

# ***Stormwater Management: A Brief Overview***

# **Outline**

**Brief Overview of CAs**

**Hydrologic Cycle**

**Rural v. Urban runoff**

**Individual Beneficial Actions**



# The Conservation Movement in Ontario

1930s

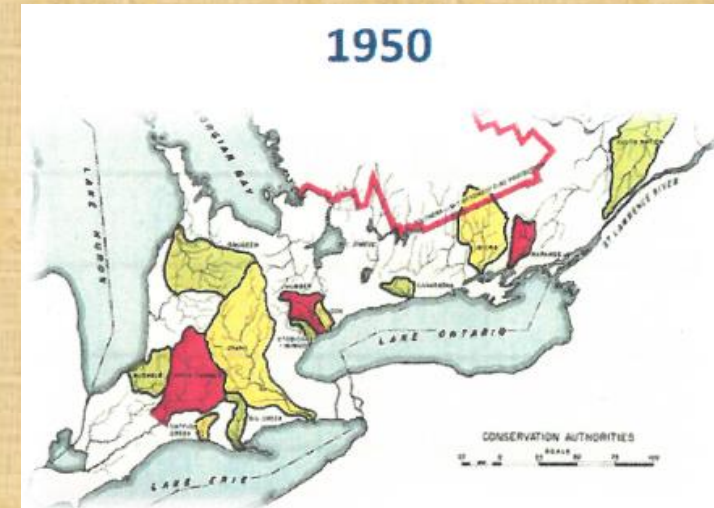
Droughts, floods, deforestation, soil loss

1940s

Agricultural, naturalist and sports groups highlighted that natural resources were in an unhealthy state because of poor land, water and forestry practices

1946

Provincial government responded with the passage of the *Conservation Authorities Act*



# The *Conservation Authorities Act*



## Three Fundamental Principles:

- Local Initiative
- Cost Sharing
- Watershed Jurisdiction





<b>WHAT HURRICANE DID</b>	
<b>RAYMORE DRIVE</b>	36 Dead 60 Homeless
<b>WOODBIDGE</b>	6 Dead 700 Homeless
<b>NEW TORONTO</b>	7 Dead 600 Homeless
<b>ISLINGTON</b>	5 Etobicoke Firemen Dead 24 Bodies Recovered Sunday
<b>HOLLAND MARSH</b>	3,000 Homeless \$10,000,000 Damage 7,000 Acres Covered
<b>BEETON</b>	5 Dead
<b>THISTLETOWN</b>	2 Dead 12 Families Homeless
<b>HIGHLAND CREEK</b>	17 Cottages Washed Into Creek Over 60 Homeless
<b>SUMMARY</b>	78 Dead, 15 Missing Total Damage Estimate: "Tens of Millions"—Métro



# Ontario's Conservation Authorities

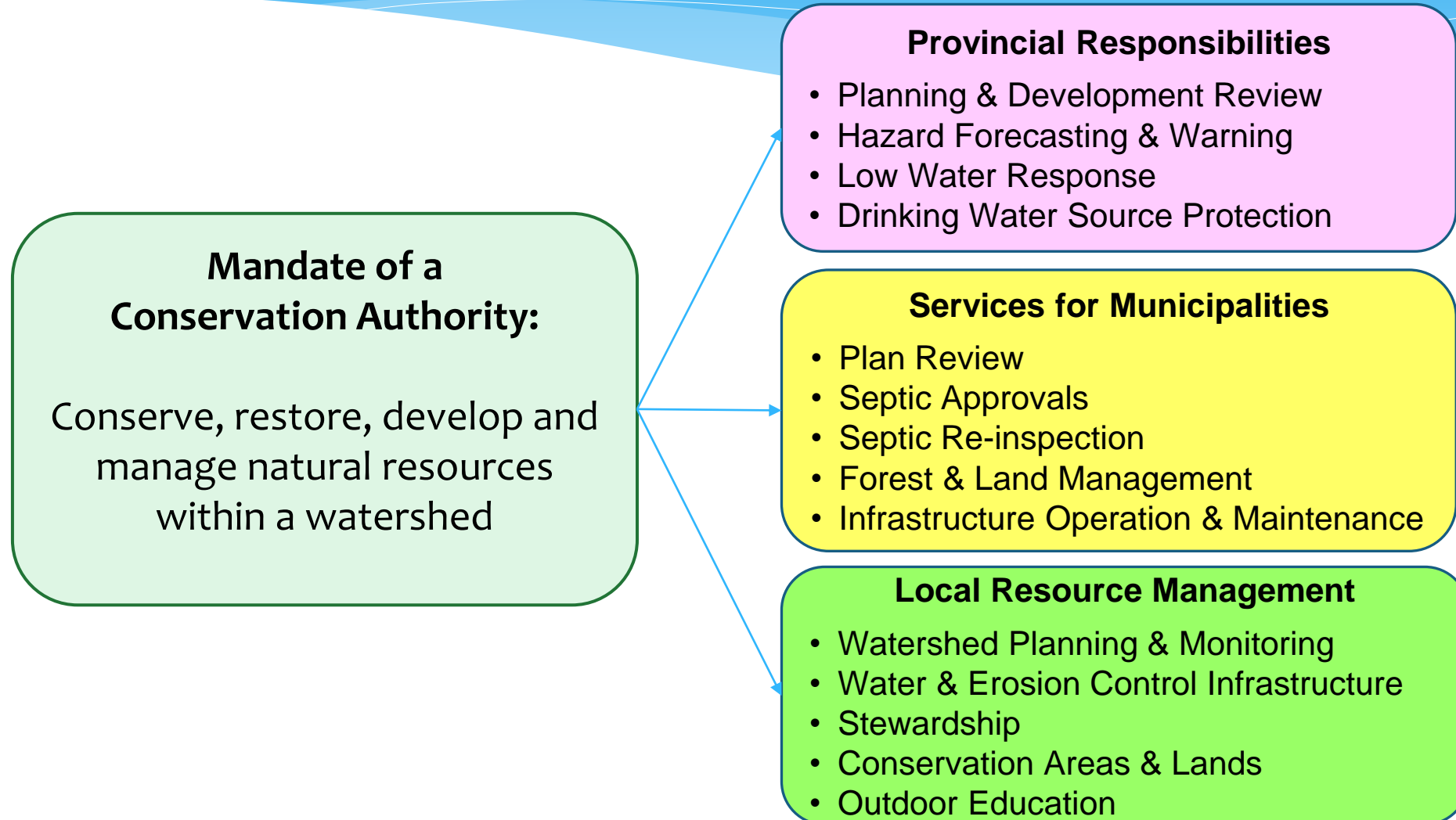


## **Mandate:**

*Provide programs and services designed to further the **conservation, restoration, development and management of natural resources***

*Conservation Authorities Act*

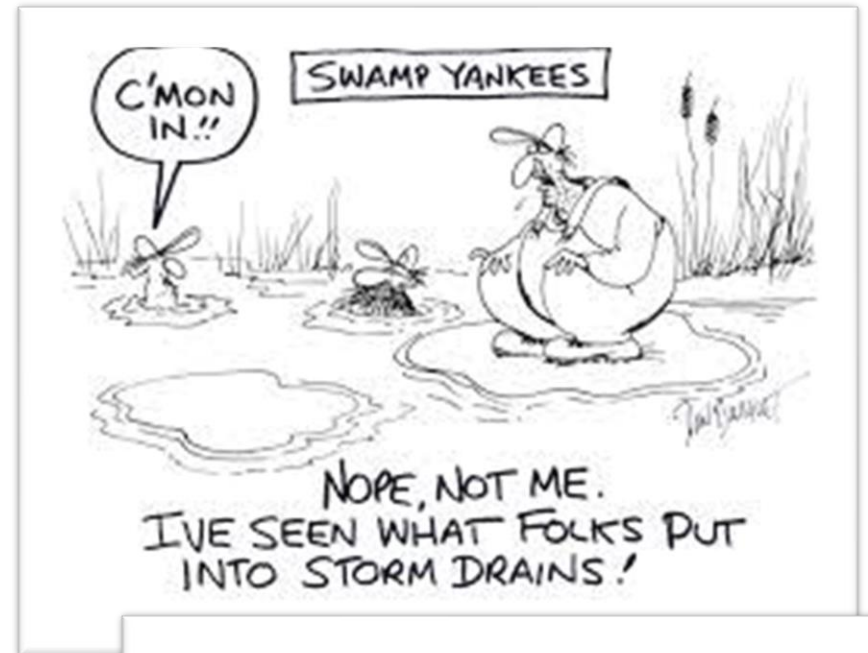
# CA Programs & Services





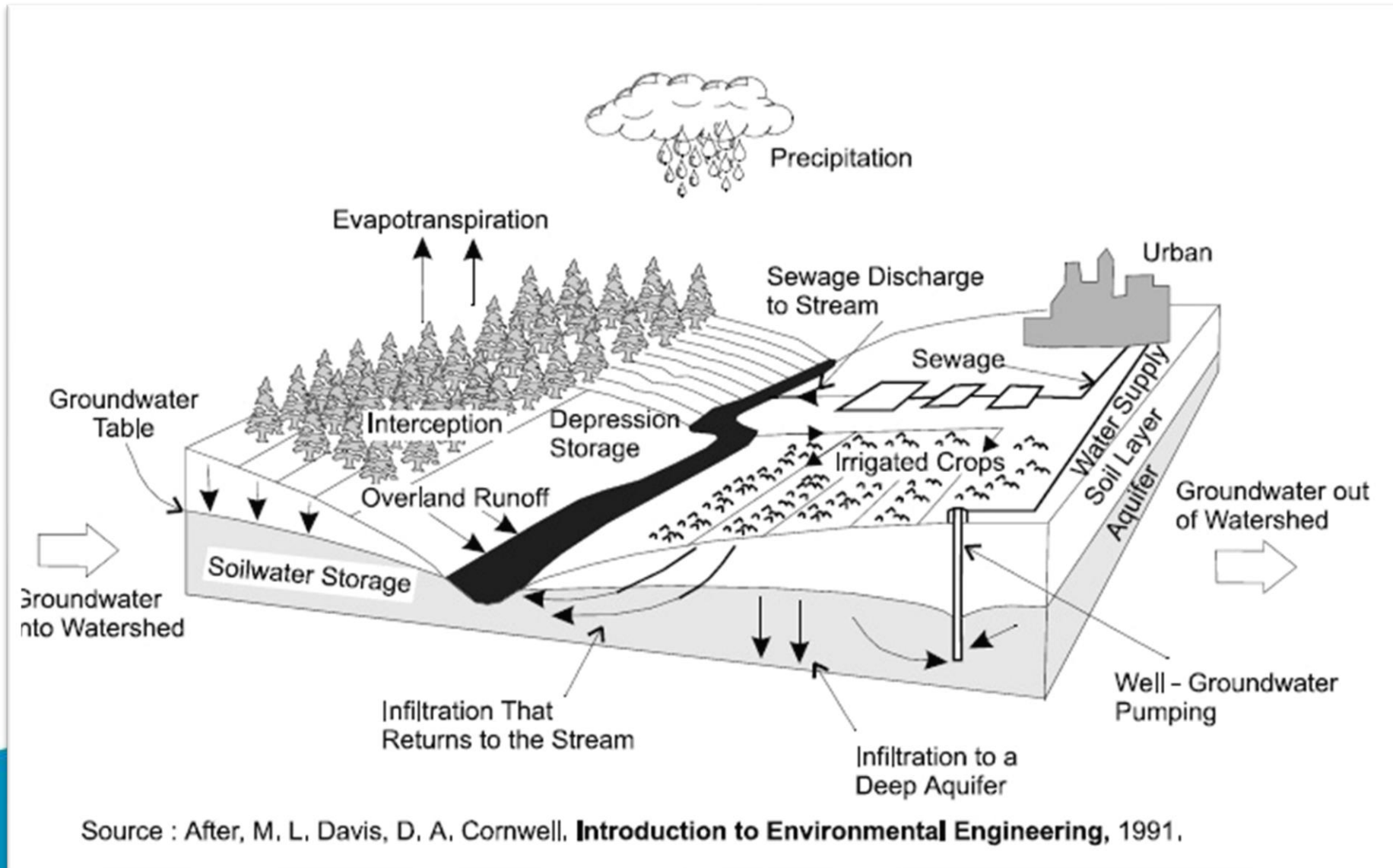
# Stormwater Management is:

- Balancing the hydrologic cycle
- Mitigating impacts from development
- Collection system
- Pollution

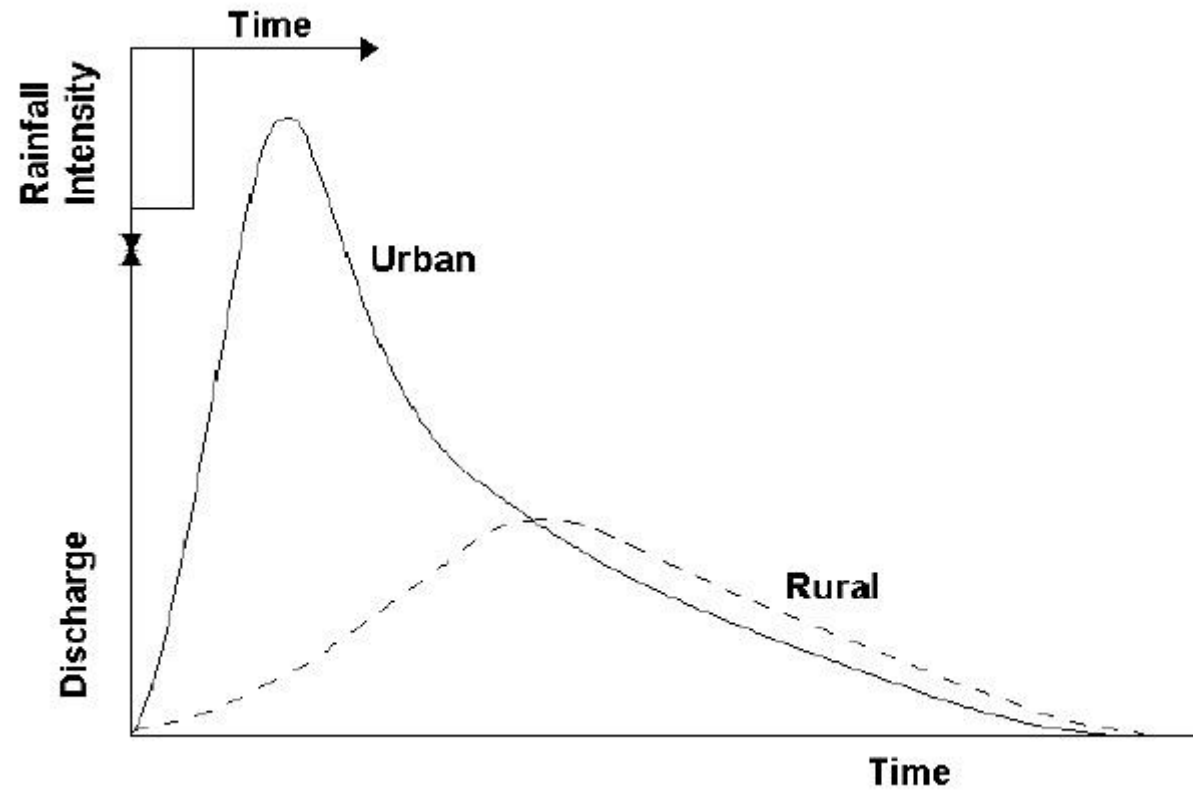




# Hydrologic Cycle

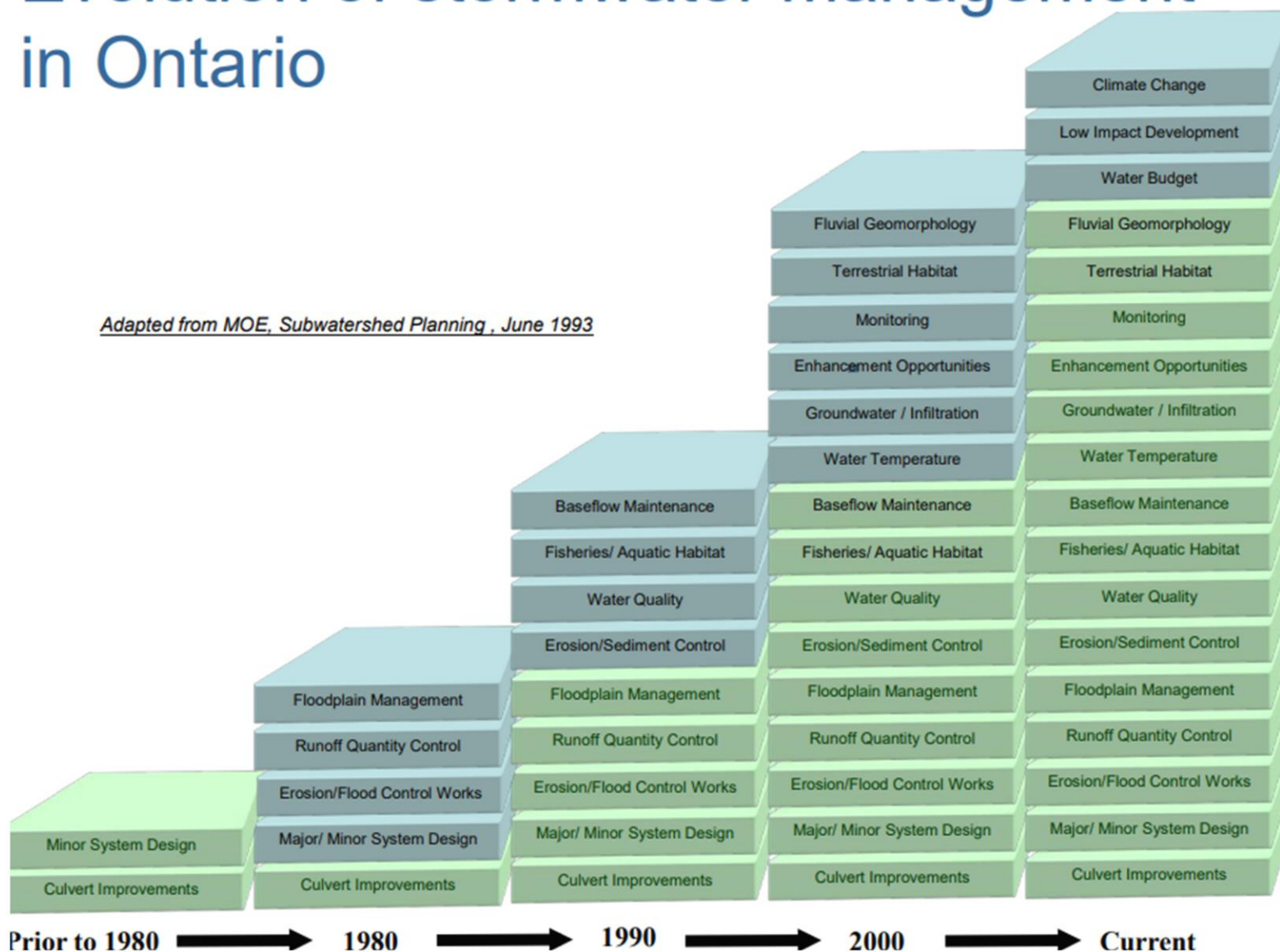


# Hydrograph



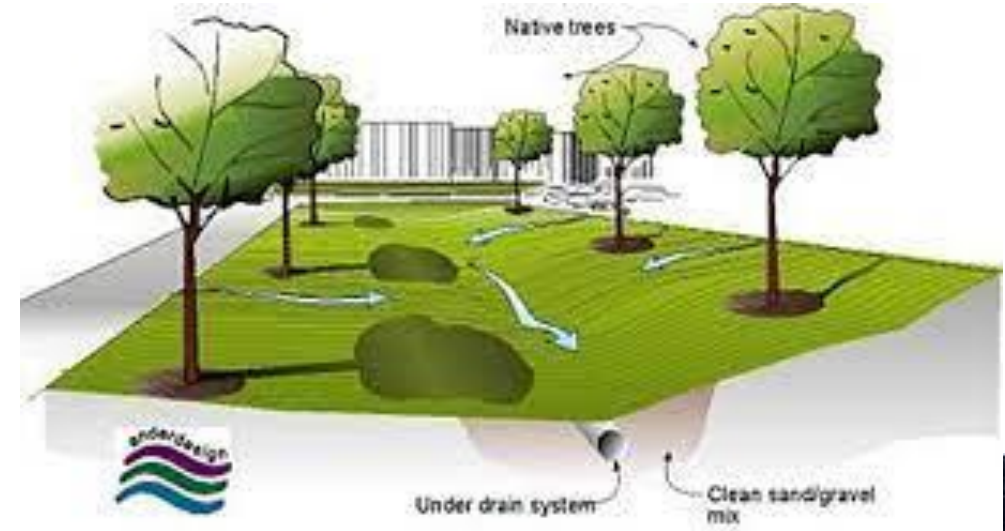
# Evolution of stormwater management in Ontario

*Adapted from MOE, Subwatershed Planning, June 1993*



# Actions individuals can undertake

- Advocate for stormwater improvements locally
  - Ask local decision makers about adopting updated engineering standards
  - Low Impact Development measures
- Take individual actions to improve property
  - French drains
  - Soakaway pits
  - Rain barrels
  - Naturalized lawns





# Resources

- [RVCA Stewardship webpage](#)
- [Greening Your Grounds – TRCA Document](#)
- [MECP Stormwater Management Planning and Design Manual](#)
- Individual BMP documents – provided to Katie and for circulation



# Thank You – Questions?

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