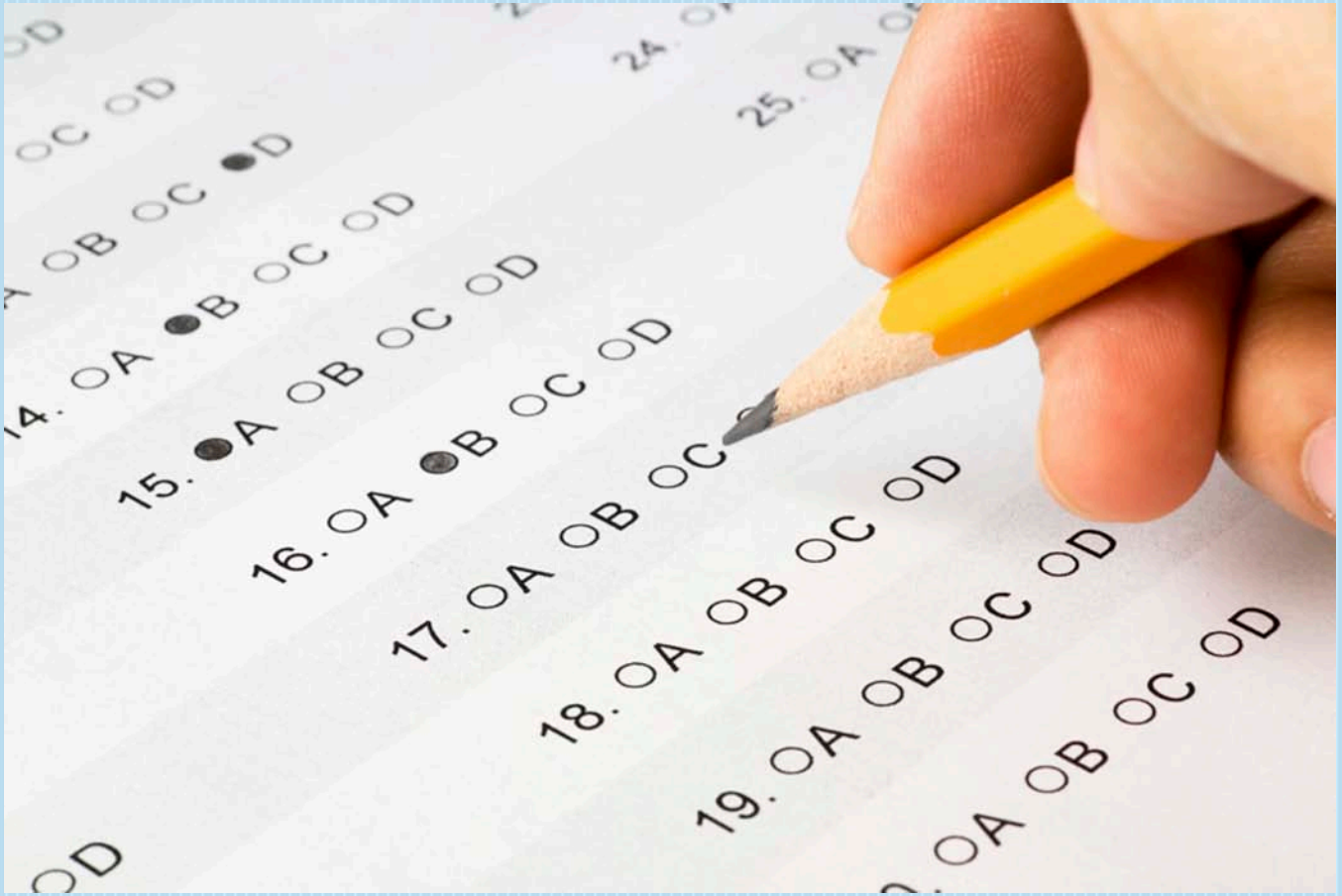
Storm Water Pollution Prevention Training

For Officials and Residents of Doylestown Township

THOUSANDS HAVE LIVED WITHOUT LOVE, NOT ONE WITHOUT WATER.

W. H. Auden, *First Things First*

Time for a Pop Quiz!



True or False: There is the same amount of water on the earth today that there was a million years ago.

True or False: Used motor oil is the number one pollutant found in surface water.

True or False: The Clean Water Act, the cornerstone of surface water protection, became law in 1940.

True or False: Less the 1% of the earth’s surface water is available for human consumption.

Which of the following are signs of storm water pollution?

Cloudy water

Algae blooms

Fish kills

Oily sheen

Foul odors

All of the above

Water that runs off a typical one acre house lot:

a) Is the same quality as from an acre of forest land.

b) Has twice as much contaminants as forest land.

c) Has 5 - 10 times as much contaminants as forest land.

What is Storm Water?

- Storm water is water flowing over the land during and immediately after a rain storm.
- Storm water does not flow into a wastewater treatment system, it flows into our surface waters
- What we do on the land affects the water quality and the habitat of our creeks and rivers. It also affects our quality of life, our fisheries, and our recreation.

Why do we have to do something to improve our storm water discharges?

- **In 1972, Congress passed the Clean Water Act and focused on point source pollution discharges to surface waters. Most point sources have been eliminated, others are permitted.**
  - The U.S. Environmental Protection Agency (EPA) defines point source pollution as "any single identifiable source of pollution from which pollutants are discharged, such as a pipe, ditch, ship or factory smokestack"

Why do we have to do something to improve our storm water discharges?

- **In 1990, the EPA began the National Pollutant Discharge Elimination System (NPDES) Permitting process to address <u>non-point sources</u> of pollution.**
  - Pollution generated by diffuse land use activities rather than from an identifiable or discrete facility. It is conveyed to waterways through natural processes, such as rainfall, storm runoff, or groundwater seepage rather than by deliberate discharge

What can you do at home?

- Keep litter, pet wastes, leaves and debris out of street gutters and storm drains—these outlets drain directly to lake, streams, rivers and wetlands.

Turk Rd

Rolling Hill Blvd.

Rolling Hill Blvd.

Rolling Hill Blvd.

What can you do at- Home Erase Green Envy

- *Planning and design*. Consider sunlight, soil and drainage conditions; desired maintenance level; which existing plants will remain; plant and color preferences; and budget.
- *Soil improvement*. Mix peat moss or compost into soil before planting to help the soil retain water. Use terraces and retaining walls to reduce water run-off from sloped yards.
- *Appropriate plant selection*. Choose low-water-using flowers, trees, shrubs, and groundcovers. Many of these plants need watering only in the first year.

What can you do at home?

- *Practical lawns.* Limit the amount of grass area. Plant ground-covers, indigenous plants, or slow-growing, drought tolerant vegetation. If replanting lawns, use drought-tolerant grass seed mixes.
- *Efficient irrigation*. Install water-efficient drip or trickle irrigation systems.
- *Effective use of mulches*. Use a 3-inch deep layer of mulch, such as pine needles, shredded leaves, or bark. Mulch keeps soil moist, prevents erosion, and smothers weeds.

What can you do at home?

- *Appropriate maintenance*. Properly timed fertilizing, weeding, pest control, and pruning preserve a landscape's beauty and water efficiency.

What can you do at home?

- Clean up spilled brake fluid, oil, grease and antifreeze. Do not hose them into the street where they can eventually reach local streams and lakes. Recycle used oil at Participating locations in your community.
- Control soil erosion on your property by planting ground cover and stabilizing erosion-prone areas.
- Have your septic system inspected and pumped, at a minimum every three years.

Pebble Woods Dr.

What can you do at home? Reduce Water Usage!

- Run the dishwasher and laundry machines only with full loads. Use the shortest wash and rinse cycles and the lowest water level setting possible. Avoid the permanent press cycle, which uses an additional 10 to 20 gallons of water.
- When hand-washing dishes, do not let the water run continuously.
- Avoid using garbage disposal systems.
- When buying a new washing machine, choose a suds-saver model.

What can you do at home? Reduce Water Usage!

- In the bathrooms, place two half-gallon plastic bottles filled with water in the toilet tank to reduce the amount of flush water used.
- Take shorter showers and use a water-conserving showerhead (less than 2.5 gallons per minute) rather than taking baths, which use 30 to 50 gallons of water.
- When shaving, brushing teeth, or washing your face, do not let the water run continuously.
- Use a bucket when washing your car, and wash and rinse sections individually. Use a high-pressure, low-volume hose with a nozzle.

What can you do at home?

- Install Green Techniques at home! Install a rain garden, green roof, rain barrels etc.
- Purchase household detergents and cleaners that are low in phosphorous to reduce the amount of nutrients discharged into our lakes, streams and coastal waters
- Dispose of used oil, antifreeze, paints and other household chemicals properly—not in storm sewers or drains. Check the counties website for the next Household Hazardous Waste Event.

What can you do at home? Car Washing

- 55-70% of all households wash their own cars at home
- 70-90% report that the drainage from those car washes runs directly into the street and storm system
- USE a commercial car wash.
- Wash cars on gravel, grass, or other permeable surfaces.
- Block off the storm drain during charity carwash events or using a insert to catch wash water.
- Pumping soapy water from car washes into a sanitary sewer drain.

What can you do at home? Car Washing

- If pumping into a drain is not feasible, pumping car wash water onto grass or landscaping to provide filtration.
- Using hoses with nozzles that automatically turn off when left unattended.
- Using only biodegradable soaps.

Interested in storm drain stenciling volunteer projects?

Contact info@doylestownpa.org