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Rainwater Harvesting Training in Texas

Bruce Lesikar

Improving Lives. Improving Texas.

Overview

- Reasoning
- Course descriptions and resources
- Evaluation results
- Impact
- Conclusions

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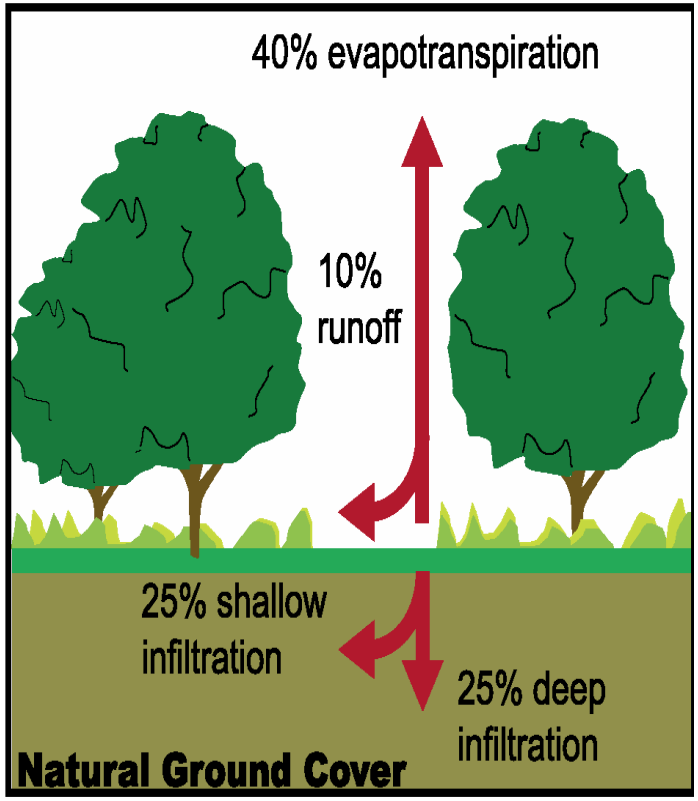
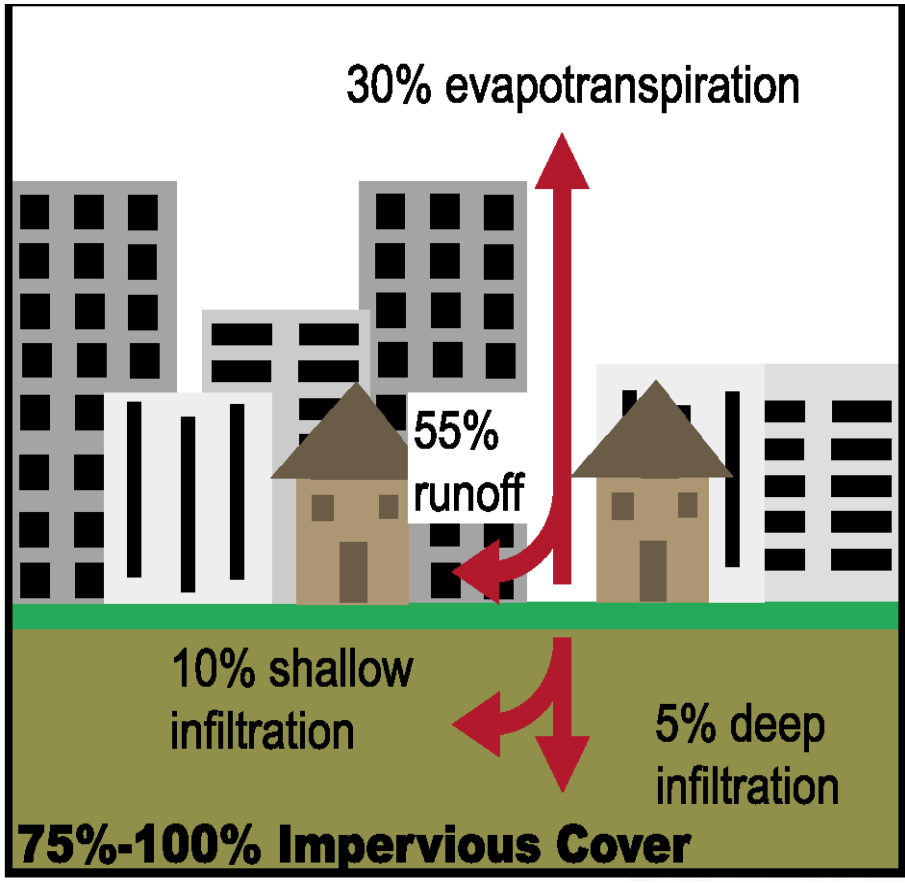
Reasoning

- Limited resource
- Urbanization
  - Increased runoff frequency and volume
- Runoff quality
- Groundwater recharge

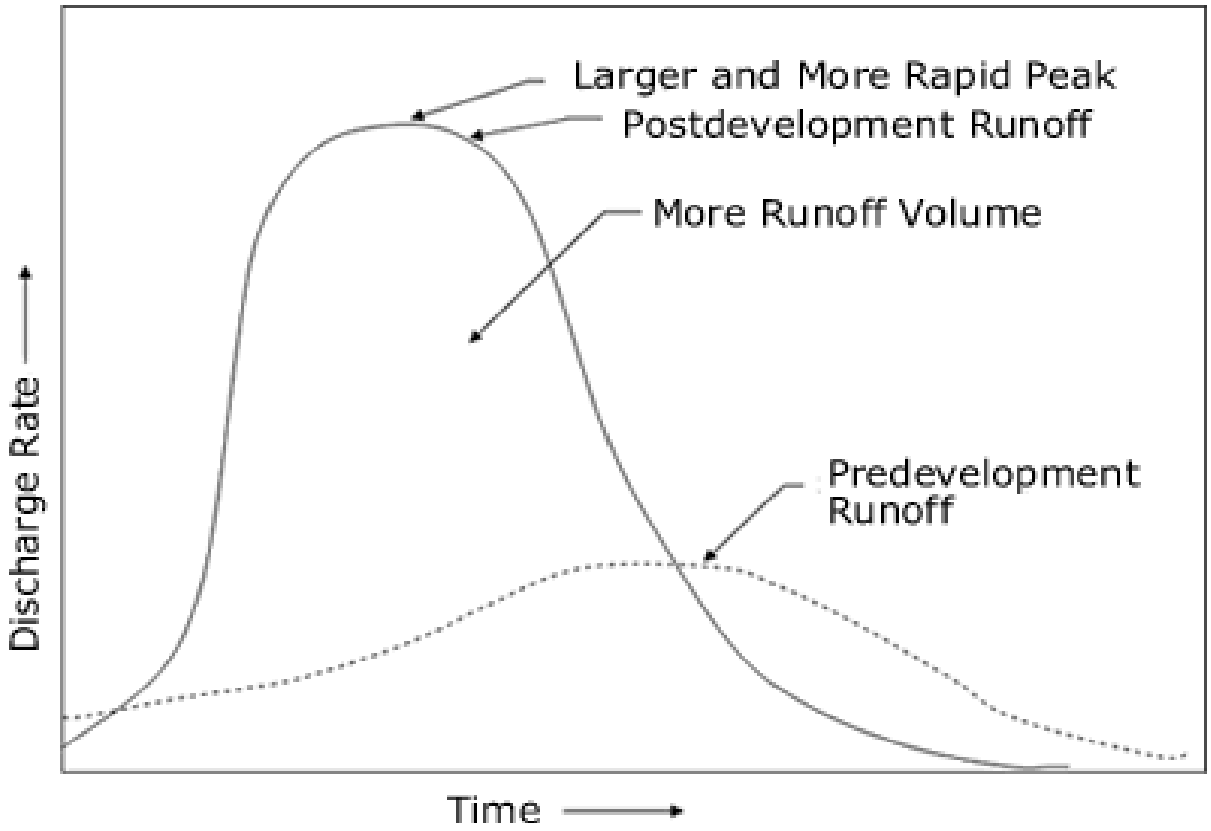
Reasoning

- Urbanization





Reasoning

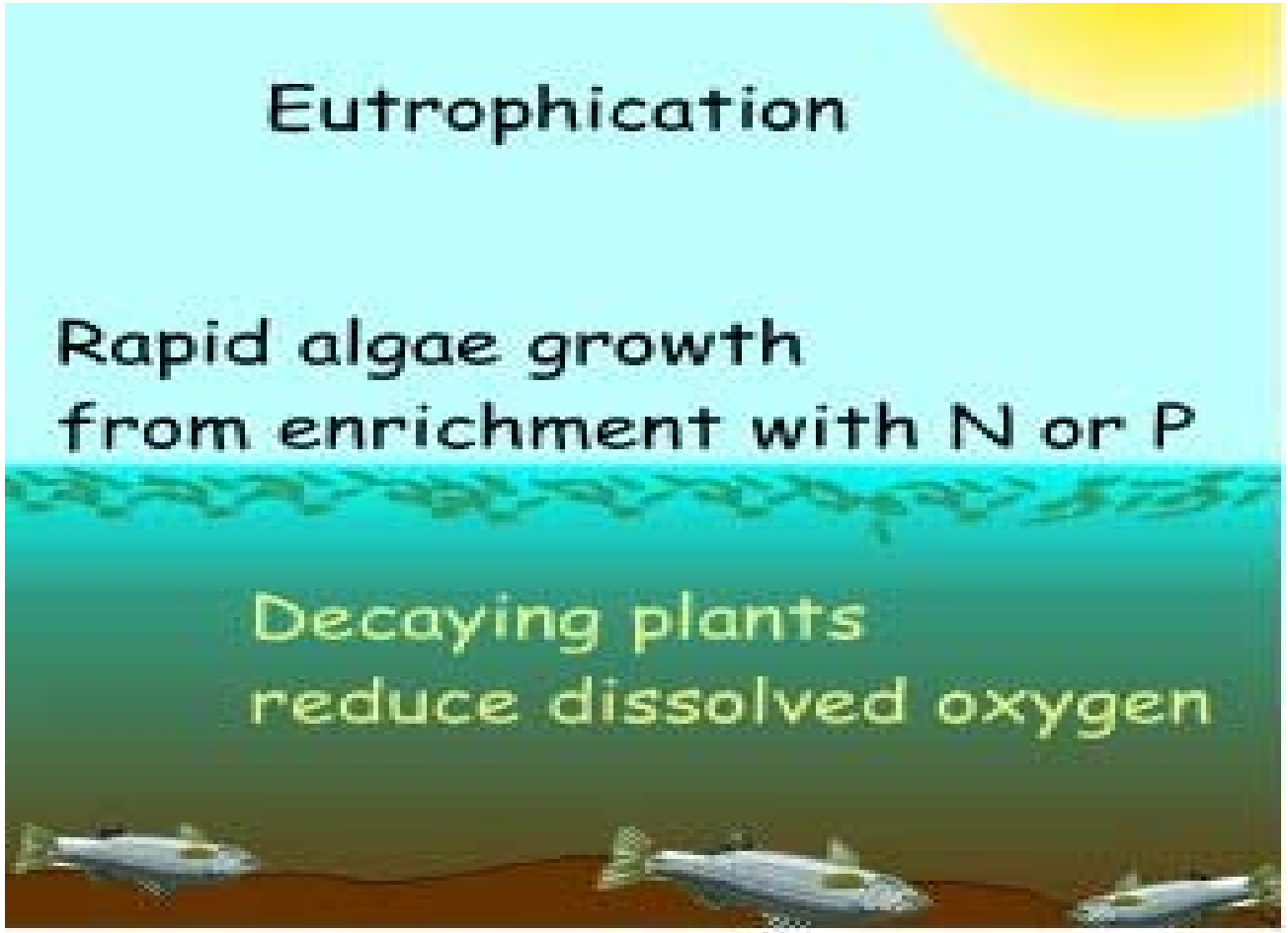


Source: Reimold, R. J. (1998). Watershed management: practice, policies, and coordination, McGraw-Hill.

Reasoning

- Water Quality Impairments
  - Potential to introduce new pollutants into surface water
    - Construction activities
    - Pesticides
    - Fertilizers
    - Spills/Leaks
  - Affects human health

Reasoning



Fish and other aquatic life die

Course Descriptions

- County Programs
- Texas Master Naturalists- Rainwater Steward
- Master Gardener- Rainwater Specialist
- Tap Into Rainwater for In-Home Use
- Professional Accreditation

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Course Descriptions

- Texas Master Naturalists- Rainwater Steward
  - Recognition
  - Participation Requirements
  - Course Requirements
  - Expectations
  - Time Commitment
  - Service Examples
  - Available Resources

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Evaluation Results

- Evaluation results
  - Retrospective pre-post test percent knowledge gained by participants

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Evaluation Results

- Evaluation results

Topics	% Knowledge Gain
a. Where Does the Rainfall Go?	32
b. Capturing Water, an Ecological Process:	30
c. Rainwater Management on Rangeland:	34
d. Rainwater Capture Systems	79
e. Capturing Water on the Land	36
f. Rainwater Capture for Wildlife:	45
g. Youth Education:	77

Course Descriptions

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Evaluation Results

- Evaluation results
  - Retrospective pre-post test percent knowledge gained by participants

Evaluation Results

- Evaluation results

Topics	% Knowledge Gain
a. Understanding of how rainwater addresses water quality and quantity issues:	51
b. Understanding of stormwater and its impact on the environment:	51
c. Understanding of rangeland watersheds:	63
d. Understanding of collection and storage of harvested rainwater:	62
e. Understanding of filtration and sanitation of harvested rainwater:	70

Evaluation Results

- Evaluation results

f. Understanding of how landscaping affects water usage:	38
g. Understanding of how a soil storage and infiltration system works:	71
h. Understanding of how rainwater cam be used to water wildlife:	59
i. Understanding of how raingardens can be used to harvest rainwater:	85
j. Understanding of how to implement a youth education session:	63

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Course Descriptions

- Tap Into Rainwater for In-home Use
  - Course Requirements
  - Expectations
  - Available Resources

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Course Descriptions

- Rainwater Harvesting Professional Accreditation
  - Recognition
  - Course Requirements
  - Expectations
  - Available Resources

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Impact

- Texas Master Naturalist- Rainwater Steward
  - 2 Trainings
  - 45 participants
  - 540 required volunteer hours valued at $9,720 ($18/hr)
- Texas Master Gardener- Rainwater Harvesting Specialist
  - 6 Trainings
  - 190 participants from 27 different counties
  - 994 reported volunteer hours valued at $17,892 ($18/hr)
  - Demonstrations in every chapter within 5 yrs

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Conclusions

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