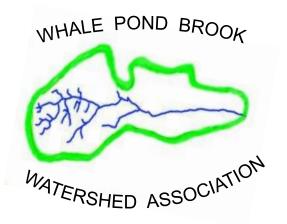
# Flooding, Water Pollution And New DEP Green Infrastructure Rules

**Impacts and Actions Affecting our Towns** 

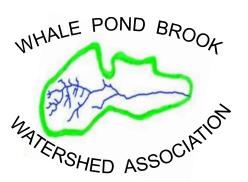


Whale Pond Brook Watershed Association
Neighbors working together to restore the watershed



## Activities and Players and Homework

- The Watershed Institute A leader in working with other Watershed Associations to protect our watersheds
  - Keeping water clean, safe and healthy
  - Work to protect and restore our water and natural environment in central New Jersey through conservation, advocacy, science and education.
- Step 1 Sources to view Recent Webinar active organizations: Whale Pond Brook Watershed, Watershed Institute, Monmouth University Urban Coast Institute, Sierra Club, Long Branch Green Team, Clean Ocean Action



**VISIT and VIEW: Webinar – Stormwater Pollution and Local Watersheds** 

https://www.monmouth.edu/uci/2020/09/

Or Watershed Institute/ANJEC Webinar

https://youtu.be/dQge4PJTZfQ

## Why is Water an Issue in Towns and OUR Watershed?

#### Average Annual Precipitation Has Increased



Ave. Annual Precip. for 1 <sup>st</sup> 7 decades of 20 <sup>th</sup> Century:	44.16"
Ave. Annual Precipitation for 21st Century:	47.62"
Ave. Annual Precipitation Increase:	3.45"

Source: Office of the NJ State Climatologist David Robinson http://climate.rutgers.edu/stateclim/



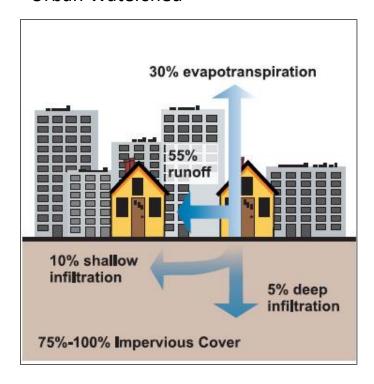
526.74 billion more gallons per year in NJ!

# Development Pressure Continues Increasing level of Impervious Surfaces (Eatontown Area – from 2012!)



# Stormwater Runoff from Developments and Homes

#### **Urban Watershed**





2800 SF Roof + 1" Rain Storm = 1,680 gallons of water

## How is Stormwater Managed by Towns?

- Local Ordinances
  - Towns vary in implementations but usually start with state generated model template.
- Initiated with Town Engineer lead, guide, outside contractors....???
  - Planning Boards typically involved.....level depends???
  - Roles of Green Teams and EC .....depends???
  - Final approvals by Governing Body

NJ DEP Adoption of New Stormwater Regulations
W/Model Ordinance
Must be incorporated by NJ Towns & Cities NLT March 2021

## Why New Regulations and Ordinances?

Stormwater is pushed elsewhere – typically into streams.

• Stormwater runoff picks up Pollution – flows into streams

 Urban Stormwater not able to reach groundwater – Limited recharge of our aquifers

## **New DEP Rules**

- What they do…
  - Requires the use of green infrastructure
    Encourages smaller systems that treat stormwater closer to its source
  - ➤ Applies to new "major" development (over 1 acre of soil disturbance or ¼ acre of impervious cover added)

#### SHORTFALLS MAY EXIST – RULES ARE NOT PERFECT....

Treatment of quality of runoff from various impervious surfaces

How best to encourage residential development stormwater BMP (best management practices)

Address redevelopment / Address minor development

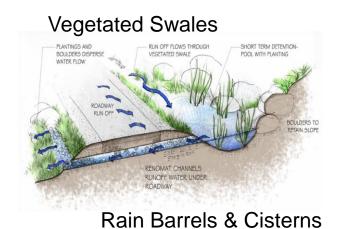
Opportunities to use existing natural native cover and trees

#### Green Stormwater Infrastructures









#### **OBJECTIVES:**

- > Retain water on site and infiltrate to groundwater
  - Reduce flooding
  - Reduce water pollution
  - Recharge our aquifers

Green Streets / Rain Gardens / Bioswales / Cisterns/Rain Barrels

### What we can do?

- Consider comparison of State DEP Model Ordinance with Watershed Institute Model Ordinance
  - <a href="https://thewatershed.org/wp-content/uploads/2020/07/TWI-Enhanced-Ordinance-highlights-final.pdf">https://thewatershed.org/wp-content/uploads/2020/07/TWI-Enhanced-Ordinance-highlights-final.pdf</a> (to download the document)
  - Consider how to address minor developments
  - Consider if need for firm implementation of ordinance (avoid loopholes)
- TOWN ORDINANCES MAY GO <u>BEYOND</u> MODEL ORDINANCES

### Actions we can take

- Contact local elected officials.
  - This issue of stormwater and pollution matters to you
  - Expand citizen involvement for opportunity to have community input
  - Consider the Watershed Institute version of DEP Rules Ordinance
- Automated process in place to notify your Mayor/Council Members.
   Let them know we care around our water quality and the flooding in our town.
  - <a href="https://act.sierraclub.org/actions/NewJersey?actionId=AR0283237">https://act.sierraclub.org/actions/NewJersey?actionId=AR0283237</a>

A short term working group with EC's, Green Teams and Watershed to consider any strengthening of proposed Ordinance??