# Unit XI:

# Non-point Sources of Pollution: A Field Trip

# Unit XI Non-Point Source of Pollution Field Trip Introduction

A field trip to explore non-point sources of pollution in the (**your watershed here** [*Flat River Reservoir*]) Watershed is a great idea for your teacher-training workshop. Your state environmental agency (e.g. DEM, DEP, DES) may be willing to help you select some good examples of non-point source pollution to visit. Possible sites include:

- Farms that use BMP:
  - Crop rotation
  - o Manure management
  - o Irrigation practices
  - o Livestock grazing
- Erosion control methods around constructions sites
- Combined sewage overflow pipes
- Runoff management of roads and highways
- Detention basins
- Wildlife management areas
- Erosion at river and pond access sites
- Innovative ISDS projects
- Sensitive areas such as salt ponds

## FIELD TRIP: NON-POINT SOURCES OF POLLUTION

The following farms were visited during the pilot project (in Rhode Island). This information is provided only as an example of what can be arranged. PLEASE DO NOT contact these farms directly.

**Perreault Farms** – Students observed turf farm, and participated in demonstration of irrigation scheduling project. We discussed differences in soil water holding capacities, methods of measuring soil moisture, crop rooting depth as it relates to irrigation needs, and using the "Scheduler" computer program to schedule timing of irrigation.

**Chickadee Farm** – Students observed complete farming operation. This farm produces eggs from "layer" chickens. Students were let through the processing area where eggs were checked for quality, sized, washed, and packaged. They also went into one of the chicken coops to see the thousands of chickens housed there. We discussed the waste storage structure (for chicken manure) that SCS planned for the farmer.

**Reynolds Dairy Farm** – Students arrived at their farm during the milking of the cows. Mrs. Reynolds explained how the cows were bred and raised to be milkers, what they do with the male calves, where the milk goes after it leaves their farm, etc. Students were shown the concrete pad and waste storage area installed to contain the manure and prevent it from entering a nearby stream. Mrs. Reynolds also discussed additional work that they hope to complete to more fully address all of the resource concerns on the farm.

**Detention Basin**- Students looked at a basin installed near McDonald's in Richmond (Rt. 138). This basin collects runoff from the parking lot and "treats" it before it leaves the basin. The basin is designed to store a certain amount before it overflows. It is also well landscaped, so it blends in well with the surrounding features.

**Kenyon Dairy Farm** – Students were taken on a tour of the corn and hay fields. Mr. Kenyon demonstrated the use and importance of various farm implements, such as a chisel plow, harrow, planter, etc. He also discussed their complete cropping sequence, emphasizing the need for rotations to control erosion and minimize pest damage.

Merner's Earth Care Farm – Students were taken on a tour of the composting operation and the small vegetable field. This farm is strictly organic, and composts horse manure, sawdust and shells and bones from the fishing industry to produce a rich organic, nutrient-filled material for his farm. He uses the compost to raise vegetables and Christmas Trees. He also has a landscaping business, and sells the compost to other gardeners.

### **FARM FIELD TRIP**

# PLEASE CONTACT THE NATURAL RESOURCES CONSERVATION SERVICE TO ARRANGE THE FARM FIELD TRIP FOR YOUR STUDENTS.

The best time of year for a farm field trip is early fall and late spring. Usually NRCS does not providing names and addresses for the farmers because 1) they don't want to overwhelm any one farmer with several busloads of students on a regular basis, and 2) farming operations can change over time, and they want to be sure that your students observe the most up to date methods of conserving and protecting soil and water resources.

To arrange a farm field trip, please contact your local Conservation District or local office of the USDA NRCS. To find your local conservation district, go to: <a href="http://www.nacdnet.org/resources/cdsonweb.html">http://www.nacdnet.org/resources/cdsonweb.html</a>. Click on your state and you will find the conservation districts in your state listed by county. To find your local NRCS office, go to: <a href="http://www.nrcs.usda.gov/about/organization/regions.html">http://www.nrcs.usda.gov/about/organization/regions.html</a>. Click on your state and then click on contact us. You may find your local office under your county name, or just try calling the state office's main number for help.