

Integrated Water Resource Management Plan Brewster, MA July 24, 2013

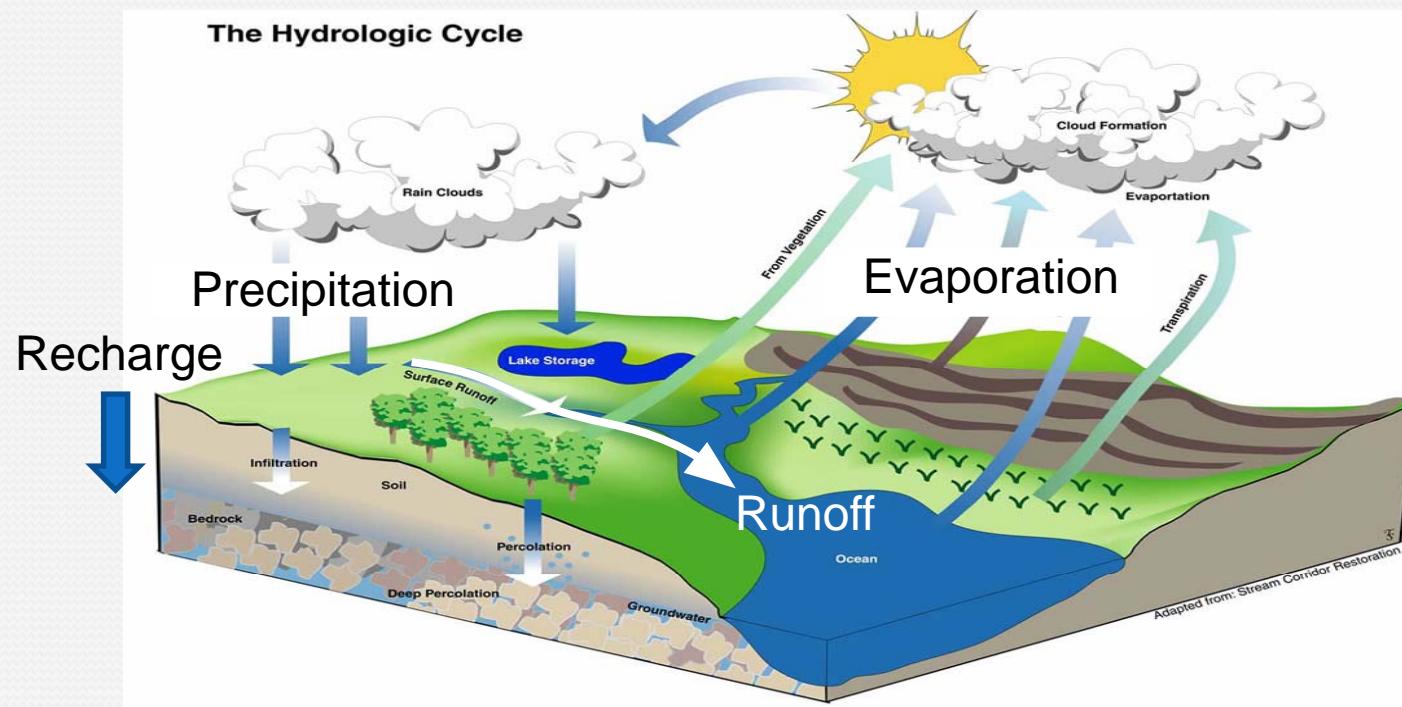


Comprehensive Water Planning
Committee

Town of Brewster



All Water Resources are Interconnected



- Therefore:

An Integrated Plan!

Why Integrated?

Everything is Connected

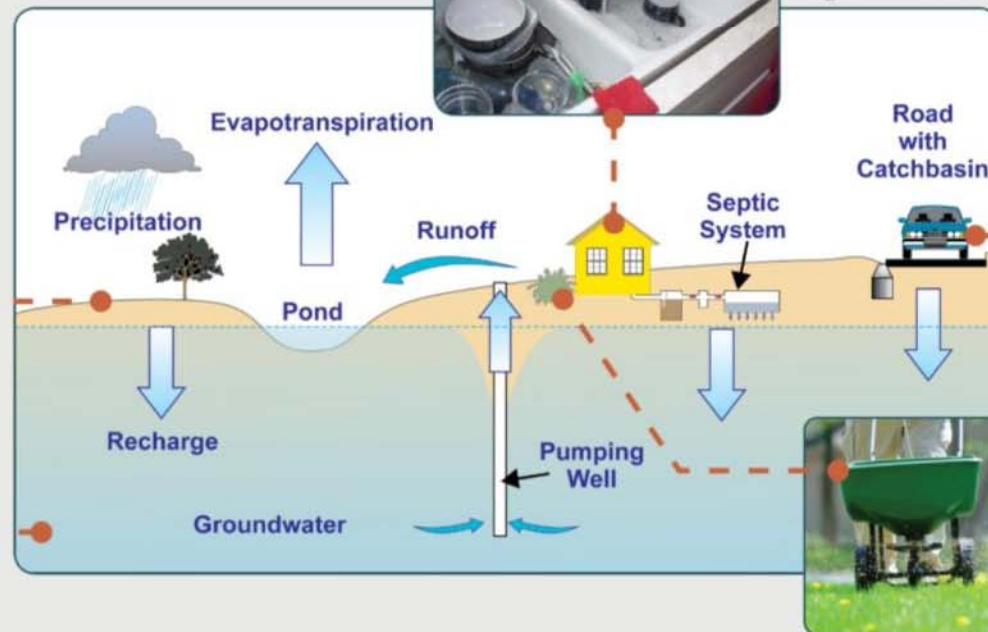


Animal waste...
Also makes it to surface waters.



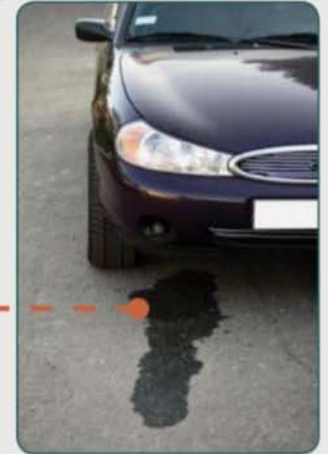
From the groundwater...
Back to your tap!

How you manage your property has a direct impact on water quality



From the kitchen sink...
To the septic system...
To groundwater!

From an oil leak under your car...
To the road drainage...
To a surface water!



From your lawn...
To groundwater and/or
ponds and coastal waters.





Components of the IWRMP

- Managing Nitrogen Loads to Coastal Embayments
- **Improving Stormwater Management**
- Protecting Public and Private Drinking Water Supplies
- Protecting and Restoring Fresh Water Ponds



Stormwater Management

- Current work has included:
 - Stormwater code review
 - Retrofit assessment of 19 potential sites
 - Selection of three possible sites for more detailed design of stormwater systems

Town Hall

Proposed Rain Garden behind Rear Parking Lot



Existing Similar System (below)



Breakwater Landing

Proposed Bioretention System in Corner Parking Lot

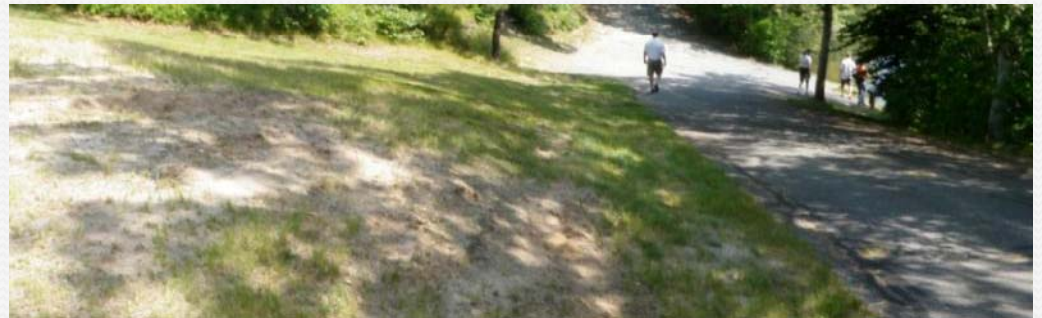
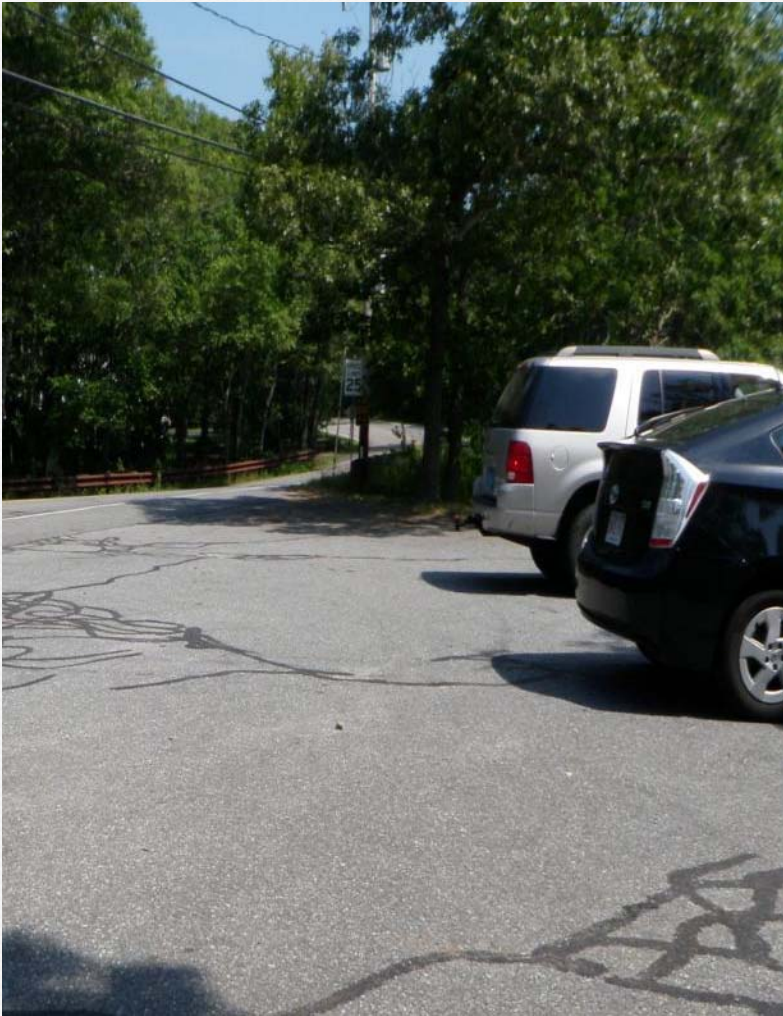


Existing Similar System (below)

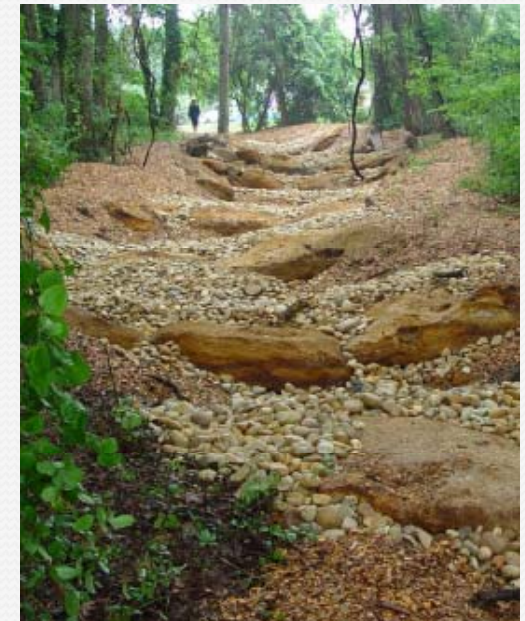


Walker's Pond Landing

Proposed Porous Pavement / Stepped-Conveyance System



Existing Similar Systems (below)





Stormwater Regulatory Recommendations

- Recommendations
 - Stormwater Management Bylaw
 - Reduce confusion from overlapping and potentially conflicting regulations
 - Create a single set of standards to regulate stormwater discharges



Stormwater Regulatory Recommendations

- Amendments to zoning and subdivision regulations to:
 - Reduce impervious cover
 - Encourage Low Impact Design (LID)

Bioretention/Rain Gardens/Planters



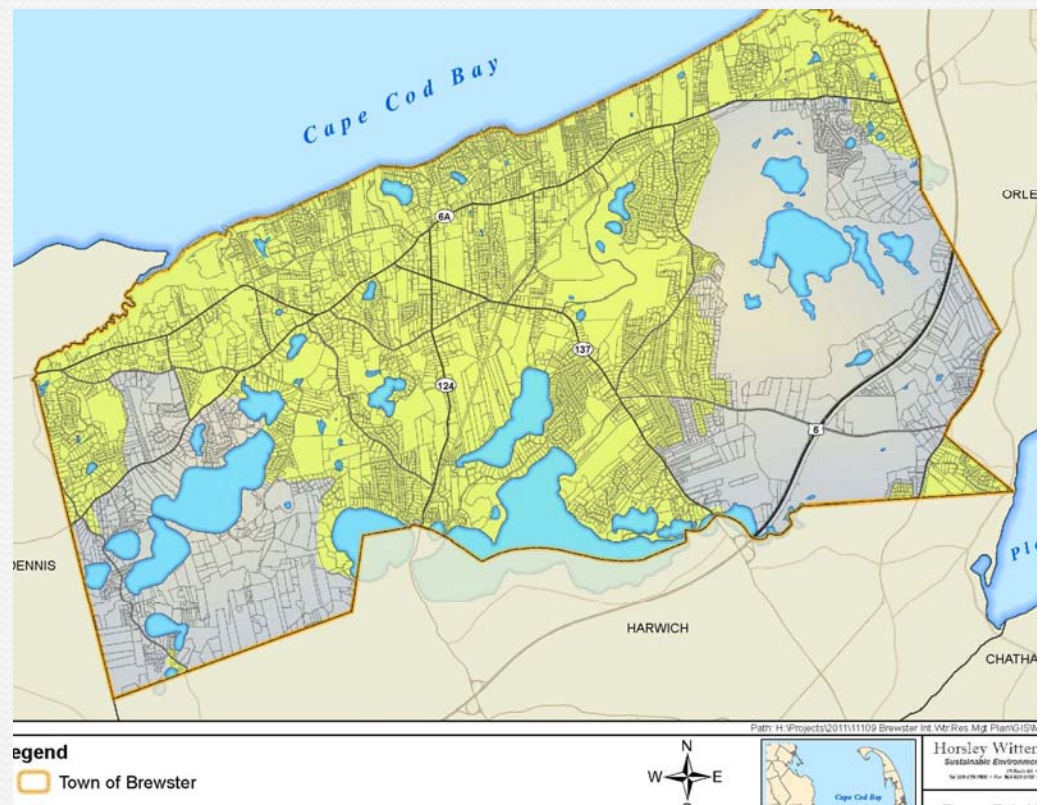


Phase III: Implementing Stormwater Recommendations

- Four Deliverables
 1. Stormwater Management Bylaw
 2. Stormwater Management Regulations
 3. Amendments to the Zoning Bylaws
 4. Amendments to the Subdivision Rules and Regulations

Stormwater Management Bylaw: Considerations

- Who is in charge?
- General bylaw or zoning bylaw?
- Town-wide or “urbanized area”?





Stormwater Management Regulations

- Distinction between bylaws and regulations
 - Bylaws
 - Can only come into force or be amended by adopting the exact formal procedure of the particular statute conferring the power of making the bylaw.
 - In Brewster, require Town Meeting vote.



Stormwater Management Regulations

- Regulations
 - Do not require Town Meeting vote
 - Adopted or amended by the local board or committee charged with their administration.
- Why regulations?
 - Flexibility to modify procedures and standards as technology and federal and state laws change over time.

Stay In Touch!

www.town.brewster.ma.us

Click on Water Planning Button:

Or Contact:

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WATER PLANNING







Stormwater Management Bylaw: Preliminary Outline

- **Purpose:** *Why this bylaw? Protection of public health and environment.*
- **Definitions:** *Ensure consistency across local and state codes and regulations.*
- **Authority:** *Identifies the Town's authority to enact the bylaw.*
- **Administration:** *What is the procedure for a permit? Who is in charge?*



Stormwater Management Bylaw: Preliminary Outline

- **Applicability:** *What is the threshold?*
- **Procedures:** *References the stormwater management regulations.*
- **Enforcement:** *Who will enforce the bylaw?*
- **Severability:** *Legal clause stating that the provisions within the bylaw shall not invalidate any other sections of the town's bylaws.*



Stormwater Management Regulations: Preliminary Outline

- Waivers
- Surety
- Construction Inspections
- Certificate of Completion
- Perpetual Inspection and Maintenance
- Enforcement
- Severability



Stormwater Management Regulations: Preliminary Outline

- Purpose
- Definitions
- Authority
- Administration
- Applicability
- Permit Procedures and Requirements
- Post-Development Stormwater Management Criteria

Amendments to Local Zoning

- **Section 179-2. Definitions** (e.g., parking space, driveway)
- **Article VII. Off-Street Parking and Loading** (e.g., amendments to parking minimums, permeable paving)
- **Article XI. Water Quality Protection Bylaw** (e.g., reinstate limit in lawn area on residential lots?)
- **Article XII. Site Plan Review** (e.g., LID standards, cross-reference with stormwater management bylaw and regulations)



Parking Standards often Create Excessive Impervious Surface Areas

Amendments to Subdivision Regulations

- **Article IV. Design and Construction Standards** (e.g., allow permeable paving for road shoulders, parking lots, etc)
- **Table 1. Street Cross-Sectional Design Standards** (e.g., reduce the minimum required widths for minor streets)
- **Table 2. Street Geometrical Design Standards** (e.g., reduce cul-de-sac radii requirements)



Scenic Roads are Usually Narrower than Allowed by Local Regulations.