TOWN OF WELLESLEY
STORMWATER MANAGEMENT PROGRAM

THE NEXT PHASE OF THE MS4 PERMIT

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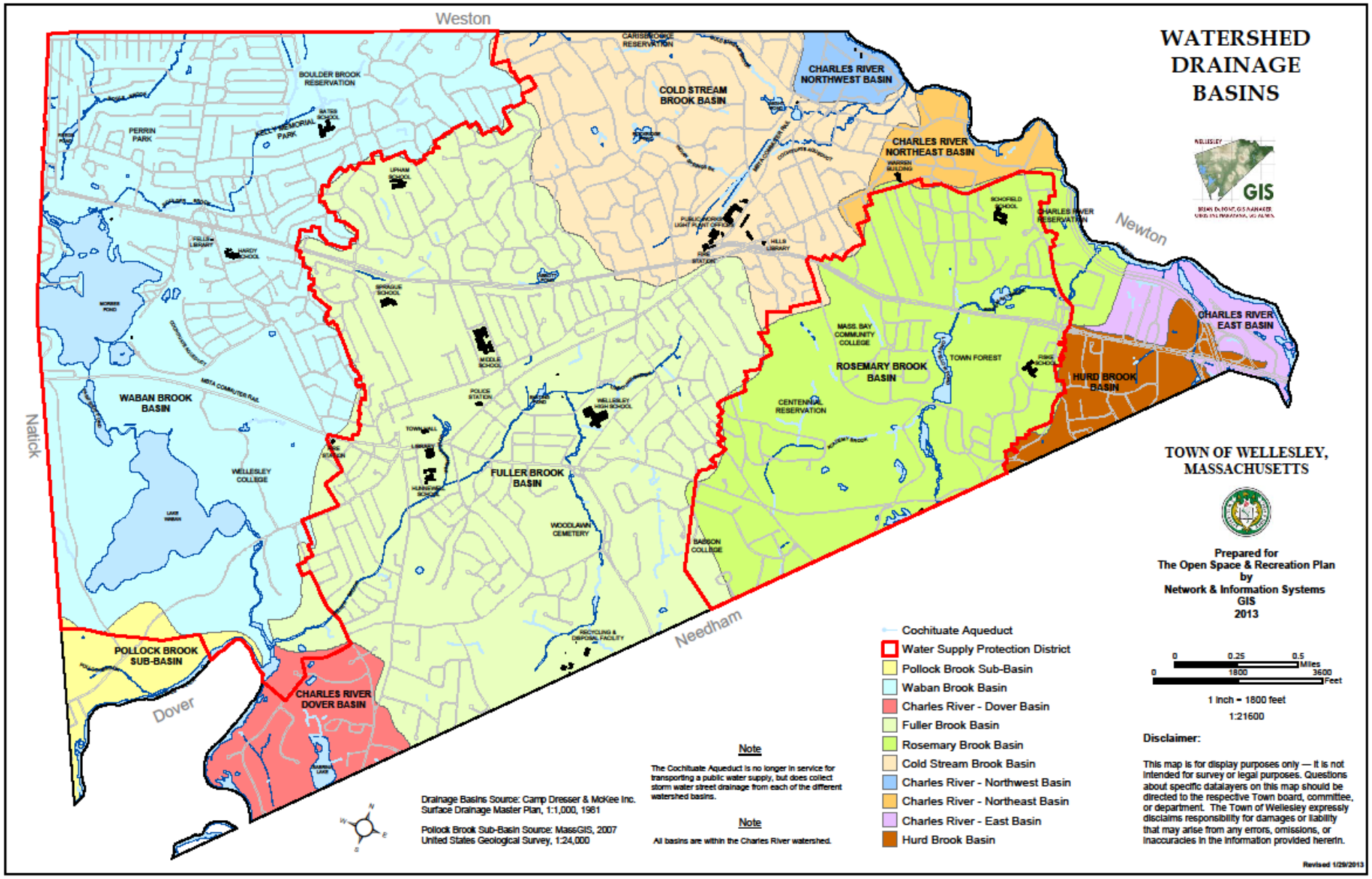
Overview of the Town's Drainage System

- 10 PRIMARY WATERSHEDS IN WELLESLEY
- 130 miles of pipe, 4,500 CATCH BASINS, 400 OUTFALLS, 2,200 DMH, 28 INTERCONENCITON POINTS
- DRAINAGE SYSTEM COMPRISED OF PUBLIC, PRIVATE, NEIGHBORING & STATE DRAINAGE
  PUBLIC SYSTEMS:
  - 1 CONSTRUCTED WETLANDS
  - 2 DRY DETENTION BASINS
  - 90 INFILTRATION SYSTEMS
  - 4 BIOSWALES
  - 19 INFILTRATION SYSTEMS

Watershed Drainage Basins



Current Stormwater Program

Capital Project Programming
Stormwater drainage system improvements based on periodic assessment of infrastructure performance.

Operation & Maintenance
Labor, materials, equipment, and contractual services for maintenance of catch basins, culverts, stormwater BMPs, drainage system, street sweeping.
Indirect Costs – Employee benefits, equipment depreciation, insurance, etc.

Current Stormwater Program

Small MS4 Permit Compliance

- The 2003 MS4 permit added requirements including the 6 minimum control measures (Public Education, Public Involvement, IDDE, Construction Management, Pollution Prevention and Good House Keeping)

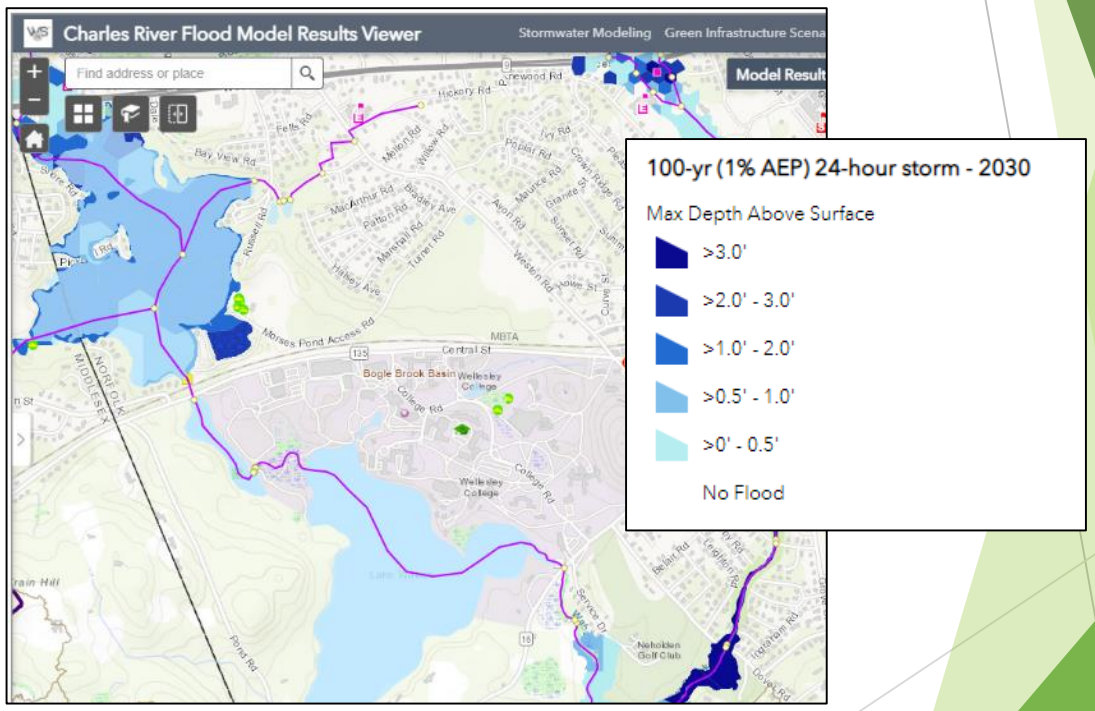
- 2016 MS4 permit:
  - Creates more demand for Engineering staff time
  - Increased drainage system O&M requirements and need for capital projects to improve water quality
  - For the Charles River, requirements for Phosphorous reduction…

Stormwater in the Charles River Watershed: Challenges & Opportunities

Water Quality

Source: WBUR. *EPA Moves To Reduce Runoff That Feeds Toxic Algae In Charles River* . August 14, 2020. Green-blue algae blooms dot the surface of the Charles River along the Esplanade. (Jesse Costa/WBUR)

Climate Change & Flooding



Source: Building Resilience Across the Watershed. Flood Viewer Map. URL: https://www.crwa.org/watershed-model.html

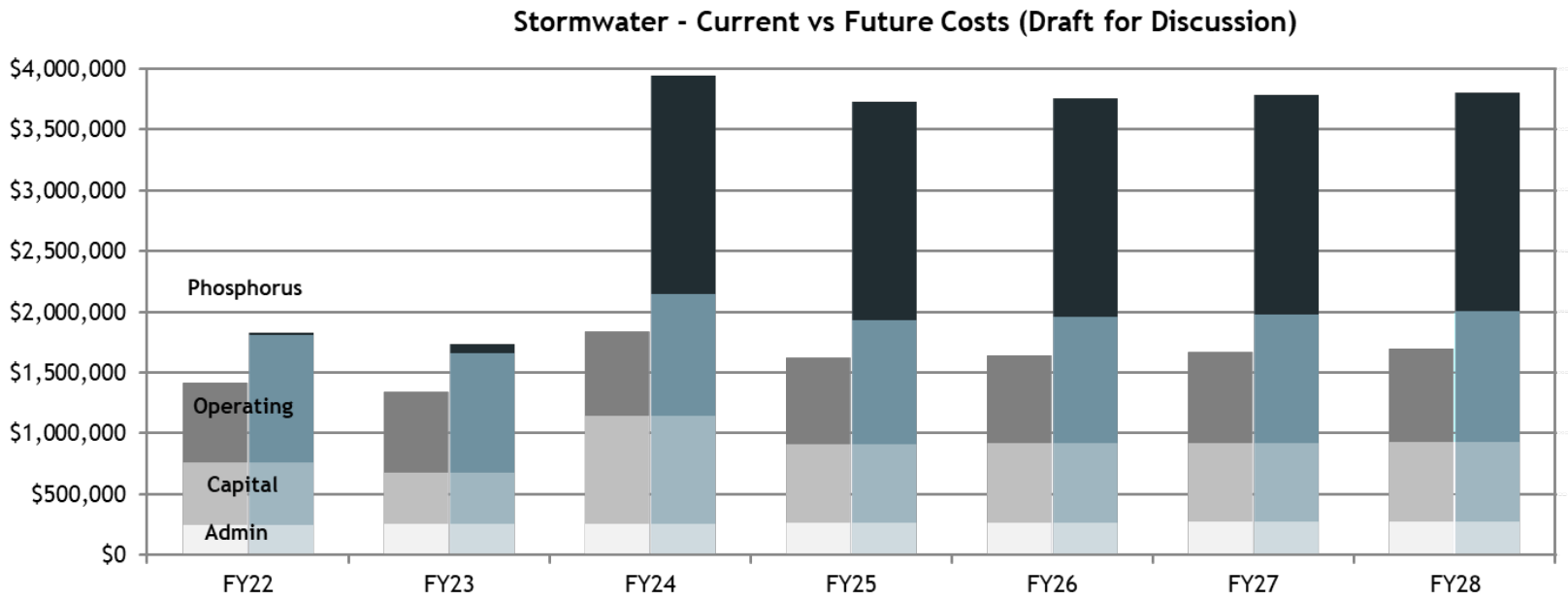
Stormwater in the Charles River Watershed: Challenges & Opportunities

Holistic Approach to Stormwater

- Drainage performance and water quality under one umbrella for projects, planning, and policy
- **Green Infrastructure (GI):** Opportunity to solve both water quality and future flooding. GI has broad community co-benefits (health, economic, climate adaptation & mitigation, and transportation).
- **Municipal Properties**
  - Retrofits will be required over the next 15+ years
- **Private Properties:**
  - Large commercial and industrial properties may become regulated by EPA under the Clean Water Act
  - Wellesley will need to work with individual property owners and residents to improve stormwater treatment onsite

Images: Top – Fuller Brook Park Project, Bioretention Basin, Wellesley Natural Resources Commission (NRC). Bottom – Hunnewell Field Constructed Wetlands, Wellesley Engineering.

Funding: What will this cost?



Phosphorus Control Plan for to address the Charles River Watershed could cost up to **$27 Million*** over a 15-year period starting in Fiscal Year 2024 (Capital, Operating, and Administration).

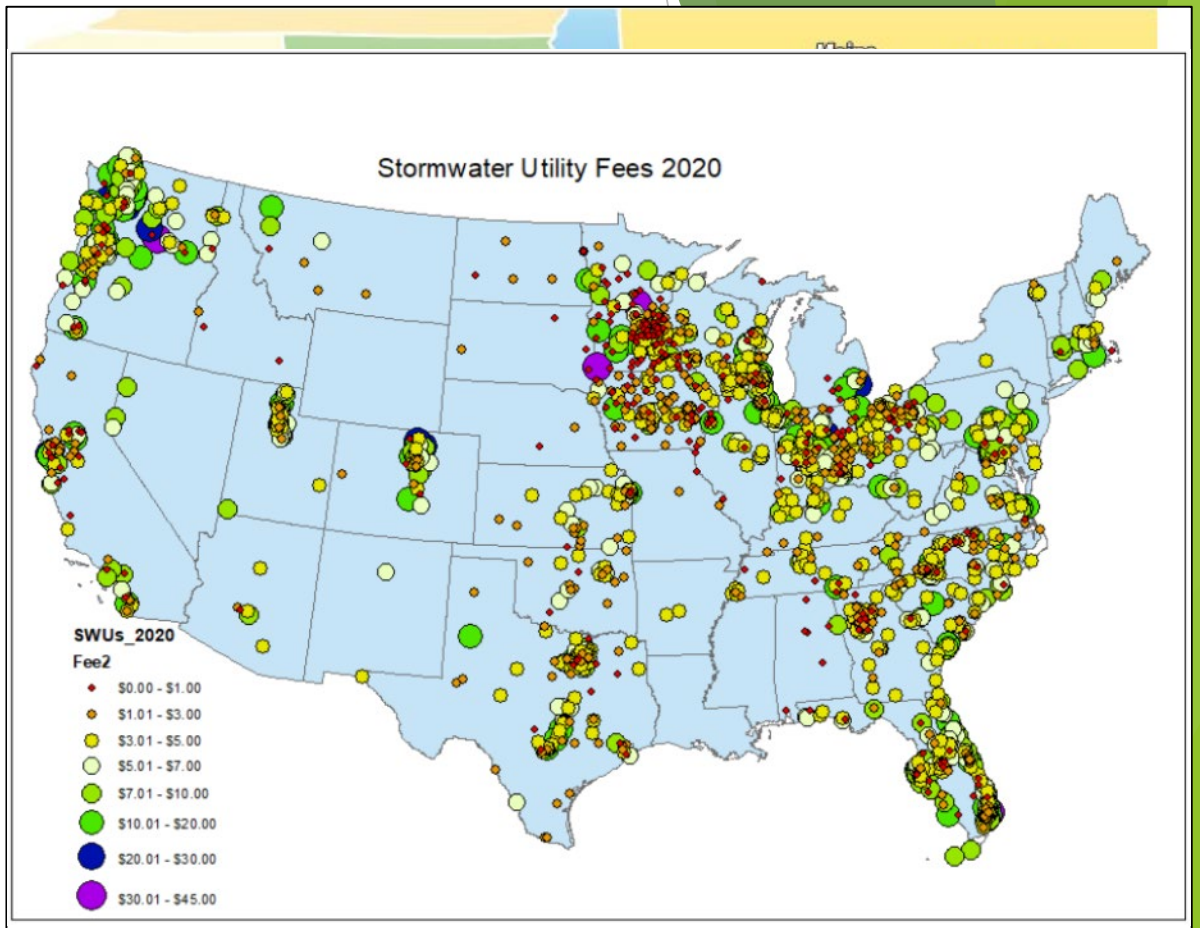
* ***Phosphorus Control Plan*** *implementation costs beginning in FY2024 (Permit Year 6) were prepared using EPA's methodology where all phosphorus load reduction is accomplished through future stormwater BMPs using an optimization analysis of BMP opportunities in the planning phase. Therefore, assuming an overall average cost of $41,000/kg-phosphorus removed for 661 kg/year, the cost estimate for achieving this requirement is $27 Million over 15 years (Permit Years 6 to 20) or approximately $1.8 Million per year.*

Funding: How will we pay?

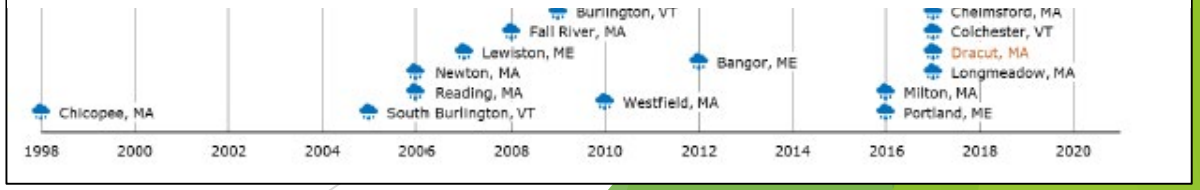
- Funding has historically been through the General Fund (Tax Revenue)
- Other Options include:
  - Grants and Loans (Occasional, Specific Projects)
  - Stormwater Enterprise Fund (Fee for Service)
  - Municipal Water Infrastructure Investment Fund (Capital projects for water, sewer, and stormwater; surcharges on tax bill)
- **Stormwater Utility Fee:** Multiple advantages for Wellesley's Program
  - Stable - Dedicated Revenue Source
  - Equitable - Based on Stormwater Impact vs. Ability to Pay (Taxes)
  - Flexible – Enterprise Fund can pay for all aspects of the program
  - Credit Policy – Ability to provide a financial incentive for stormwater improvements of private property

Funding: Who has a stormwater utility?

- Not a New Concept: Over 1,800 stormwater utilities in the U.S. as of 2020
- 21 in MA as of November 2020 (Newest: Bellingham, Dracut, Tewksbury, Westford)
  - More information: MassDEP Stormwater Fee Summary
- There needs to be a clear nexus among Program Cost of Service, User Fees, and Customer Benefits
  - Impervious area is the most commonly used method to assess stormwater fees in the U.S.

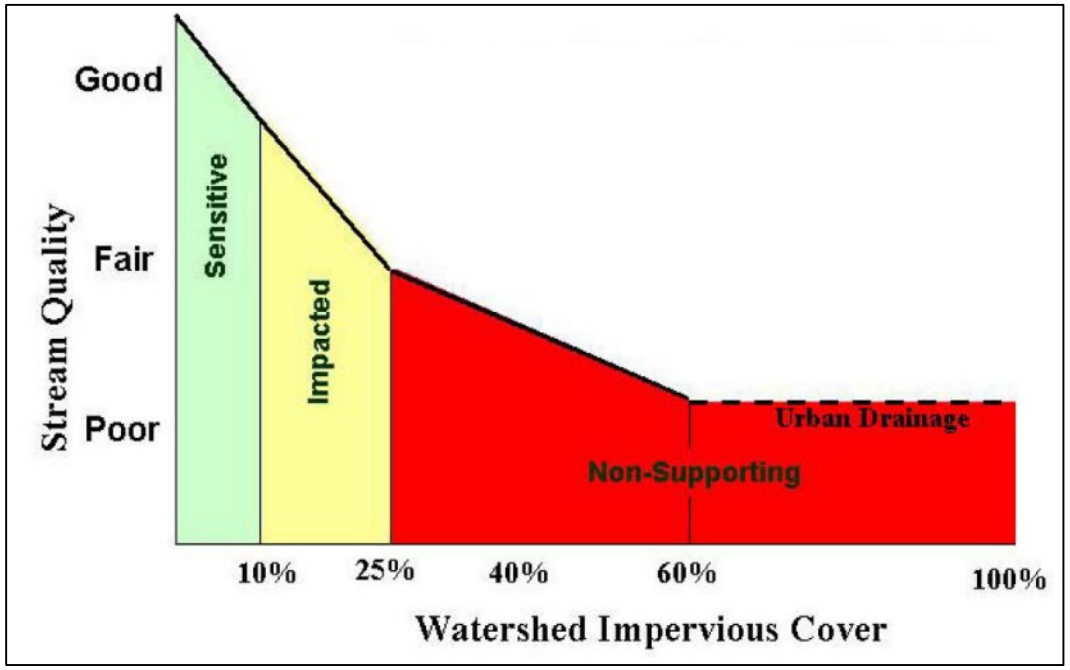


Spatial distribution of monthly stormwater fees. *Western Kentucky University Stormwater Utility Survey 2020, Warren Campbell, Western Kentucky University, Bowling Green, Ky.*

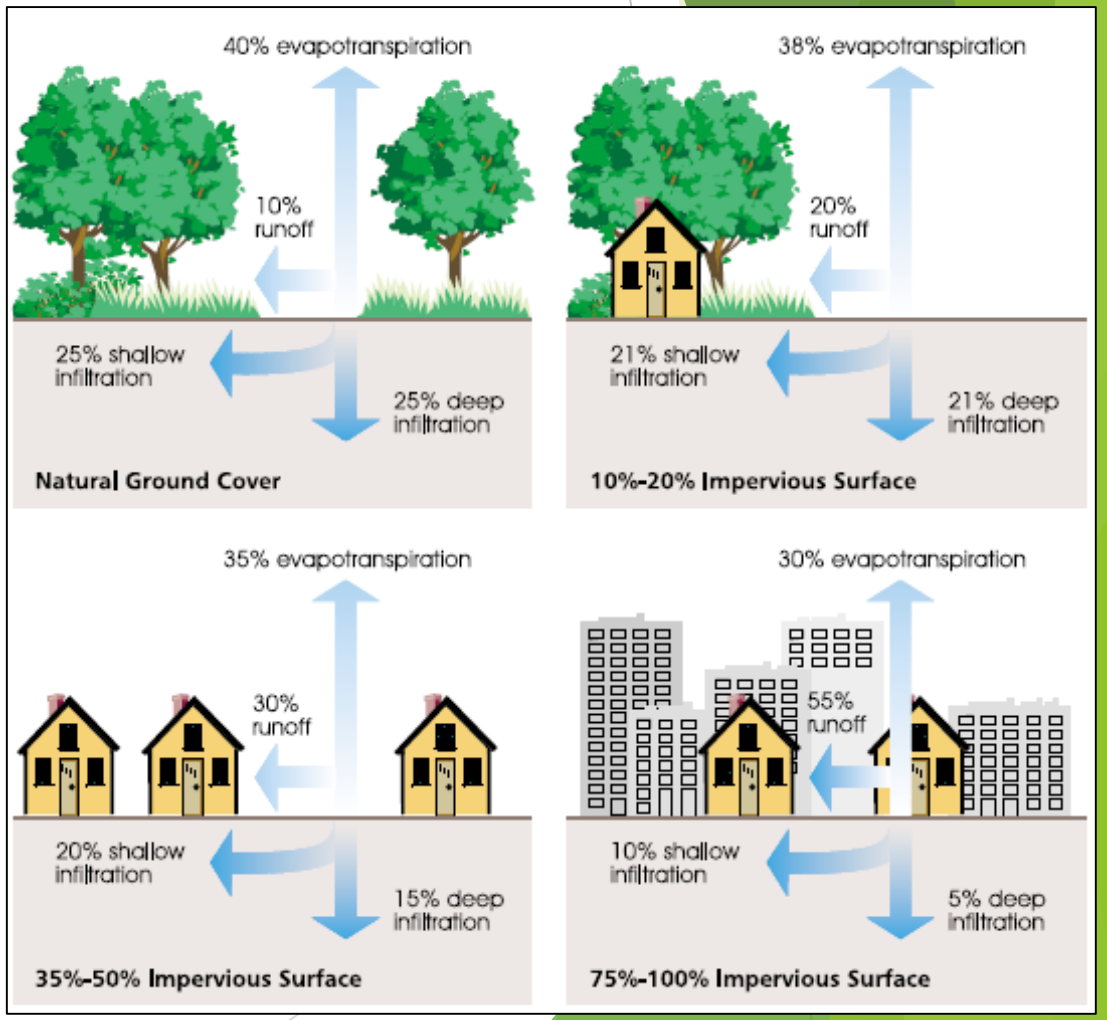


Funding: Impervious Area as Basis of Fee

- The relationship between impervious area and impacts to local water bodies and wetlands has been well established.
- Wellesley's overall imperviousness is about 27%.



Center for Watershed Protection. 2003. Impacts of Impervious Cover on Aquatic Systems: Watershed Protection Research Monograph. Center for Watershed Protection, Ellicott City, MD. Pages 1-158



Funding: Example Stormwater Fees

	Newton	Bellingham	Milton	Westford
Date Adopted	2006	2020	2016	2019
ERU (Equivalent Residential Unit)	N/A	3,025 ft^2 IA	N/A	3,500 ft^2 IA
SFR Fee	$100/year Flat Fee	$96/year Flat Fee for SFR & Condos.	$40-$520/year 4 Tiers	$37.50-$150/year 5 Tiers
Other Residential	$100/year Flat fee for 2-4 Unit Res	$192/year Flat fee 2-3 family	$2.32 per 100 ft^2 IA	$75/ERU
Large Res, Commercial, Industrial, Tax Exempt	$0.047 per ft^2 IA Minimum $150/year	$96/ERU	$2.32 per 100 ft^2 IA	$75/ERU

Next Steps & Timeline

- **Now:** DPW Board Feedback on program status
- **Through December 2021**: Stormwater Working Group meetings to develop rates and prepare for outreach
- **December-January 2021**: Warrant Open
- **January -March 2022**:
  - Stormwater Fee Workshops with Select Board, Advisory Committee, Key Stakeholders, and Public
  - Finalize FY23 Stormwater Budget, Rates, and Fee Policy for Select Board Adoption
- **Annual Town Meeting**: Present Stormwater Enterprise Fund and FY23 Budget
- **July 1, 2022 (FY23 Starts):** Fee in Effect. Bills sent during next cycle.
- **July-September:** Customer Service, Credits, Abatements.

Ongoing and Planned Outreach

Since May, monthly **Working Group meetings** with representatives from:

- Public Works & Engineering
- Natural Resources Commission (NRC)
- Wetlands
- Planning

Public Outreach

- Individual or small Group Meetings with Large Property Owners (e.g., Top 100 Bills)
- Public Hearing at the Board of Public Works

Presentations and Q&A with individual **Boards/Commissions**, including:

- Select Board
- Advisory Committee
- Town Meeting Members
- Public Works Board
- Town Departments and Professional Staff
- Boards and Committees

Questions & Discussion

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