

The City of Roanoke, Roanoke County,
Town of Vinton, and Clean Valley
Council are committed to working
together to improve stormwater quality
in the Roanoke Valley.



For more information call (540) 345-5523.



**GIVE
WATER
A HAND**

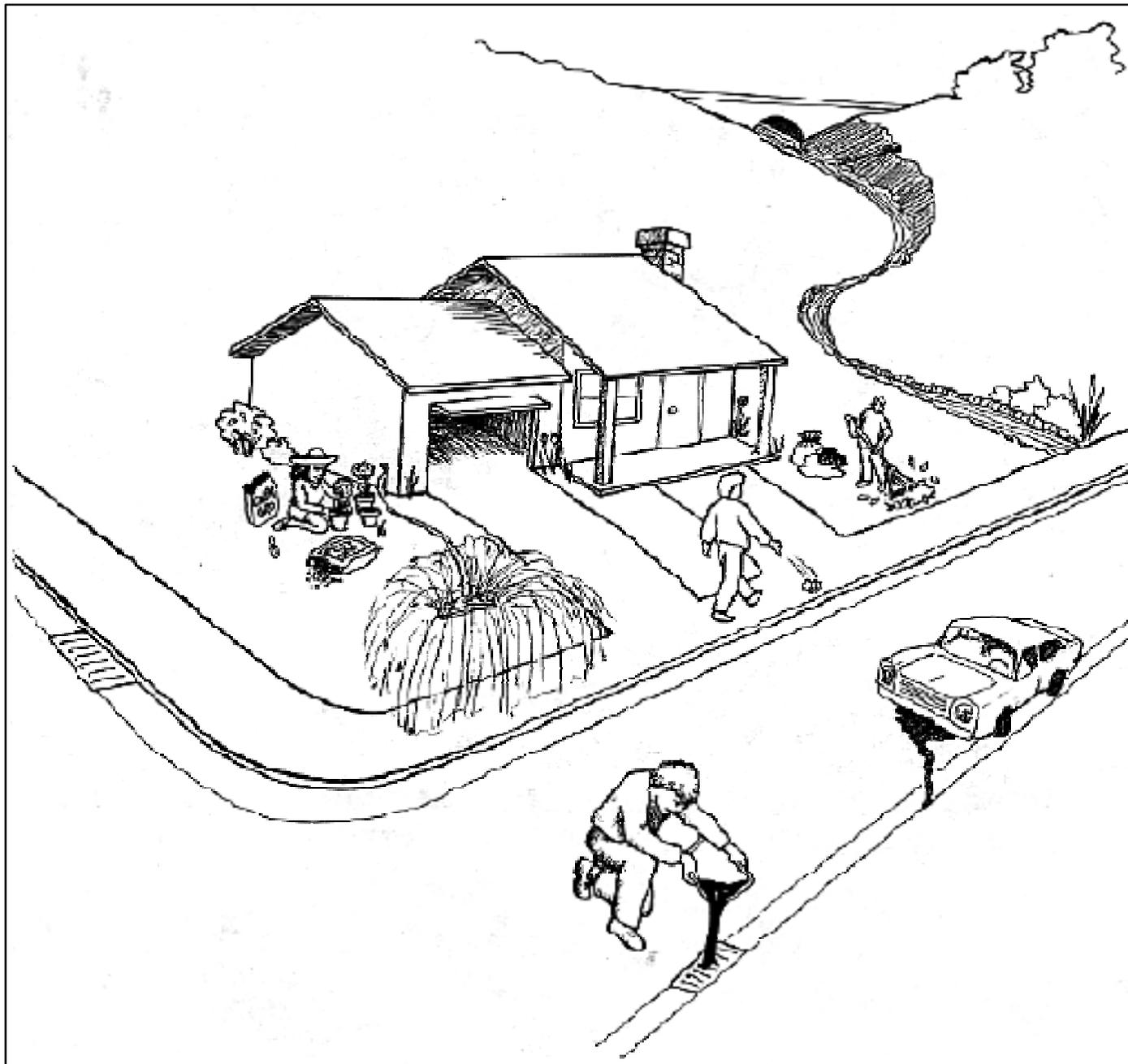
Many graphics in this document provided with permission by the U.S. Environmental Protection Agency.

The City of Roanoke, Roanoke County, Town of Vinton and Clean Valley Council are committed to working cooperatively to improve stormwater quality in the Roanoke Valley. For more information call 540.345.5523.

What's **WRONG** With This Picture??



The people below are taking care of their car, but they are doing many things that can damage the environment, especially our water. Circle spots where you think something could harm our waterways.



Some of the graphics in this document are from the U.S. Environmental Protection Agency.

Kids' Page



Nonpoint Source (NPS) Pollution Word Search

To do the word search read these paragraphs. Then find the listed words in the word search.

The United States has made tremendous advances in the past 25 years to clean up the aquatic environment by controlling pollution from industries and sewage treatment plants. Today, nonpoint source pollution remains the Nation's largest source of water quality problems. Nonpoint source (NPS) pollution occurs when rainfall, snowmelt, or irrigation runs over land or through the ground, picks up pollutants, and deposits them into rivers, lakes, and coastal waters or introduces them into ground water. The most common NPS pollutants are sediment and nutrients. Other common NPS pollutants include pesticide, pathogens, salts, oil, grease, toxic chemicals, and excess fertilizer.

The watershed approach is one way to determine the effectiveness of management techniques. It looks at a water body but also the entire area, including all the potential sources of pollution that drains into it. Water conservation uses technologies that limit water use in the bathroom, kitchen, laundry room, lawn, driveway, and garden, thereby reducing the demand on existing water supplies and limiting the amount of water runoff. A more technical approach can be used which includes the implementation of best management practices (BMP). These are pollution control measures that can be used to prevent or reduce the impacts from activities that may cause water pollution. Examples of BMPs include, erosion control techniques like silt fencing, establishment of riparian (vegetated) zones next to waterbodies to filter out pollutants, and xeriscape landscaping which incorporates native species, proper irrigation, mulches, and appropriate maintenance schedules. Many local groups organize volunteer monitoring efforts which provide information that can help government agencies understand the magnitude of NPS pollution.

Pollution Solution Quiz



The Problem...

The left-hand column below contains pollutants that will harm streams and rivers if they enter storm drains. On the right is a list of the harmful effects the pollutants can cause. Can you match each pollutant with its undesirable effect?

- 1) Motor Oil
- 2) Pet Waste
- 3) Anti-freeze
- 4) Paint
- 5) Pesticides & Herbicides
- 6) Plastic
- 7) Fertilizer
- 8) Yard Waste

- A) Accelerates growth of aquatic plants, which rob water of oxygen when they decay.
- B) "Killer" chemicals that pose serious human and environmental health risks.
- C) Can contain lead, which is highly toxic to people and animals.
- D) This radiator fluid is poisonous to plants and animals, and seriously depletes oxygen in water.
- E) A single quart of this lubricant will contaminate two million gallons of drinking water.
- F) Takes centuries to biodegrade; harmful to animals that try to eat it.
- G) Clogs storm drains and depletes oxygen in streams when it decays.
- H) Releases bacteria and other harmful materials into streams.

The Solution...

Can you match the pollutants in the left-hand column with the appropriate pollution solution? Some solutions are appropriate for more than one pollutant.

- 1) Motor Oil
- 2) Pet Waste
- 3) Paint
- 4) Anti-freeze
- 5) Pesticides & Herbicides
- 6) Plastic
- 7) Fertilizer
- 8) Yard Waste

- A) Compost or bag and deposit in trash.
- B) Take to Household Hazardous Waste Collections, or share unused portions with others.
- C) Recycle or put in trash.
- D) Bag and deposit in trash or flush down toilet.
- E) Don't over apply; clean up excess. Never hose into gutter.
- F) Recycle at recycling centers specializing in car products, or take to Household Hazardous Waste Collections.

