

# LESSON PLAN



**Activity:** Nonpoint Source Pollution in Your Watershed

**Time:** 50-60 minutes

**Grades:** 6-12

## **Education Standards (NGSS):**

MS-LS2-2, MS-LS2-1, MS-LS2-4, MS-LS1-5, MS-ESS2-4, MS-ESS3-3, MS-ESS3-4, MS-ETS1-1, HS-LS2-2, HS-LS2-6, HS-LS2-8, HS-LS4-6, HS-LS4-5, HS-ESS2-5, HS-ESS3-1, HS-ESS3-6, ES-ETS1-2

## **Objective:**

To understand the impact of nonpoint source pollution on our environment, how stormwater runoff affects our aquatic ecosystems, and how to change personal behavior to prevent stormwater pollution.

## **Materials Used for Activity**

- Enviroscape® Watershed/Nonpoint Source Interactive Model
- What is stormwater pollution Power Point
- Brochures on stormwater pollution
- Watershed map
- Worksheet on pollution prevention

## **Learning Outcomes**

- What is a watershed? How does a healthy watershed function?
- How are models useful in helping us understand our environmental impact?
- What is the difference between storm and sanitary sewer systems?
- How do I identify pervious versus impervious surfaces?
- What is green stormwater infrastructure?
- What are ten common contaminants in stormwater runoff?
- What personal actions can I take to reduce stormwater pollution?
- What is the difference between nonpoint and point source pollution?
- What is a municipal separate storm sewer system, or MS4?
- Why must MS4s obtain a permit to discharge to surface waters?

## **Lesson Plan Schedule**

- Introduction to stormwater pollution slide presentation: 10 minutes
- Engage with Enviroscape Watershed/Nonpoint Source Model: 20 - 30 minutes
- Q & A on nonpoint sources of pollution within stormwater runoff: 10 minutes
- Pollution Prevention Worksheet: 10 minutes

## **Out of Class Assignment(s)**

- Complete pre- and post-assessments listing point and nonpoint sources of pollution.
- Discuss steps you and your family take or can take to prevent stormwater pollution.