CHALLENGE AREA: WATER QUALITY

COMPREHENSIVE PLAN ADVISORY COMMITTEE MEETING

MAY 23, 2017

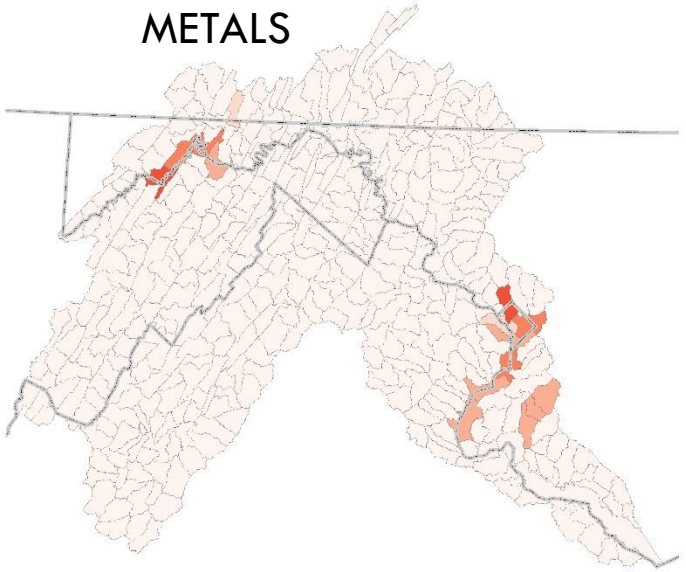
OUTLINE

- EXISTING THREATS
- NEW AND EMERGING THREATS
- REGULATORY FRAMEWORK
- EXAMPLE PROGRAMS & ACTIVITIES
- TOOLS
- ROLE OF PLAN

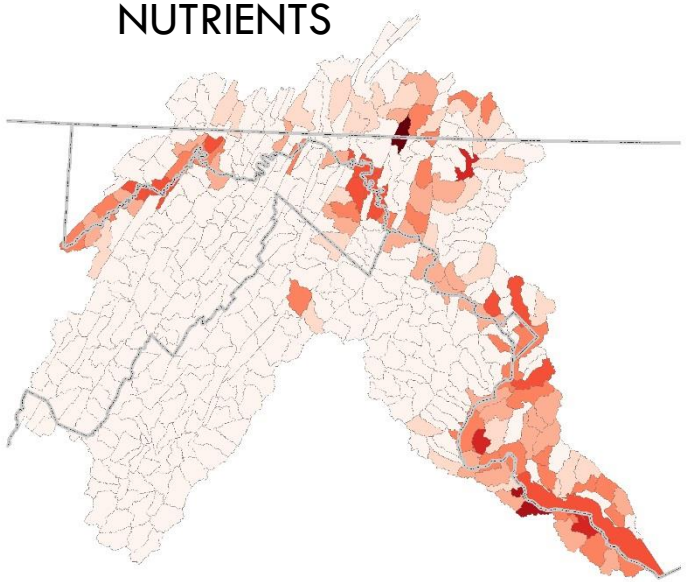
Acid mine drainage, McDonald Mine, 2012.
Photo by ICPRB.

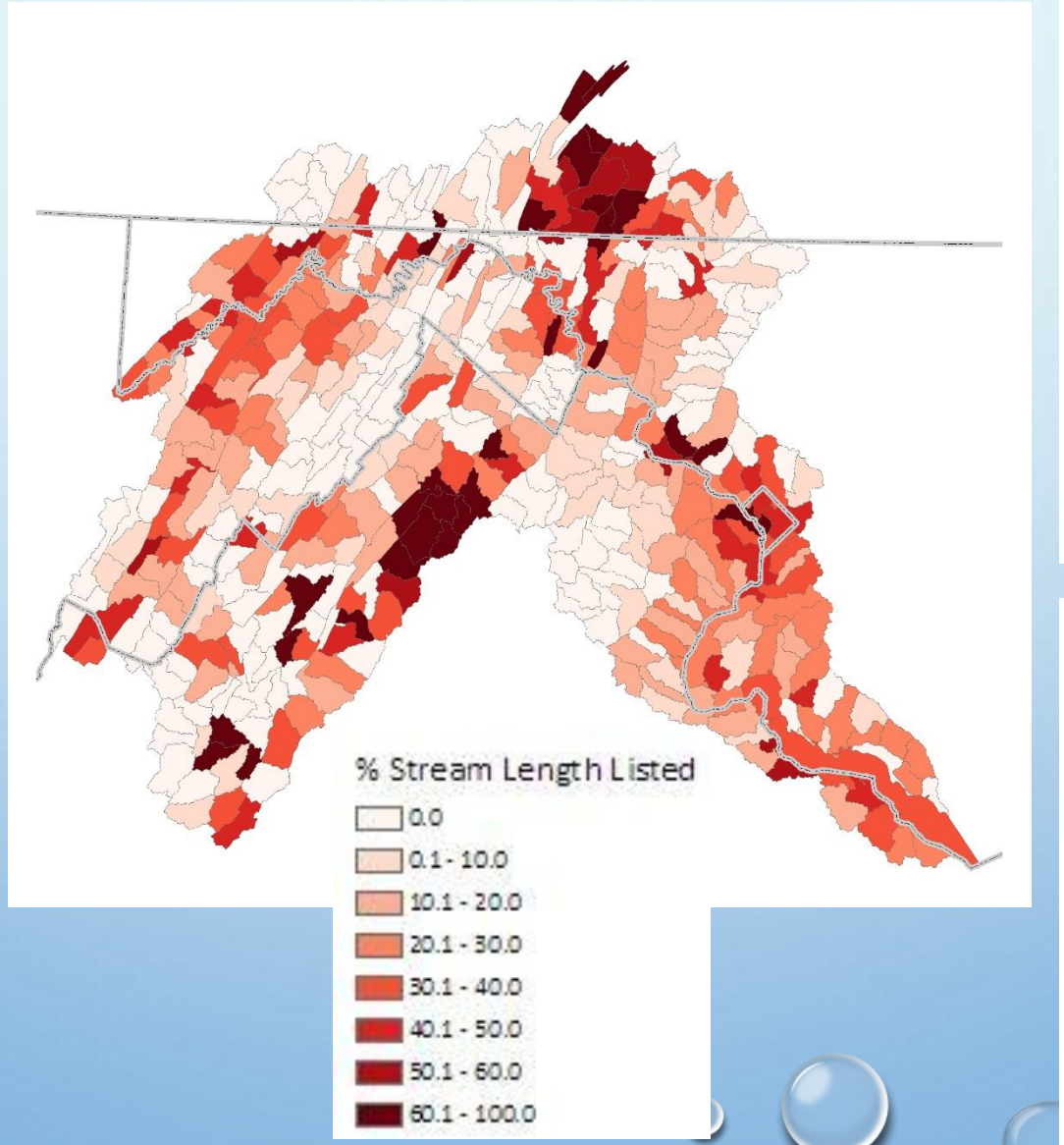
WATER QUALITY: EXISTING THREATS

METALS

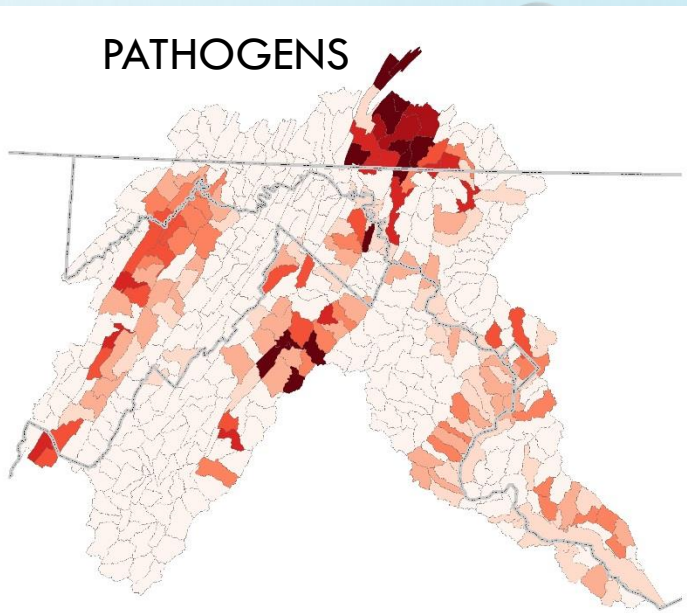


NUTRIENTS

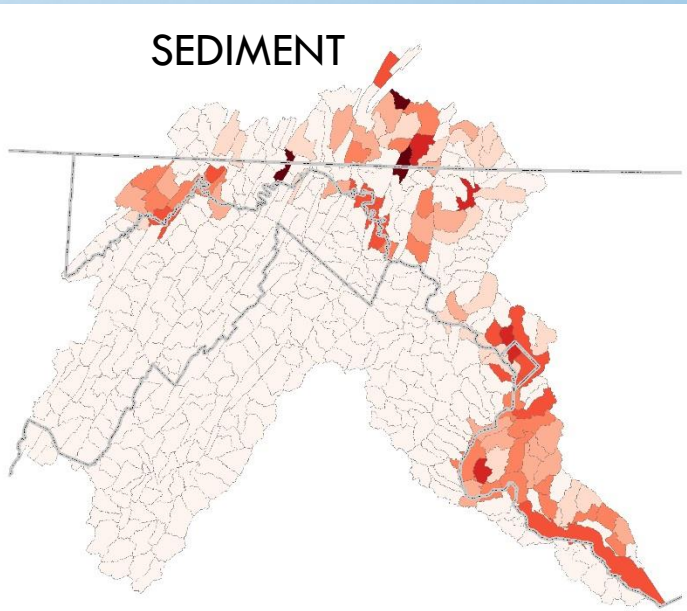




PATHOGENS

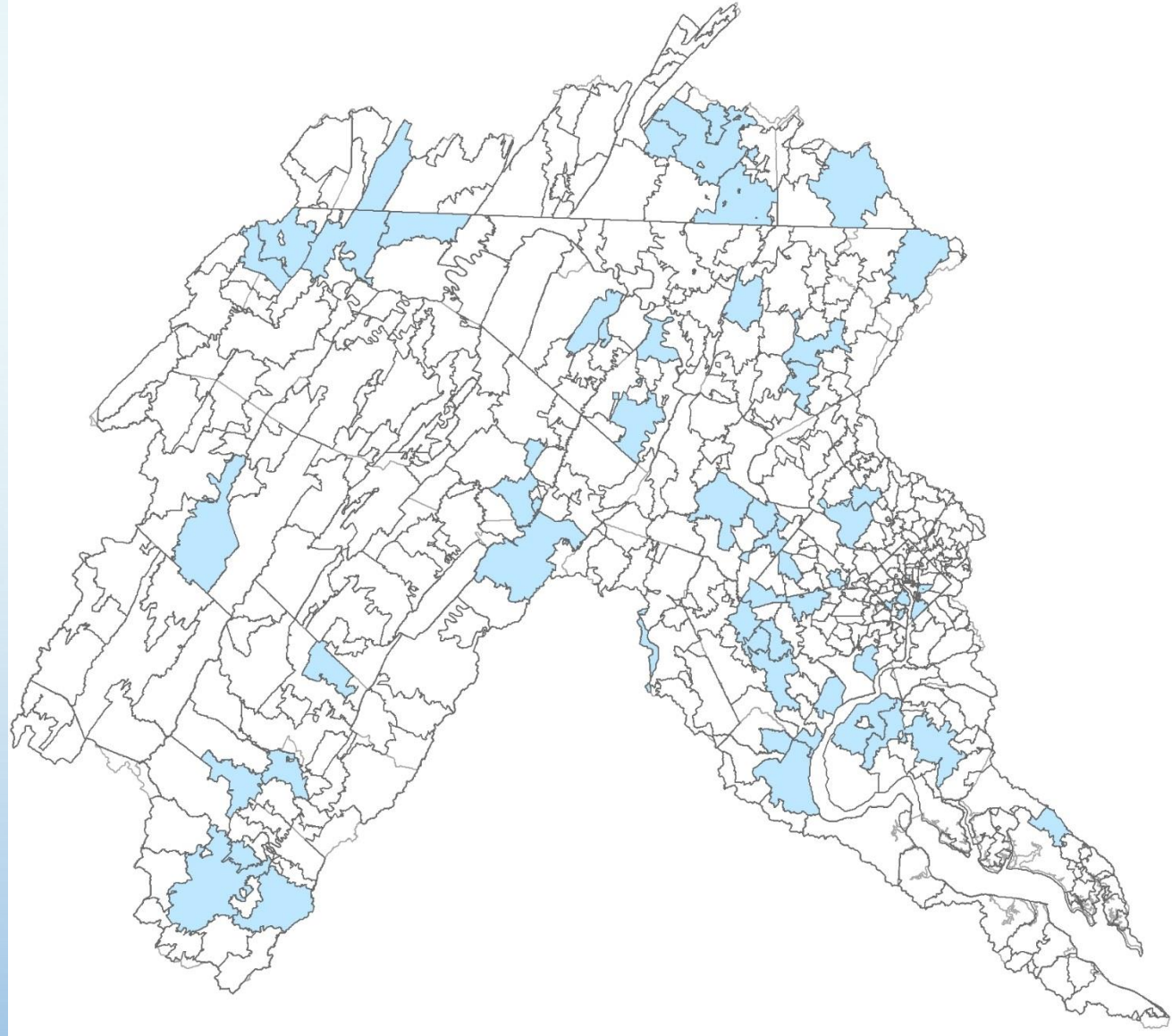


SEDIMENT



Data Source: EPA Recovery Potential Screening Tool

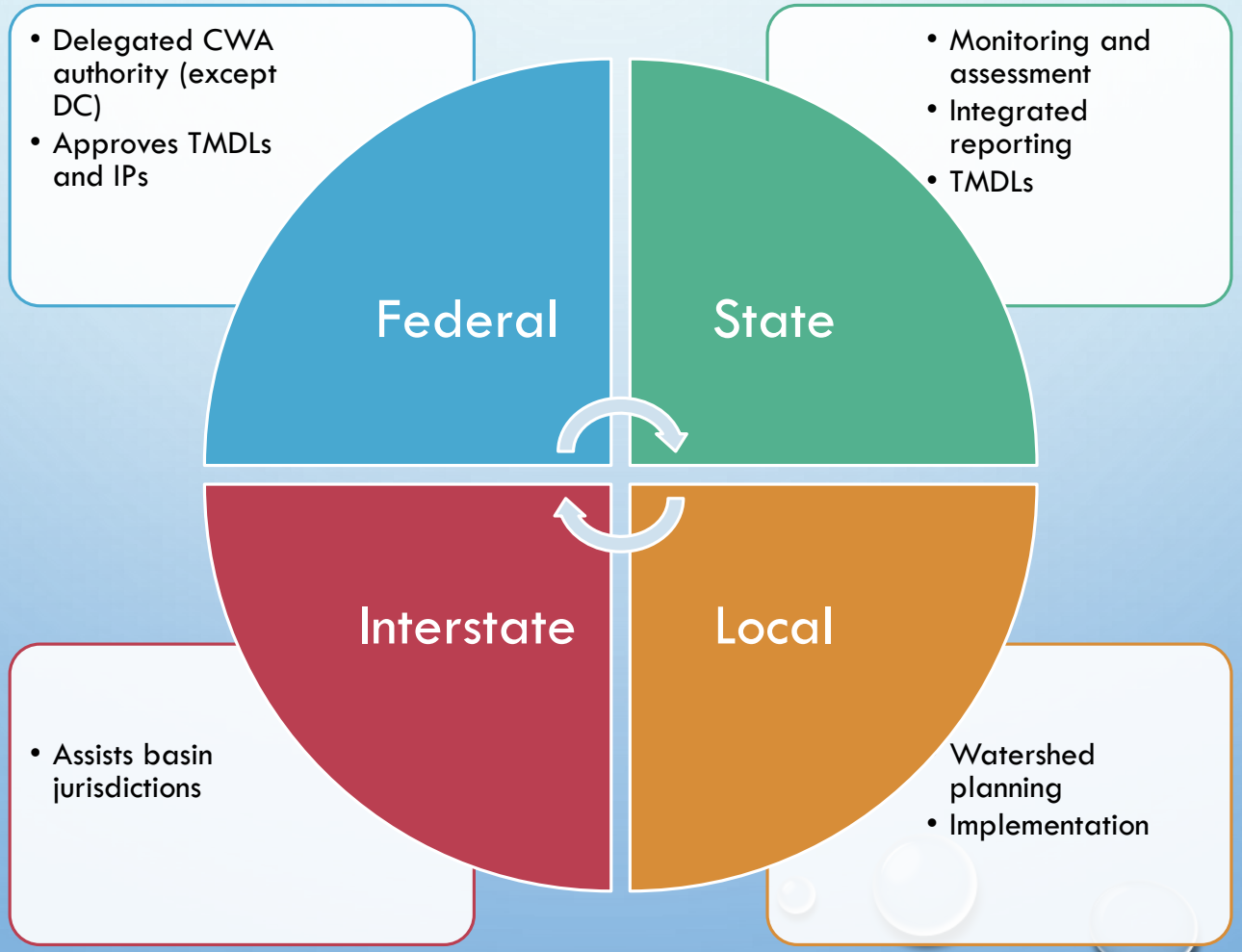
NEW AND EMERGING THREATS



Data Source: EPA UCMR3 Data

WATER QUALITY: MULTI-LEVEL MANAGEMENT FRAMEWORK

EXAMPLE: CLEAN WATER ACT



WATER QUALITY: EXAMPLE PROGRAMS & ACTIVITIES

FEDERAL

Chesapeake Bay Program — CWA, SDWA, UCMR

USACE Federal Support Toolbox — DWMAPS

Chesapeake Bay Comprehensive Plan

INTERSTATE

Potomac Drinking Water Source Protection Partnership

Modeling, trend analysis, data inventory and management

Communication and education

STATE

Source Water Assessments — NPDES permits

Phase III WIPs — TMDLs

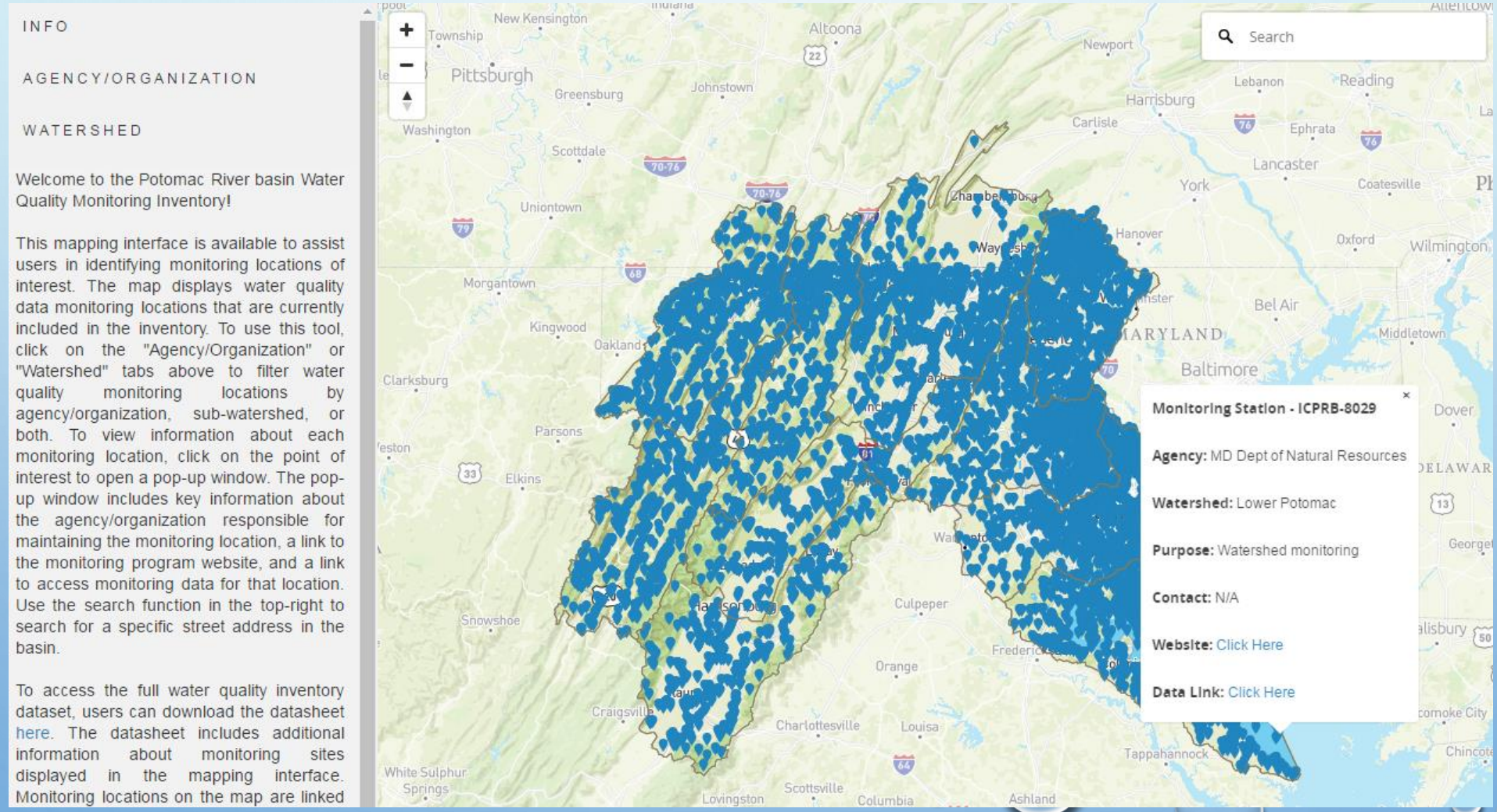
LOCAL

Watershed Planning and Implementation

Watershed Associations — Watershed Roundtables

TOOLS TO ASSESS WATER QUALITY

Potomac Water Quality Data Inventory



www.potomacriver.org/WQ-Inventory/

TOOLS TO ASSESS WATER QUALITY

EPA Region 3 Long-Term Trends Viewer

EPA Region 3 Water Quality Trends

HUC 8
All HUCs

Site
104021

Parameter
TEMP

Units: deg C
Outliers Removed: 0
Parameters: CL_TOT, DO, DOC, FE_TOT, HARDNESS, MN_TOT, NO2W, NO3W, PB_TOT, PH, SPCOND, TALK, TEMP, TOC, TP, TSS, ZN_TOT

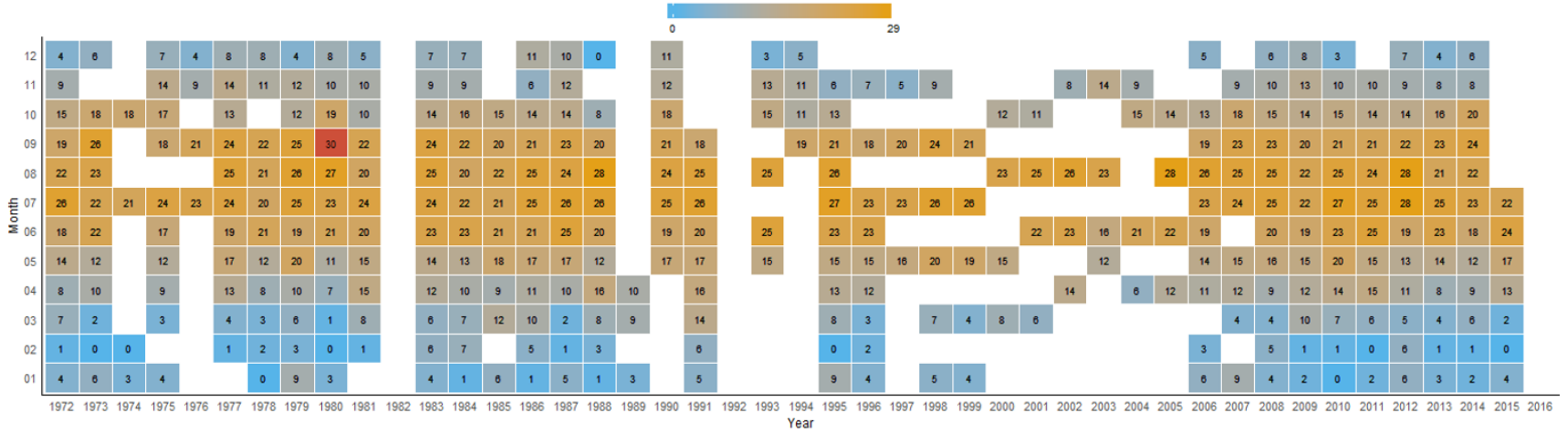
Site Information

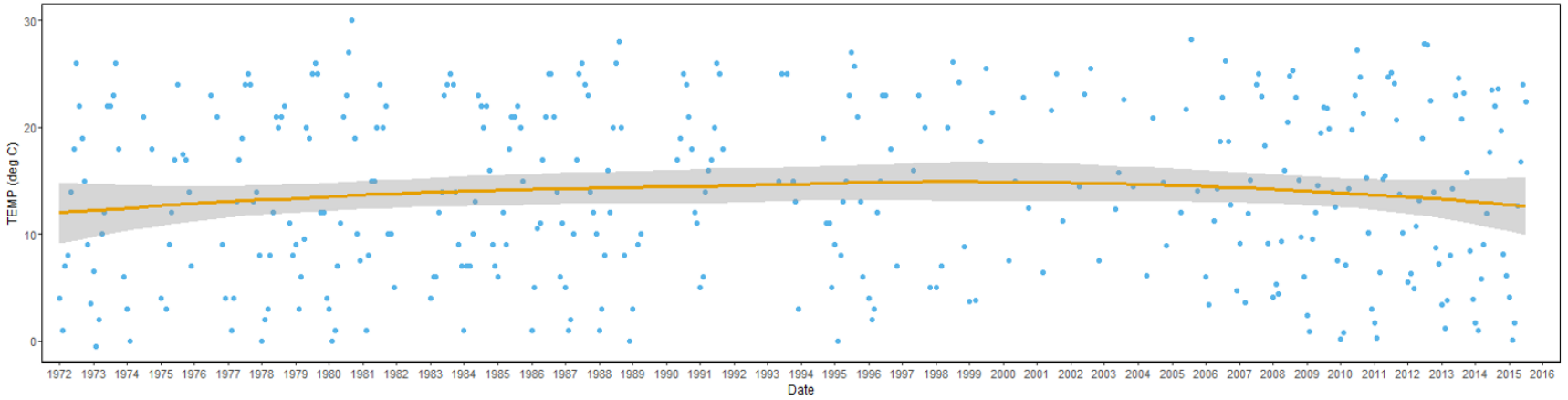
Site: 104021
Agency: 21DELAWQ
Start Date: 01/10/1972
End Date: 07/06/2015
State: Delaware
Latitude: 39.770278, 39.76983
Longitude: -75.579167, -75.57884
Depth (m): 0, *Blank*
Replicate: *Blank*
Composite: *Blank*

Nearest Gage Information

Flow Gage:
Agency: USGS
Flow Gage Location:
Longitude:

Figures | Data | Map | Metadata





ROLE OF PLAN IN ADDRESSING WATER QUALITY CONCERNS

- WQ GOALS:
  - THE WATERS OF THE BASIN ACHIEVE OR EXCEED WATER QUALITY STANDARDS ESTABLISHED UNDER THE CLEAN WATER ACT.
  - NEW AND EMERGING THREATS ARE PROACTIVELY ADDRESSED.
- WQ CHALLENGES:
  - MANAGING EXISTING THREATS
  - ADDRESSING NEW AND POTENTIAL THREATS
  - IMPROVING POLLUTION CONTROL
- ROLE OF THE PLAN:
  - WITHIN EXISTING FRAMEWORK AND RESPONSIBILITIES
  - INFORMATION EXCHANGE, EDUCATION, AND COLLABORATION

EXAMPLE RECOMMENDATIONS

- SOURCE: ADVISORY COMMITTEE MEMBER INTERVIEWS:
  - ASSESS IMPACTS OF EXISTING PROGRAMS AND IDENTIFY GAPS AND DETERMINE WHETHER THERE ARE BETTER WAYS TO ATTAIN WATER QUALITY GOALS
  - IMPROVED INFORMATION SHARING
  - IDENTIFY PRIORITIES FOR WATER QUALITY INVESTMENTS IN THE BASIN
  - ENHANCE COORDINATION ACROSS STATE LINES ON WATER QUALITY PLANNING, PRIORITIZATION, AND IMPLEMENTATION

- SOURCE: GMU STUDENTS:
  - ENHANCE JURISDICTIONAL SHARING OF BMP INFORMATION: WHERE AND HOW ARE THEY WORKING AND WHY OR WHY NOT?
  - IMPROVE ABILITY TO PRESENT DATA ACROSS STATE LINES.