# Patton Township MS4 Program 2022 Update

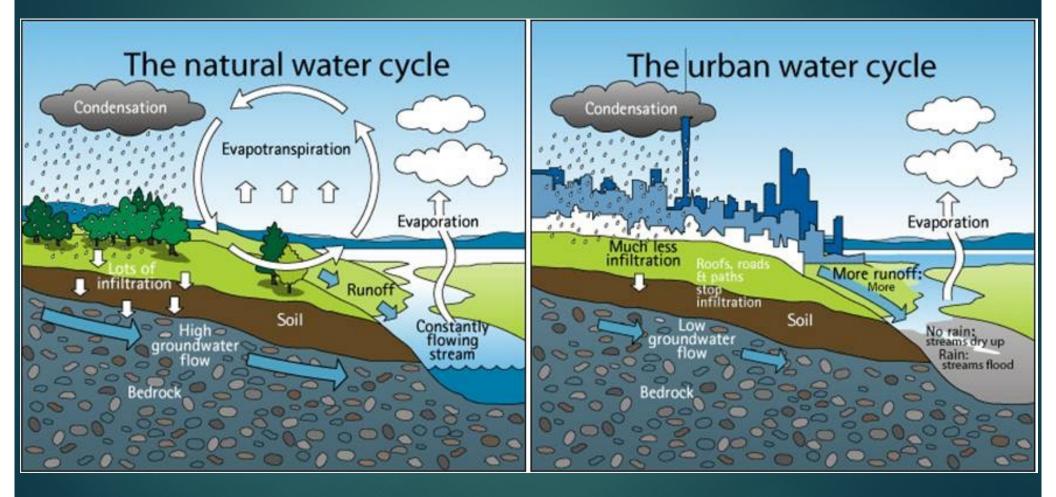
Presented by: Alexandra Castrechini, P.E., Director of Engineering, Planning and Zoning/Township Engineer



## 2022 MS4 Program Update Outline

Stormwater
 MS4 Permit
 2021-2022 Activities
 New 2025 Permit Highlights
 Future Permit Actions

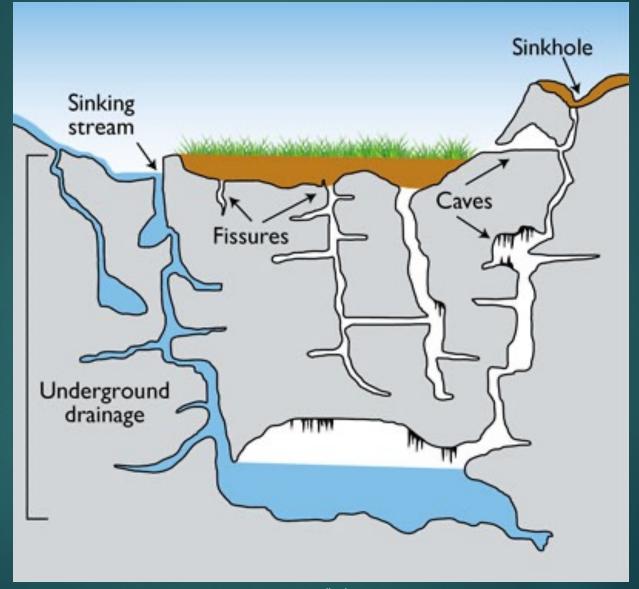
#### <u>What is stormwater?</u>



www.clemson.edu

# Is the Centre Region watershed different?

## Karst Geology



www.cornell.edu

#### <u>When runoff is a problem...</u>

- Volume of rainfall runoff > infiltration or conveyance capacity.
- Pollutants can be easily transported to streams, especially from impervious surfaces





## <u>Where does stormwater go?</u>

#### Patton Township's Storm Sewer System discharges directly into streams.





#### Clean Water Act 1972





#### How did we get here? NPDES $MS4 \rightarrow PADEP$



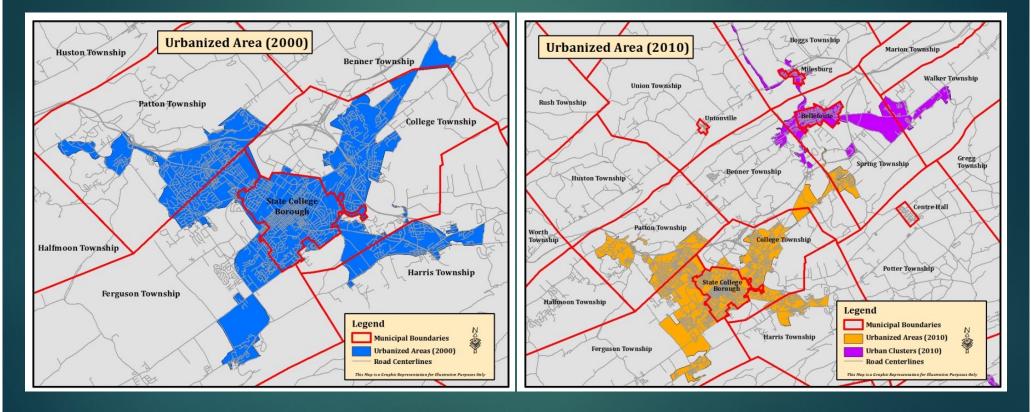
Chesapeake Bay Pollution Reduction 1983→2016→Present

#### <u>What is a MS4 Permit?</u>

- Patton Township has an Individual National Pollution
   Discharge Elimination System (NPDES) Municipal
   Separate Storm Sewer System (MS4) Permit.
- MS4 permits target storm water from Urbanized Areas (UAs)
- Every year, the Township submits an annual report on the program and municipal operations to PADEP.
- The Spring Creek MS4 Partners work collectively together on multiple parts of the permit.

#### Urbanized Area

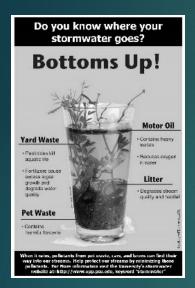
The UA boundaries include the State College Borough; and parts of Benner, Spring, College, Ferguson, Harris, and Patton Townships; and Penn State.



#### Stormwater Management Program

MCM 1) Public Education and Outreach

#### Permittees must comply with 6 Minimum Control Measures (MCM's)



MCM 2) Public Involvement and Participation
MCM 3) Illicit Discharge Detection and Elimination
MCM 4) Construction Site Runoff Control
MCM 5) Post Construction Stormwater Management

MCM 6) Pollution Prevention/Good Housekeeping









#### Pollutant Reduction Plan

- Joint Pollutant Reduction Plan with MS4 Partner Entities
- Modeled pollutant loads over the Urbanized Area
- Modeled pollutant reductions are required for this Permit cycle
- 10% Sediment, 3% Nitrogen, and 5% Phosphorus
- 10% modeled sediment reduction = assumed nitrogen and phosphorus
- Partner Entities may combine to share projects and reductions
- Patton Township Project: Streambank stabilization, UNT to Buffalo Run along Meeks Lane

## Patton Township MS4 Program 2021-2022

- Received Final Permit July 2020-June 2025
- Rain Barrel Workshop
- Watershed Cleanup Day
- BMP and Outfall Inspections
- Zero non-compliance issues last year
- Crew Training
- This presentation

## 2020-2025 Permit Highlights

- Reporting of unanticipated non-compliance
- Notice to DEP of BMP changes/alterations
- Pollutant reductions extended to 2025
- Compliance of private BMP owners
- Model Ordinance changes
- Establish & promote pollution reporting mechanism
- Car washing

#### <u>Future Highlights</u>

- MS4 information sent to other target audiences
- Evaluate further stormwater BMP upgrades
- Begin stream bank restoration project

# Sponsored by the Spring Creek MS4 Partners

