

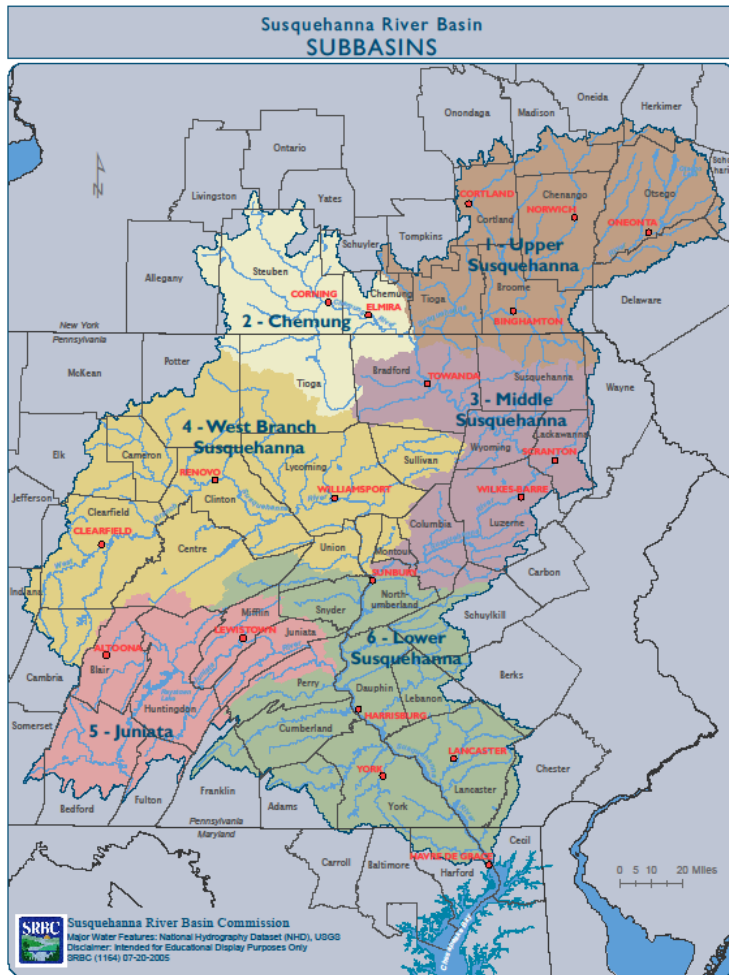
# YORK COUNTY'S JOURNEY STORMWATER MANAGEMENT: COMPLIANCE, COORDINATION & COST

MAY 18, 2017

GIANT FOOD STORE COMMUNITY CENTER



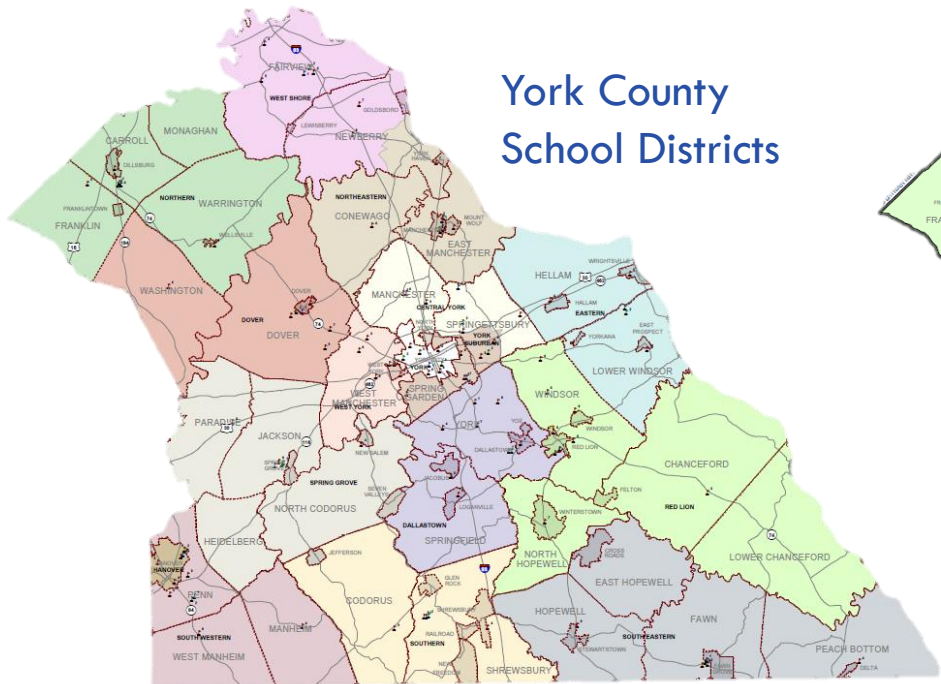
# REGIONAL MAPS OF THE CHESAPEAKE BAY WATERSHED



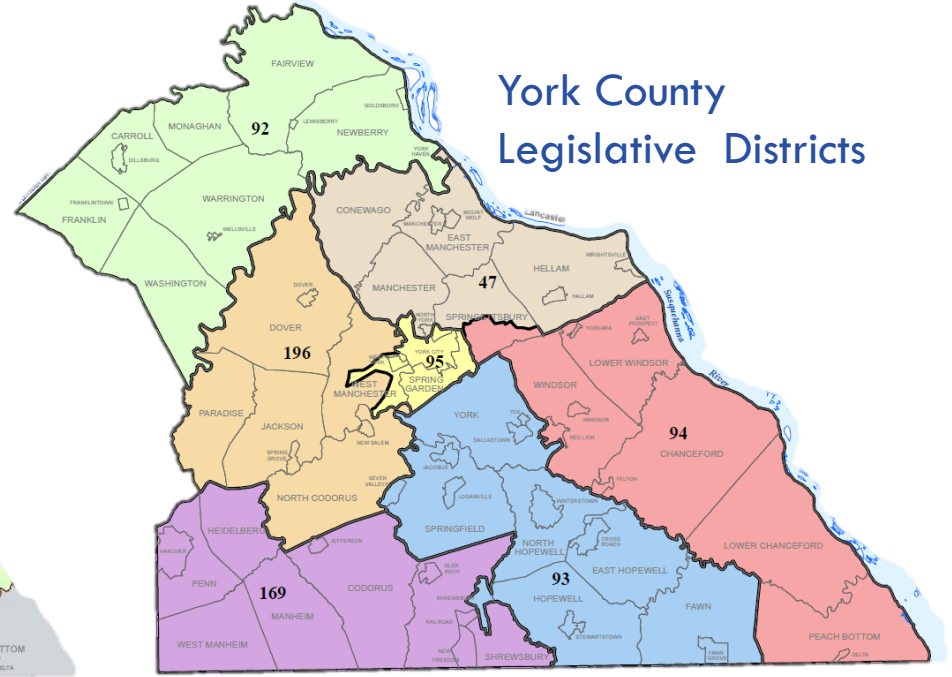




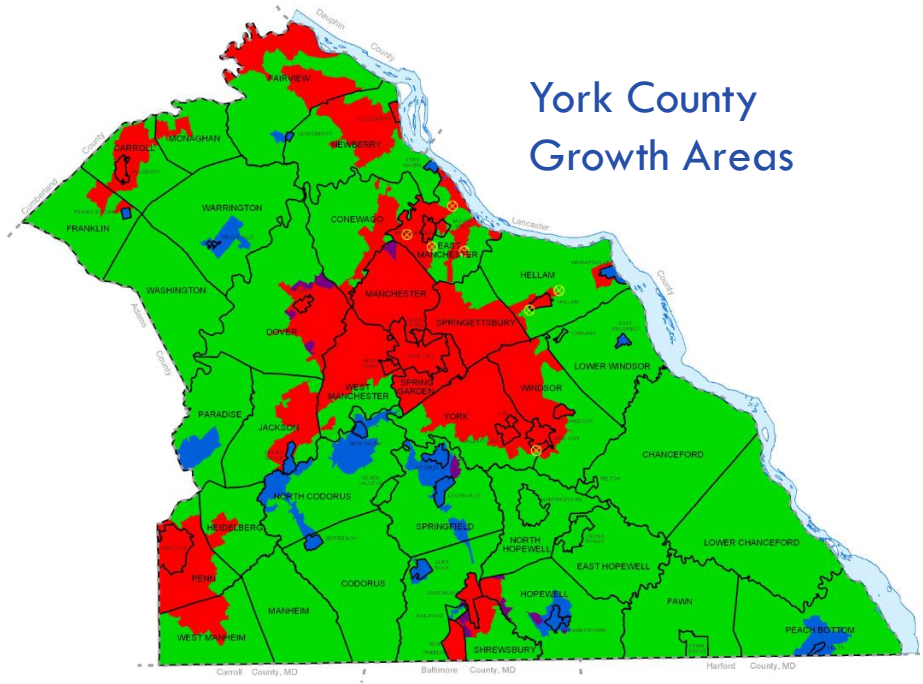
York County  
School Districts



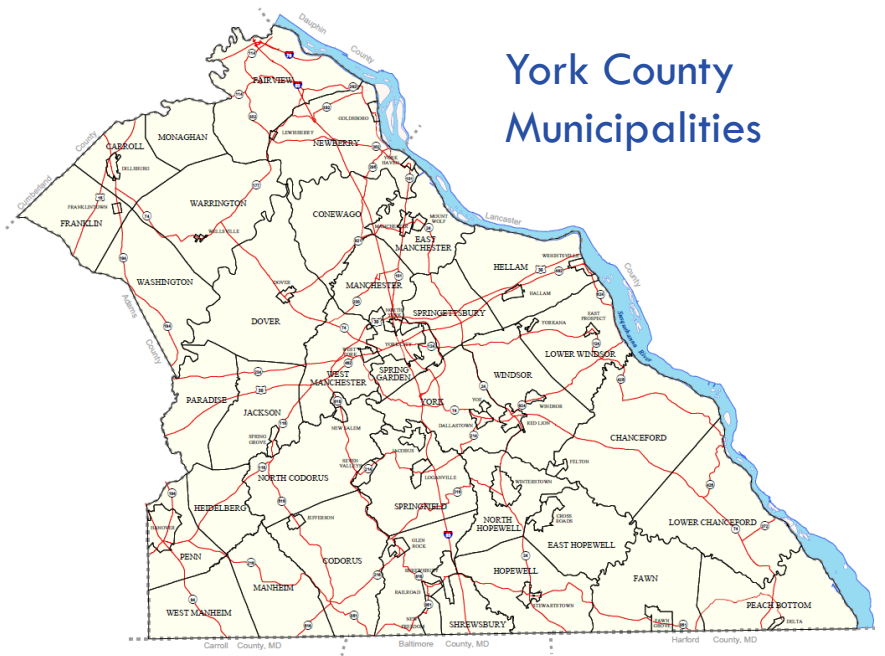
York County  
Legislative Districts



York County  
Growth Areas



York County  
Municipalities





Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet  
 Datum: North American 1983  
 Spheroid: GRS 1980  
 False Easting: 1,568,200.0000  
 False Northing: 0.0000  
 Central Meridian: -77.500  
 Standard Parallel 1: 39.3333  
 Standard Parallel 2: 40.2667  
 Latitude Of Origin: 38.3333  
 Units: Foot US

**YORK COUNTY**  
 PLANNING  
 COMMISSION  
 www.ycpc.org

**York County Planning Commission**

**York County MS4**

**Sewershed Map**

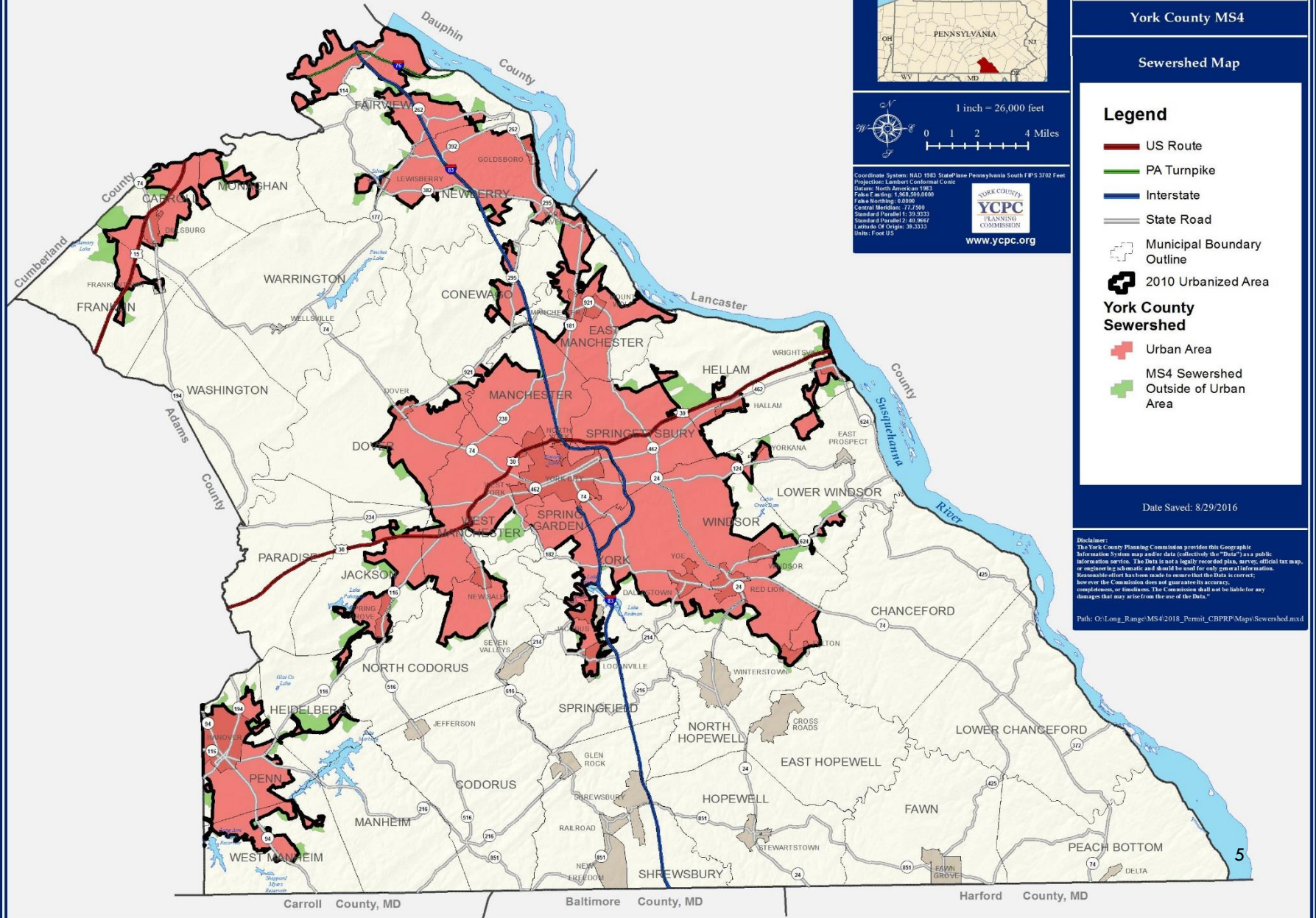
**Legend**

- US Route
- PA Turnpike
- Interstate
- State Road
- Municipal Boundary Outline
- 2010 Urbanized Area
- York County Sewershed**
- Urban Area
- MS4 Sewershed Outside of Urban Area

Date Saved: 8/29/2016

Disclaimer:  
 The York County Planning Commission provides this Geographic Information System map and/or data (collectively the "Data") as a public information service. The Data is not a legally recorded plan, survey, official tax map, or engineering schematic and should be used for only general information. Reasonable effort has been made to ensure that the Data is correct, however the Commission does not guarantee its accuracy, completeness, or timeliness. The Commission shall not be liable for any damages that may arise from the use of the Data.

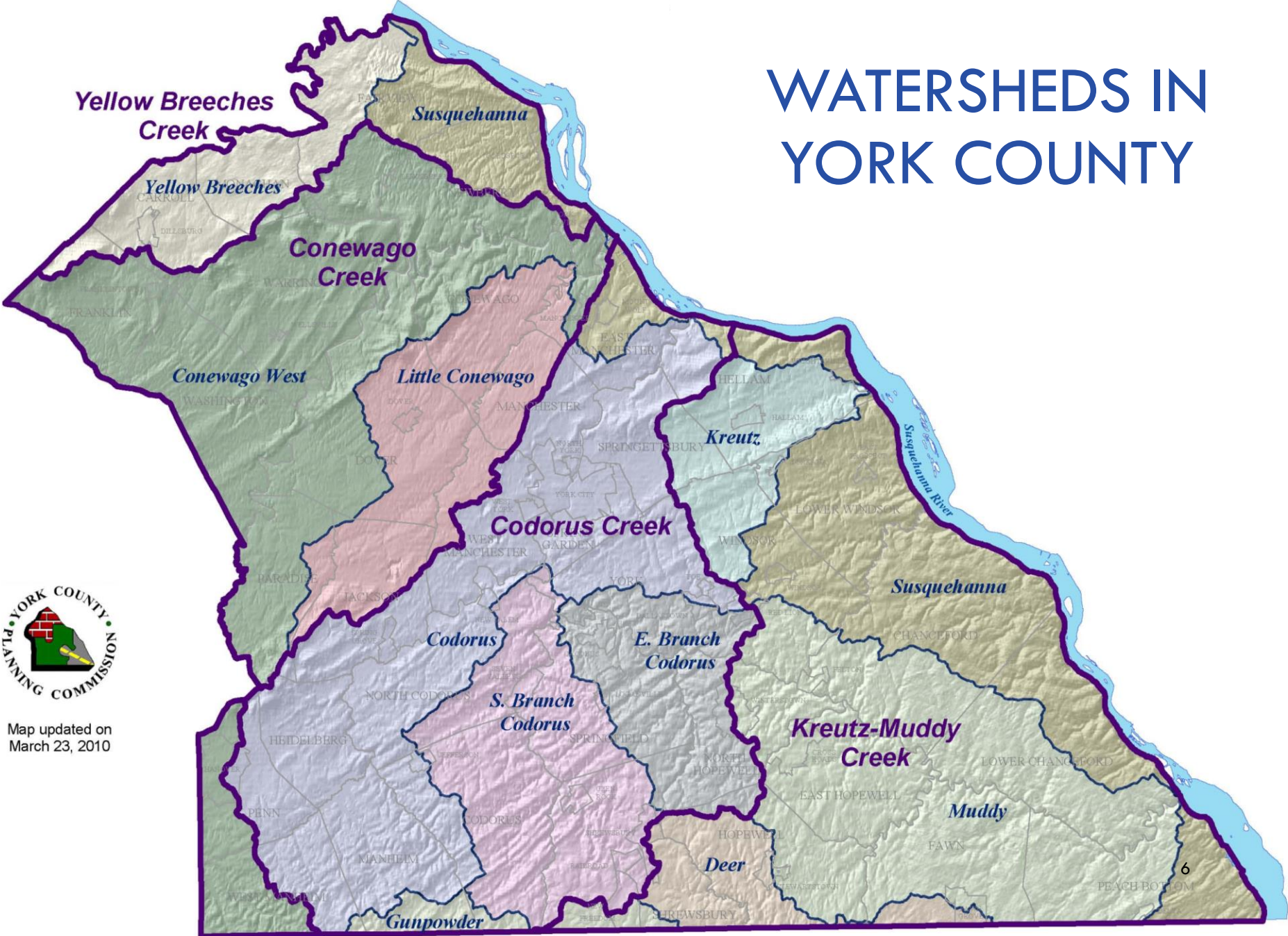
Path: G:\Long\_Range\MS4\2016\_Permit\_CBPRP\Maps\Sewershed.mxd



Carroll County, MD      Baltimore County, MD      Harford County, MD



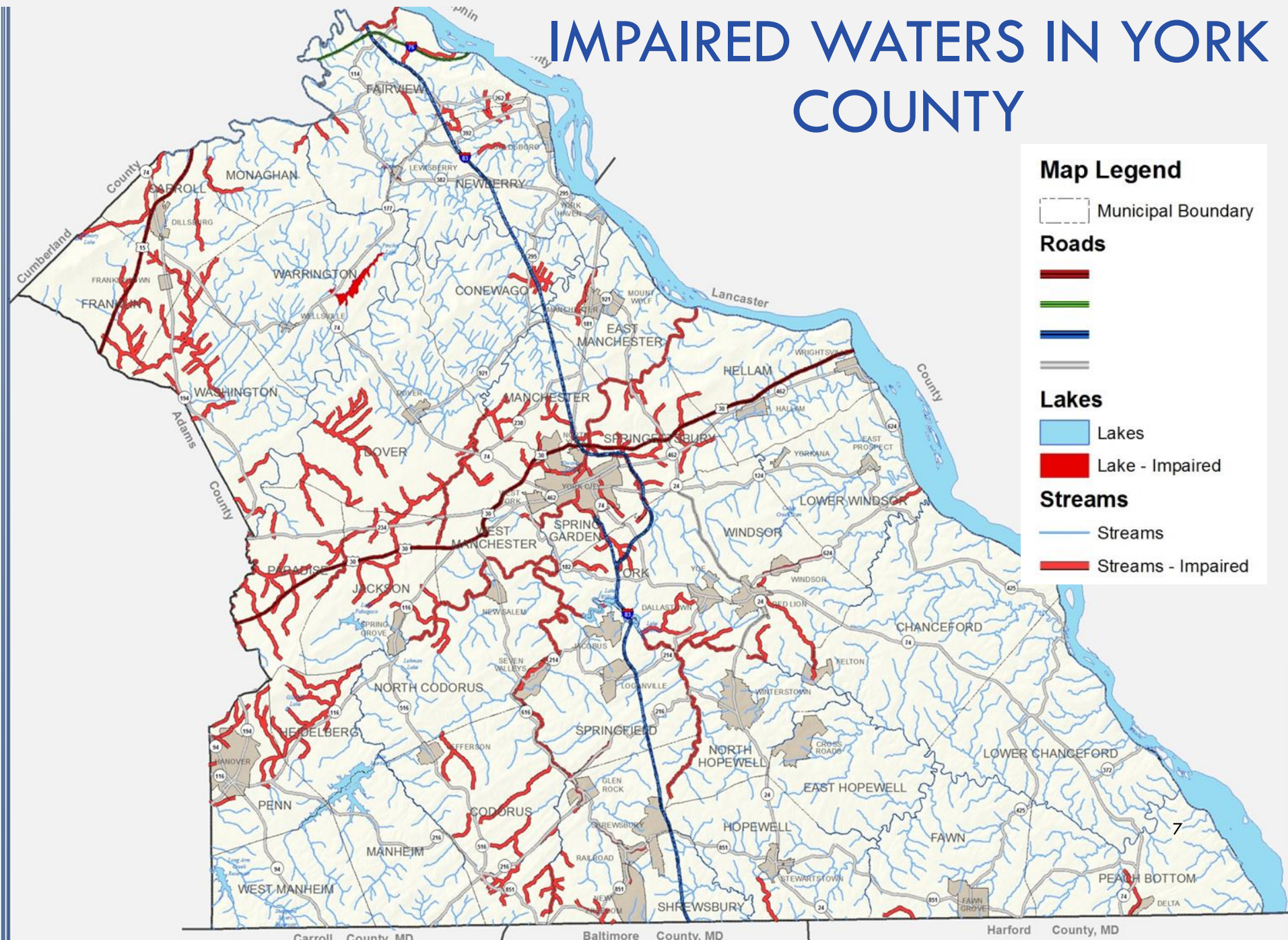
# WATERSHEDS IN YORK COUNTY



Map updated on March 23, 2010



# IMPAIRED WATERS IN YORK COUNTY





Toronto Canada

Providence RI

Columbus OH

Raleigh NC





# WE HAVE WATER ISSUES: HOW DO WE FIX THEM?

**FEDERAL** (Clean Water Act,  
Chesapeake Bay TMDL)

**STATE** (Act 167- Stormwater  
Management Act, Clean Streams law,  
Chesapeake Bay WIP)

**COUNTY** (IWRP, York  
County WIP, Regional CBPRP, SWA  
Feasibility Study)

**MUNICIPAL** (SWM Ord, ZO,  
SALDO, MS4 Permit, Local TMDL)

**CHANGES IN HOW  
WE DEVELOP OUR  
LAND**



# YORK COUNTY'S STORMWATER JOURNEY

## Integrated Water Resources Plan (IWRP)



A component of the York County Comprehensive Plan

INTEGRATED WATER RESOURCES PLAN

## YORK COUNTY WATERSHED IMPLEMENTATION PLAN



### York County Watershed Implementation Plan

Working Together for Clean Water



## YORK COUNTY REGIONAL CHESAPEAKE BAY POLLUTANT REDUCTION PLAN DECEMBER 2014



(Prepared by the York County Planning Commission and Center for Watershed Protection in cooperation with the Regional CBPRP Steering Committee)

## REGIONAL CHESAPEAKE BAY POLLUTANT REDUCTION PLAN

## STORMWATER AUTHORITY FEASIBILITY STUDY



### York County Stormwater Authority Feasibility Study

York County Planning Commission  
York, Pennsylvania

DRAFT - November 2015



Prepared for:



28 East Market Street, 3rd Floor  
York, PA 17401

Prepared by:

AMEC FOSTER WHEELER  
Environment & Infrastructure, Inc.  
751 Adair Way, Suite 100  
Blue Bell, Pennsylvania 19422

This study was funded by a grant from the Cadornas Watershed Endowment Committee of the York County Community Foundation.





# INTEGRATED WATER RESOURCES PLAN AND FLOW CHART

## **Integrated Water Resources Plan (IWRP)**



**A component of the York County  
Comprehensive Plan**

- ADOPTED 2003
- AMENDED 2011
- GOAL WAS TO TIE EVERYTHING WATER RELATED TOGETHER AND DEVELOP A USER-FRIENDLY FLOW CHART

# YORK COUNTY WIP



## *York County Watershed Implementation Plan*

*Working Together for Clean Water*



- ENDORSED BY COUNTY COMMISSIONERS  
SEPTEMBER 4, 2013
- GOAL WAS TO PROVIDE A STRATEGY FOR YORK COUNTY TO IMPROVE ITS WATERS



# REGIONAL CBPRP

- SUBMITTED TO DEP DECEMBER 2014
- APPROVED BY DEP AUGUST 2015
- GOAL WAS TO COLLABORATE TO GET THE MOST BANG FOR OUR BUCK WHEN DOING BMP PROJECTS AND TO MEET MS4 PERMIT REQUIREMENTS COST EFFECTIVELY

**YORK COUNTY REGIONAL  
CHESAPEAKE BAY  
POLLUTANT REDUCTION PLAN**

**DECEMBER 2014**



(Prepared by the York County Planning Commission and Center for Watershed Protection in cooperation with the Regional CBPRP Steering Committee)



# PROCESS OF REGIONAL CBPRP: BEFORE THE PLAN

## IDEA

- Strategy From IWRP & York County WIP

## PERMISSION

- Discuss Idea with DEP

## LOCAL SUPPORT

- Met with Municipal Engineers & YC Municipal Administrators Assoc.

## FUNDING

- CBF provided a \$44,000 Technical Assistance Grant w/ CWP





# PROCESS OF REGIONAL CBPRP: DURING THE PLAN

## MUNICIPAL OPT IN: PLAN DEVELOPMENT

- Invited ALL 72 Municipalities
- 46 Opted-in to develop Plan
- No Cost to Participate

## STEERING COMMITTEE

- Meetings
- Voting
- Other Stakeholders



# PROCESS OF REGIONAL CBPRP: DURING THE PLAN

## COLLECTED MUNICIPAL DATA

- Pervious/Impervious Coverage (GIS)
- Land Use (GIS)
- Municipal upgrades and LID evaluations
- Estimates of current loads (CAST)

## PROJECT LIST

- Asked Participants to provide a list of possible stormwater projects/BMP's in their municipality.
- 72 control measures on BMP project list
- 9 control measures on 2014/2015 Action Plan

## FUNDING FOR PROJECTS

- 4 Cost Scenarios
  - Flat Fee
  - Impervious Coverage
  - Weighted (Imp Cov/LM Impaired streams/Pop)
  - Base Fee - Tiered



# PROCESS OF REGIONAL CBPRP: **AFTER** THE PLAN

## MUNICIPAL OPT IN: PLAN PARTICIPATION

- Opt In by Resolution

## SUBMISSION TO DEP

- Approved by DEP August 31, 2015

## INTERGOVERNMENTAL COOPERATION AGREEMENT

- Adopt by Ordinance
- Required for DEP Approval of Plan
- 5 yr term w/ option to extend annually by Resolution

## IMPLEMENTATION OF THE PLAN

- Regional & Management Committees
- Collect Fees
- Carry out BMP Projects

# INTERGOVERNMENTAL COOPERATION AGREEMENT (ICA)

BACKGROUND

GUIDING PRINCIPLES

ORGANIZATION

MEETINGS

AUTHORITY OF MANAGEMENT COMMITTEE

IMPLEMENTATION OF AGREEMENT

FINANCING



# INTERGOVERNMENTAL COOPERATION AGREEMENT (ICA)

## REGIONAL COMMITTEE

- ALL PARTICIPATING MUNI'S HAVE A PRIMARY AND ALTERNATE
- QUARTERLY MEETINGS
- VOTE ON PROJECTS AND PARTICIPATION OF MEMBERS
- DISCUSS ENFORCEMENT ACTION

## MANAGEMENT COMMITTEE

- 1 YEAR TERM
- 7 VOTING MEMBERS
- MAY CREATE SUBCOMMITTEES
- AUTHORIZE PAYMENTS
- ENSURE BMP PROJECTS ARE CONSTRUCTED AS APPROVED

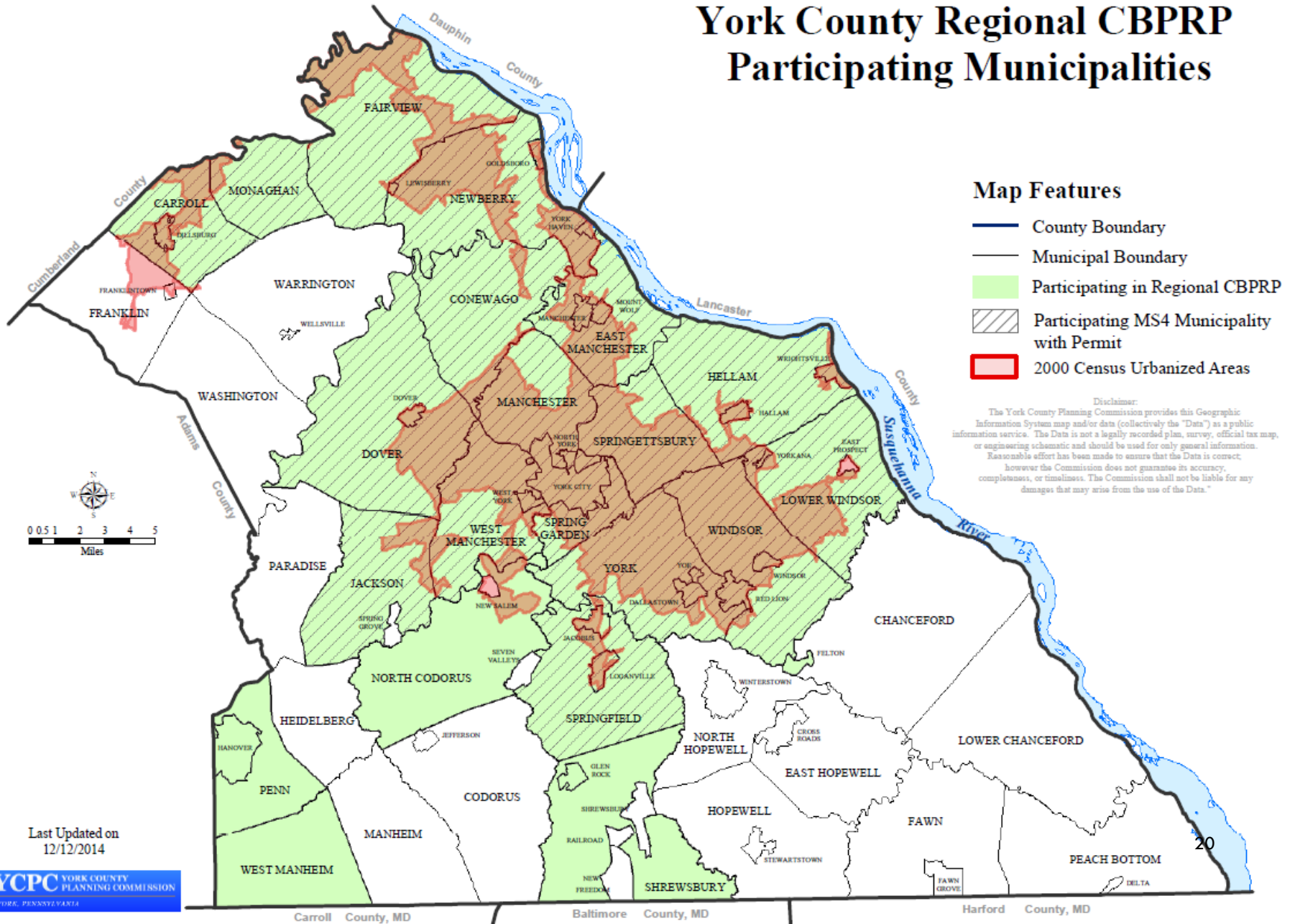
## YCPC-ADMINISTRATOR

- MINUTES
- COORDINATE MEETINGS
- NOTICE REQUIREMENTS
- INVOICES
- DRAFT REVISIONS
- PREPARE ANNUAL REPORTS



# MAP 1

## York County Regional CBPRP Participating Municipalities



Last Updated on  
12/12/2014





# PROGRESS OF OUR CBPRP

- 44 OF THE 46 PARTICIPANTS OPTED INTO THE PLAN
- \$196,520 /YEAR FOR 5 YEARS (LIFE OF CURRENT PERMIT CYCLE)
- FUNDED 4 PROJECTS IN 2015
  - STREAM RESTORATION: IWLA BARSHINGER RUN
  - BIOSWALE: HELLAM TOWNSHIP (COMPLETED)
  - STREAM RESTORATION: WINDSOR BOROUGH
  - BIORETENTION & NATURALIZED AREA: WEST MANCHESTER TOWNSHIP (COMPLETED)
- APPROXIMATELY 630,000 LBS OF TSS, TN, & TP WILL BE REMOVED PER YEAR



# YORK COUNTY'S STORMWATER JOURNEY CONTINUES

REGIONAL  
CHESAPEAKE BAY  
POLLUTANT  
REDUCTION PLAN

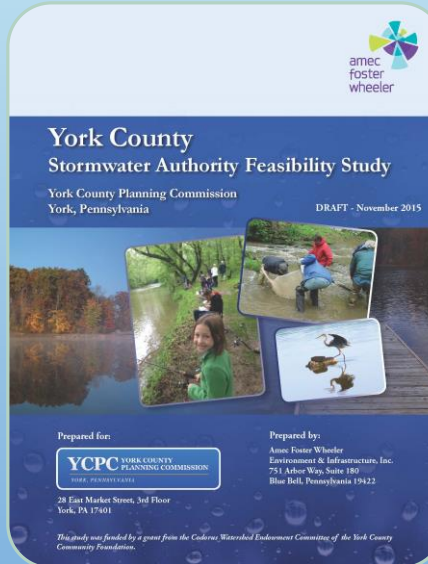
YORK COUNTY REGIONAL  
CHESAPEAKE BAY  
POLLUTANT REDUCTION PLAN

DECEMBER 2014



[Prepared by the York County Planning Commission and Center for Watershed Protection in cooperation with the Regional CBPRP Steering Committee]

STORMWATER  
AUTHORITY FEASIBILITY  
STUDY



2018 MS4  
PERMIT  
REQUIREMENTS



STORMWATER  
AUTHORITY





# CURRENT VS NEW PRP

- 1 CBPRP REQUIRED
- SUBMISSION W/IN 1 YEAR OF PERMIT ISSUANCE
- NARRATIVE DESCRIPTION OF AREA DRAINING TO UA
- INCREMENTAL PROGRESS REQUIRED
- PROJECTS ANYWHERE IN UA
- IMPLEMENTATION SCHEDULE OVER SEVERAL PERMIT CYCLES
- O&M RESPONSIBILITY IDENTIFIED
- MUST EVALUATE INFRASTRUCTURE UPGRADES FOR GI POTENTIAL

- MULTIPLE PRP'S REQUIRED: CHES BAY AND EACH IMPAIRED STREAM
- PRPS SUBMITTED W/NOI
- DRAINAGE TO EACH OUTFALL MAPPED
- REQUIRED POLLUTANT REDUCTIONS CALCULATED FOR EACH PRP (10% S, 5% P, 3% N)
- PROJECTS ONLY W/IN STORM SEWERSHED
- MUST COMPLETE PROJECTS W/IN 5 YEARS
- O&M RESPONSIBILITY IDENTIFIED
- ADVERTISED PUBLIC COMMENT PERIOD REQUIRED
- DEVELOP STORM SEWERSHED FOR EACH REQUIRED PRP
- EXISTING LOADS FOR EACH PRP CALCULATED
- PROJECTS IDENTIFIED TO MEET REDUCTIONS FOR EACH PRP
- MAPS (SEWERSHEDS, LAND USE, PROJECTS) CAN PARSE
- FUNDING MECHANISMS IDENTIFIED
- MAY REDUCE EXISTING LOADS W/ PROPERLY DOCUMENTED BMPS



# NEW PRP VS REGIONAL PRP APPROACH

- MULTIPLE PRP'S REQUIRED: CHES BAY AND EACH IMPAIRED STREAM
  - POLLUTANT REDUCTIONS FOR CHES BAY PRP BUT DIVIDED INTO 4 MAIN WATERSHEDS
- DRAINAGE TO EACH OUTFALL MAPPED
  - NOT REQUIRED FOR REGIONAL PRP
- DEVELOP STORM SEWERSHED FOR EACH REQUIRED PRP
  - SEWERSHED IS UA OF 4 MAIN WATERSHEDS PLUS WHAT DRAINS TOPOGRAPHICALLY INTO THEM
- EXISTING LOADS FOR EACH PRP CALCULATED
  - EXISTING LOADS CALCULATED FOR EACH MAIN WATERSHED





# NEW PRP VS REGIONAL PRP APPROACH (CONT.)

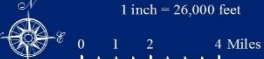
- POLLUTANT REDUCTIONS REQUIRED FOR CBPRP AND EACH IMPAIRED STREAM PRP
  - CALCULATE AND MEET CHES BAY REDUCTIONS ONLY
- POLLUTANT ACCOUNTING (EXISTING LOADS & REDUCTIONS) FOR EACH PRP
  - ACCOUNTING IS BASED ONLY ON CBPRP AND SHARED AMONG 4 MAIN WATERSHEDS
- CAN PARSE
  - NOT GOING TO B/C IT PROVIDES FLEXIBILITY TO LOCATE PROJECTS & INCREASES PARTNERSHIP POSSIBILITIES
- PROJECTS ONLY W/IN STORM SEWERSHED
  - PROJECTS MAY BE OUTSIDE SEWERSHED W/PERMISSION



# NEW PRP & REGIONAL PRP REQUIREMENTS

- PRPS SUBMITTED W/NOI
- A REQUIRED ADVERTISED PUBLIC COMMENT PERIOD
- MAPS (SEWERSHEDS, LAND USE, PROJECTS)
- MUST COMPLETE PROJECTS W/IN 5 YEARS
- O&M RESPONSIBILITY IDENTIFIED
- MAY REDUCE EXISTING LOADS W/ PROPERLY DOCUMENTED BMPS
- FUNDING MECHANISMS IDENTIFIED





Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet  
 Datum: North American 1983  
 Spheroid: GRS 1980  
 Prime Meridian: 77 00 00  
 False Easting: 1,568,200.0000  
 False Northing: 0.0000  
 Central Meridian: -77.5000  
 Standard Parallel 1: 39.3333  
 Standard Parallel 2: 40.6667  
 Latitude Of Origin: 38.3333  
 Units: Foot US

**YORK COUNTY**  
 PLANNING  
 COMMISSION  
 www.ycpc.org

**York County Planning Commission**

**York County MS4**

**Sewershed Map**

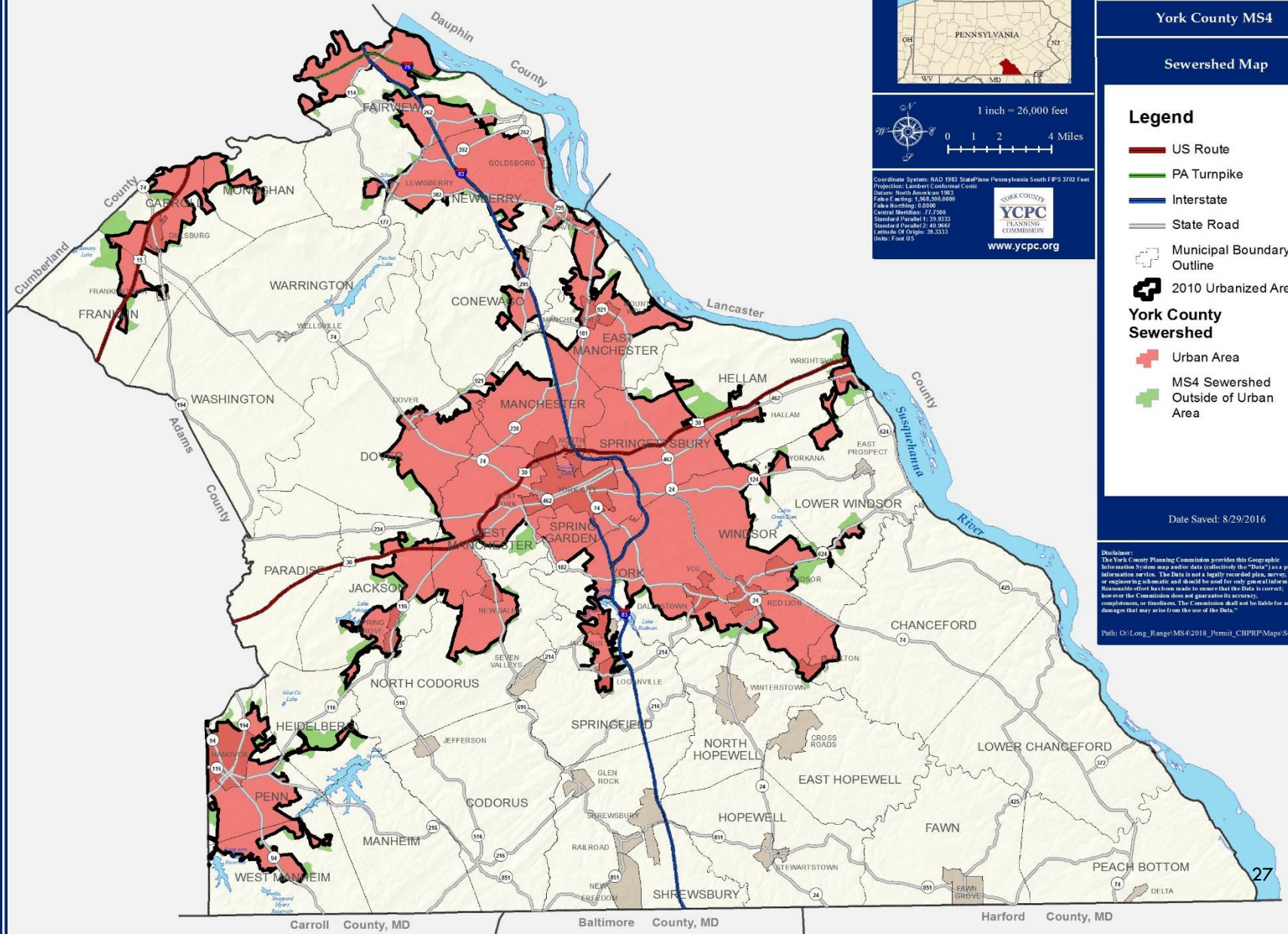
**Legend**

- US Route
- PA Turnpike
- Interstate
- State Road
- Municipal Boundary Outline
- 2010 Urbanized Area
- York County Sewershed**
- Urban Area
- MS4 Sewershed Outside of Urban Area

Date Saved: 8/29/2016

Disclaimer:  
 The York County Planning Commission provides this Geographic Information System map and/or data (collectively the "Data") as a public information service. The Data is not a legally recorded plan, survey, official tax map, or engineering schematic and should be used for only general information. Reasonable effort has been made to ensure that the Data is correct, however the Commission does not guarantee its accuracy, completeness, or timeliness. The Commission shall not be liable for any damages that may arise from the use of the Data.

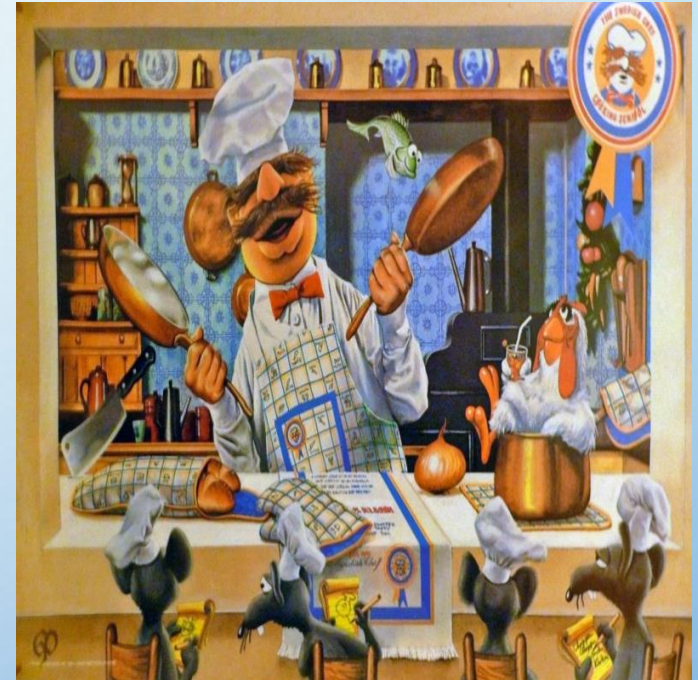
Path: G:\Long\_Range\MS4\2016\_Permit\_CBPRP\Maps\Sewershed.mxd





# INGREDIENTS FOR SUCCESS

- LEAD AGENCY W/DEDICATED STAFF
- ENGAGE EPA & DEP
- COST SAVINGS
- REGULATORY CONSIDERATION
- P3- PUBLIC PRIVATE PARTNERSHIP AND PATIENCE, PERSISTENCE, PROFESSIONAL HELP







# YORK COUNTY

Regional Stormwater Solutions

## YORK COUNTY PLANNING COMMISSION

FELICIA DELL [FDell@YCPC.org](mailto:FDell@YCPC.org)

771-9870 EXT. 1705

[WWW.YCPC.ORG](http://www.ycpc.org)