

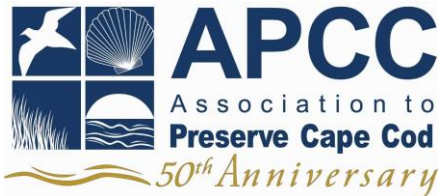
Stormwater Basics

Eastham Public Library

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Photo Credit: Chuck Choi



Eastham
MASSACHUSETTS

Presentation Topics



What is stormwater?

Why is it a problem?

What can we do about it?

What is stormwater?

rain



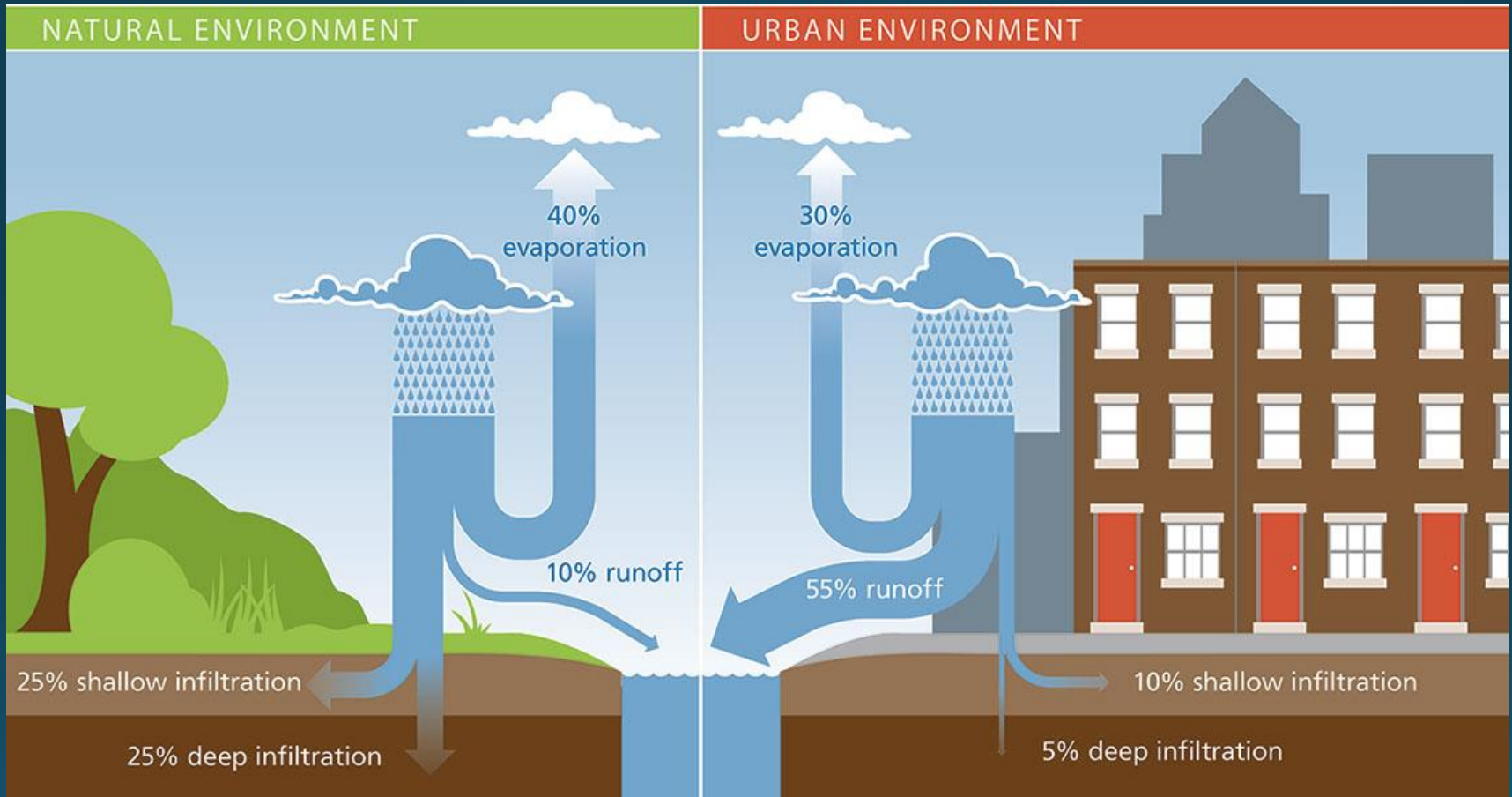
impervious
surfaces



runoff



Increased Development Increases Runoff



Why is stormwater runoff a problem?

nutrients

oil, gas
& diesel

trash

salts

metals

bacteria & pathogens

pesticides

sediment

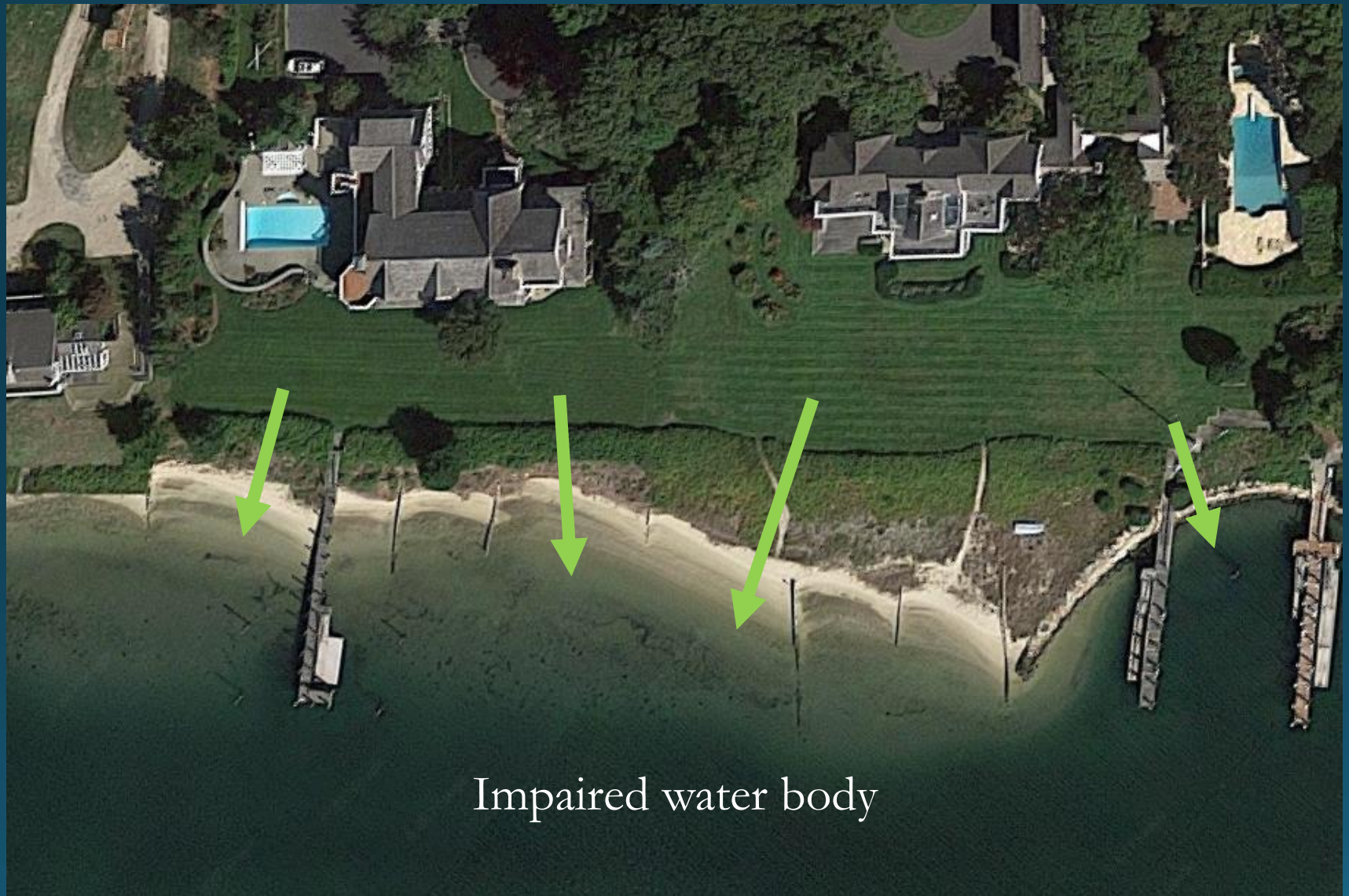


Pollutant Sources

1. Motor vehicles
2. Landscape maintenance
3. Commercial & industrial areas
4. Road maintenance
5. Construction sites
6. Atmosphere (airborne)
7. Pet & wildlife waste
8. Litter



Landscape Runoff



Negative Effects on Environment

- Impaired water quality
- Excessive algal growth
- Thermal stress
- Habitat degradation
- Harm to wildlife



Negative Effects on the Community

- Health hazards
- Beach closures
- Economic impacts
 - Tourism
 - Commercial fisheries
 - Property values
 - Cost to restore



What can we do about it?

1. Reduce stormwater volume
2. Reduce pollutants at the source
3. Install stormwater treatment systems



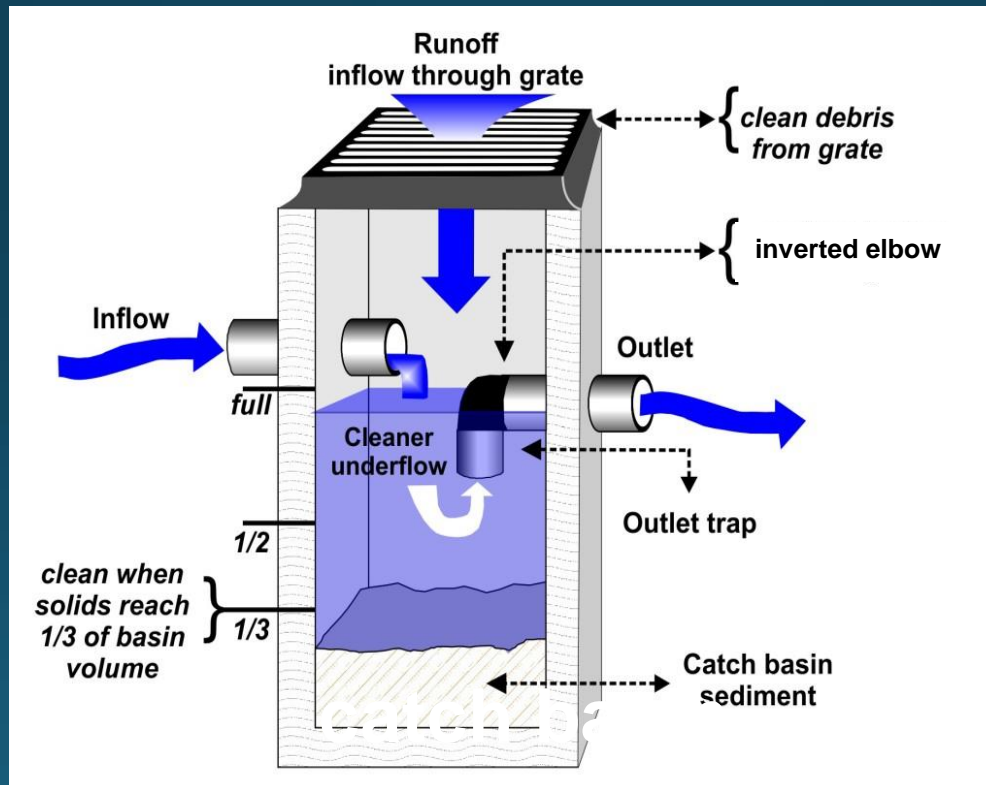
Conventional Stormwater Management

typical catch basin

roadway
drainage

reduce
puddling

driver
safety



water
quality
secondary

limited
treatment

pre-treatment

Green Infrastructure

Modern stormwater management

green

modeled
after
nature

reduces
volume



biological
treatment

treats
close to
source

cost
effective

Stormwater Management Goals

Protect and improve:

- Water quality
- Habitat
- Health & safety
- Aesthetics
- Recreation
- Commercial fisheries
- Tourism



Maintenance & Monitoring



Essential to assure
functionality and
performance.

What Can You Do ?

1. Reduce area of lawn in exchange for native habitat
2. Reduce area of impervious surfaces
3. Install rain gardens
4. Responsible landscaping
5. Transportation choices
6. Reduce energy usage
7. Pick up pet waste
8. Proper disposal of waste products
9. Spread the word
10. Volunteer to help maintain treatment systems in town

