

MASSACHUSETTS DIVISION OF MARINE FISHERIES - DESIGNATED SHELLFISH GROWING AREA

Division of Marine Fisheries
DIRECTOR PHILIP G. COATES



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STATION TYPE

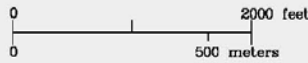
- CLASSIFICATION
- POLLUTION SOURCE
- AD-HOC
- PRIMARY PSP
- SECONDARY PSP
- TERTIARY PSP
- CHEMICAL
- MARINA

BOUNDARY LINES CLASS AREA TYPE, AS OF 07/01/1999

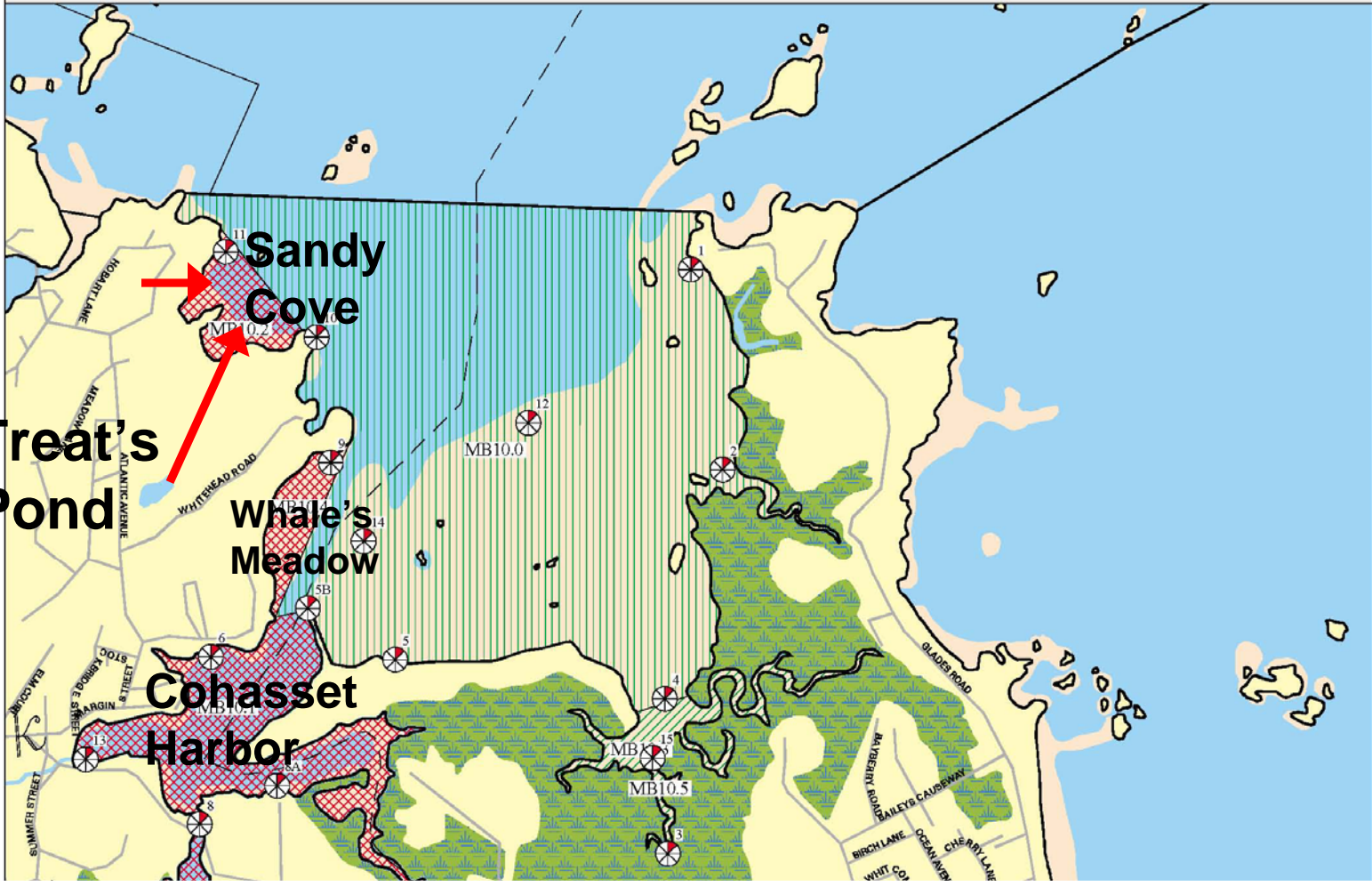
- GROWING AREA
- CLASSIFICATION AREA
- TOWN
- APPROVED
- CONDITIONALLY APPROVED
- CONDITIONALLY RESTRICTED
- RESTRICTED
- MANAGEMENT CLOSE
- PROHIBITED

GROWING AREA CODE: MB10
AREA NAME: COHASSET HARBOR
AREA TOWN(S): COHASSET/SCITUATE

This product is for planning and educational purposes only. It is not to be used by itself for legal boundary definition or regulatory interpretation.



Treat's Pond





LOTHROP LANE DRAINAGE

- Septic Systems
- Animal Feces
- Lawn Care
- Urban Runoff



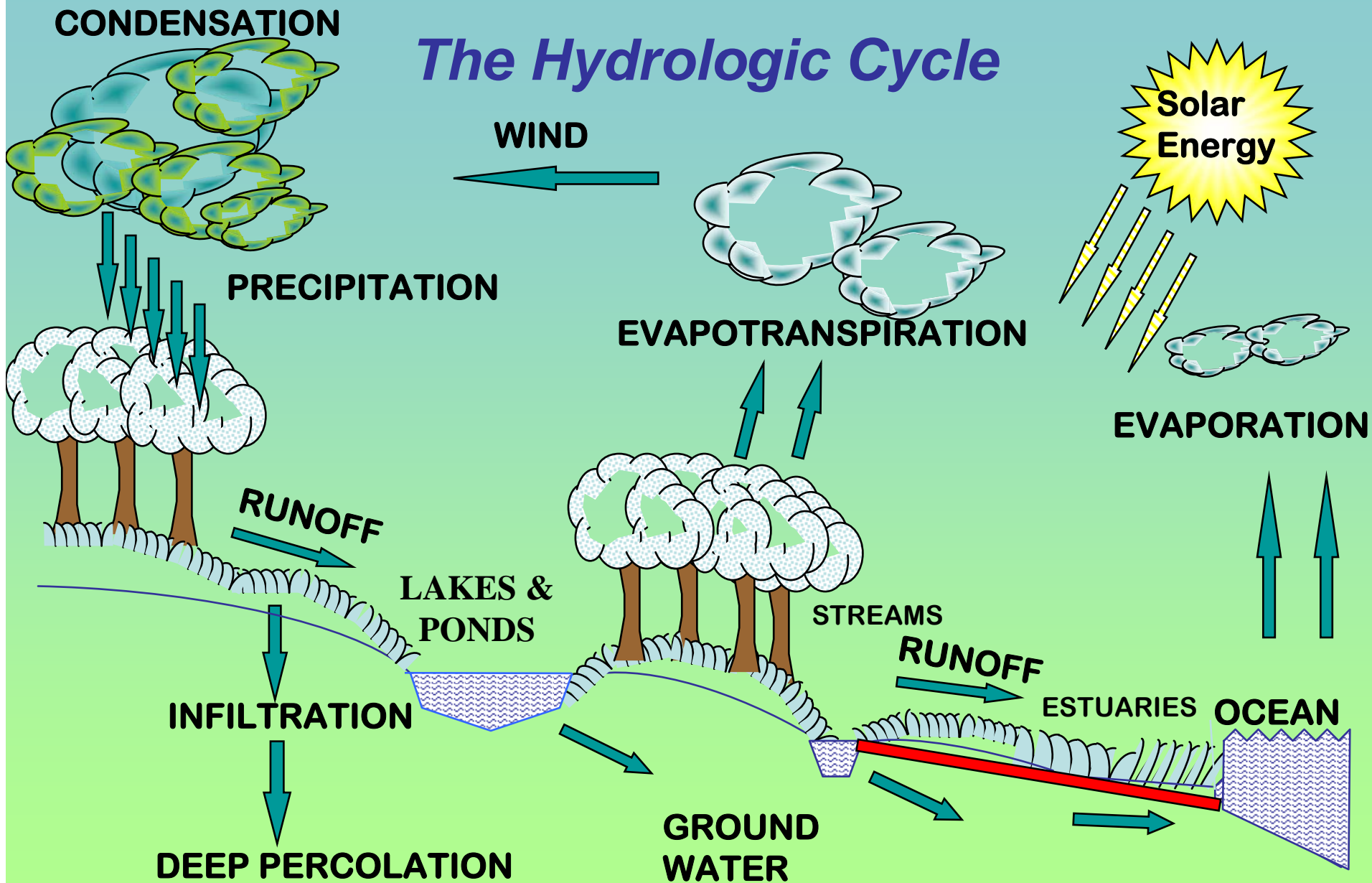


Other Environmental Issues Central to the Treat's Pond Watershed and Potential System Improvements

- **Non-point Pollution effects on Water Quality (Impacting Cohasset Harbor and Sandy Cove Beach)**
- **Shellfish Bed Protection and Improvement**
- **Excess fresh water flow hindering any salt marsh reclamation efforts in Treat's Pond and potentially influencing Cohasset Harbor health**
- **Private Property easement and access issues hindering implementation of recommendations**
- **Phragmites expansion into Pond reducing ecological values and flood storage potential**

Hydrology 101 (Background)

The Hydrologic Cycle

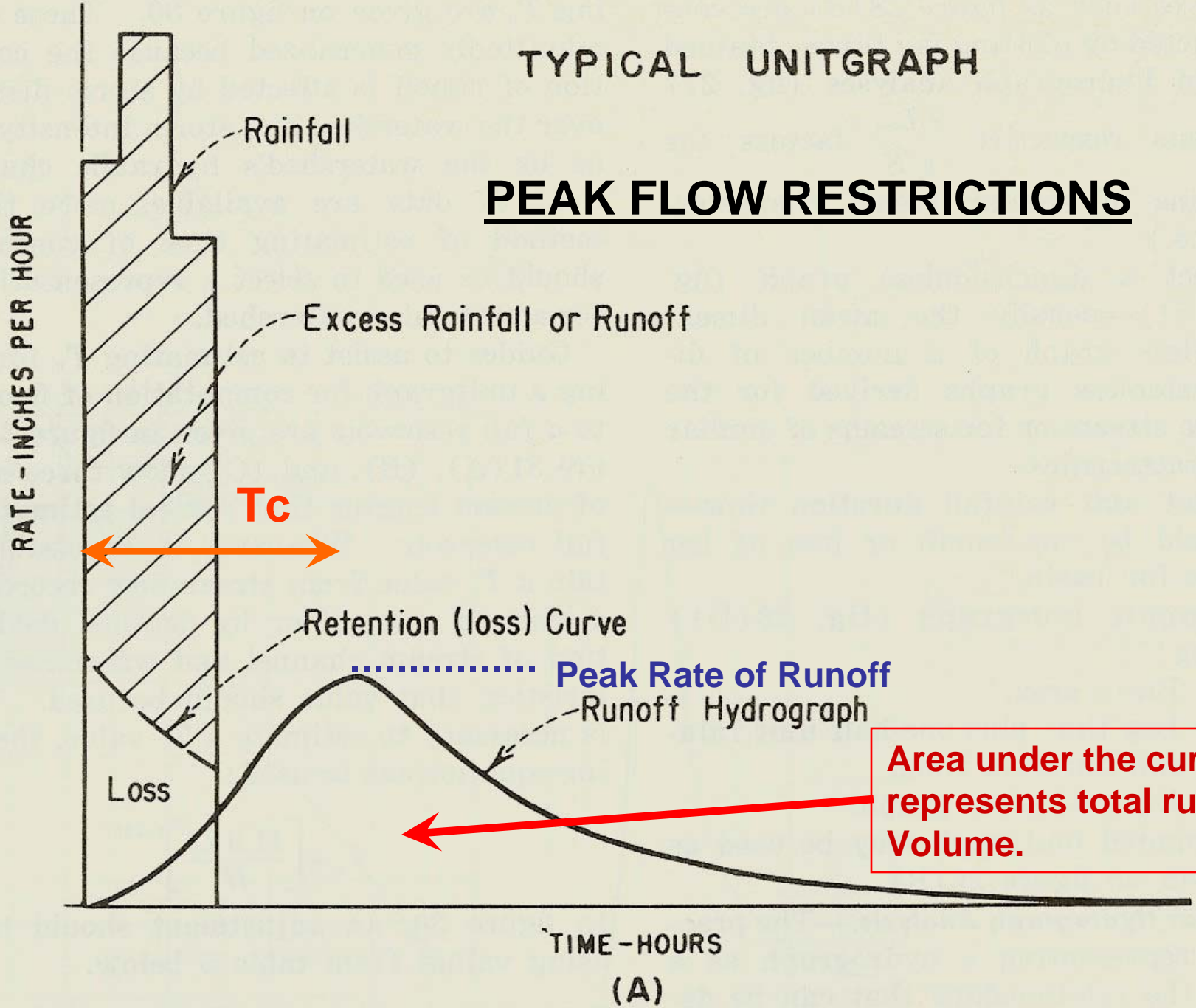


Increased Development Impacts

- Increased Impervious Area
(Building roofs, driveways, walks, altered landscapes)
- Reduced flow detention
(Channelized stormwater, ditches, swales and pipes)
- Increased Property Values and Loss Potential
- Increased Public Health and Safety Concerns

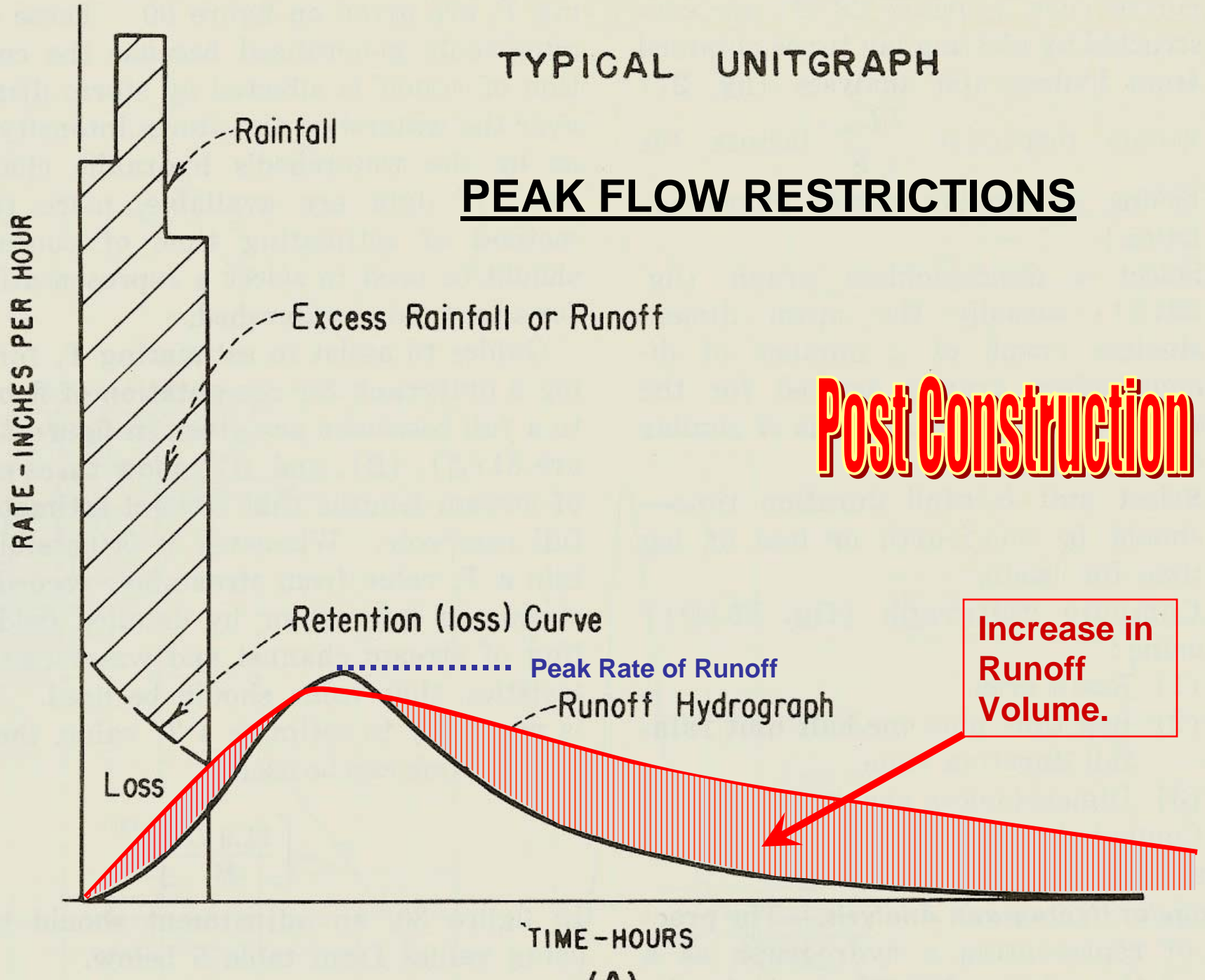
TYPICAL UNITGRAPH

PEAK FLOW RESTRICTIONS



TYPICAL UNITGRAPH

PEAK FLOW RESTRICTIONS



Post Construction

**Increase in
Runoff
Volume.**

IMPACTS OF INCREASED RUNOFF VOLUMES

- DOWNGRADIENT **FLOODING** IMPACTS
- DIRECT **IMPACT ON WETLAND** COMMUNITY DUE TO HIGHER VELOCITIES AND HIGHER/MORE FREQUENT FLOOD LEVELS (**Enhanced Phragmite development**)
- DEPRESSION OF **SALINITY** IN MARINE SYSTEMS (**Treat's Pond**)
- INCREASED NON-POINT **POLLUTION** LOADINGS CREATING RECEIVING WATER QUALITY IMPACTS
- INCREASED SEDIMENT TRANSPORT
- HIGHER DEMAND ON **MUNICIPAL SERVICES** MEANING ECONOMIC AND INFRASTRUCTURE IMPACTS
- PUBLIC **HEALTH AND SAFETY** ISSUES

REGULATORY CONTROLS on New Development

- Clean Water Act (NPDES Permitting)
- Massachusetts Wetland Protection Act
 1. Wildlife
 2. Riverfront (Rivers Protection Act)
- Local Conservation Commission Regs.
- ACOE Wetland Permitting
- MA Stormwater Management Policy
- EPA Stormwater Program (Phases 1 & 2)
- Water Management Act (Limit Interbasin Transfers)
- Various CZM, MADEP and MEPA Policies
- **Local Stormwater Bylaws (New)**
- **Local Land use Regulations**