIREMENTS. CURRENTLY UNDER REVIEW.**
- **TOWNSHIP MUST DEVELOP STRATEGIES TO REMOVE SEDIMENT. THIS COULD INCLUDE:**
  - **MODIFYING EXISTING STORMWATER CONTROL FACILITIES**
  - **PERFORM ROAD MAINTENANCE- STREET SWEEPING**
  - **CONSTRUCT PROJECTS TO OBTAIN CREDITS**
    - **STREAMBANK STABILIZATION**
    - **RIPARIAN BUFFER ENHANCEMENT**
    - **STORM SEWER PROJECTS**

**Skippack Creek Watershed**  
**Worcester's Allocated Sediment**  
**Reduction: 823,182 Lbs./ Year**

**Revised Reduction After Credit For  
Non- Urbanized and Parsed Areas:**

**276,671 Lbs./ Year**

**Credit for Completed Streambank  
Stabilization Projects:**

**(48,980 Lbs./ Year)**

**Remaining Reduction Needed:**

**227,691 Lbs./ Year**

# **Potential Reductions**

**Naturalize Defford Rd. Basin: 19,491 Lbs./ Year**

**Balance To Remove: 208,200 Lbs./Year**

**Proposed Strategy:**

**Remove 41,640 Lbs./ Permit Period**

**During the Next 5 Permit Periods (25 Years)**

## **Potential Methods of Reduction**

- \*Implement New Stormwater Ordinance**
- \*Streambank Stabilization Projects**
- \*Enhance Riparian Buffers**
- \*Street Sweeping; Inlet Filter**

# PLANNING AHEAD

- **FOR THE SKIPPACK WATERSHED, WORCESTER WILL NEED TO START PLANNING HOW TO ADDRESS THE TMDL REQUIREMENTS TO MEET THE REDUCTION REQUIREMENTS IN EACH PERMIT PERIOD (5 YEARS).**
- **FIRST RECOMMENDED PROJECT IS DEFFORD BASIN NATURALIZATION**
- **THE TOWNSHIP WOULD NEED TO STABILIZE 2,000 FEET OF STREAMBANK (ZACHARIAS CREEK). CREDIT ARE 124 Lbs./year/ lf per side of streambank TO MEET REQUIRMENTS**

# **WISSAHICKON CREEK** **WATERSHED**

**WORCESTER'S ALLOCATED SEDIMENT  
REDUCTION: 1,717.83 Lbs./ Year**

**Revised Reduction After Credit For Non- Urbanized and  
Parsed Areas:  
510 Lbs./ Year**

**PROPOSED STRATEGY FOR THIS AREA COULD INCLUDE:**

**STORM INLET CLEANING  
STREET SWEEPING**

**CLEANING 9 STORM INLETS PER YEAR AND SWEEPING  
720 FEET OF ROADWAY WOULD REDUCE 453 Lbs./ year OF  
SEDIMENT**

# **POSSIBLE WATERSHED WIDE** **APPROACH**

**CURRENTLY IN DISCUSSION WITH DEP AND  
OTHER SKIPPACK WATERSHED  
TOWNSHIPS/BOROUGHES**

**POSSIBLE VALUE IN TAKING A GLOBAL  
APPROACH**

**BETTER POSSIBILITY FOR GRANT FUNDING**

**INITIAL ACTION WOULD BE THE MODELING  
OF THE WATERSHED**

**WISSAHICKON WATERSHED MAY FORM A  
SIMILAR COALITION AS WELL**

# **NEXT STEPS**

**SUBMIT UPDATED STRATEGY REPORT TO DEP BY END OF 2015**

**CONTINUE WITH REVIEW AND EVENTUAL ADOPTION OF NEW  
STORMWATER ORDINANCE**

**CONTINUE WITH DISCUSSIONS WITH DEP AND  
MUNICIPALITIES ON VALUE OF JOINT APPROACH TO  
REDUCTIONS**

**DEVELOP PLAN FOR POTENTIAL PROJECTS TO BEGIN  
MEETING REDUCTION GOALS**

**\*DEFFORD BASIN NATURALIZATION**

**STORMWATER PROJECTS**

**RIPARIAN AND STREAMBANK EVALUATION**

**STREET SWEEPING?**