## **LESSON PLAN**

## Robert Filler - Tavares Middle School, Tavares, FL

**Lesson Title:** 

School Yard Runoff- Long Term Study

**Grade Level:** 

Middle School/High School

Topic:

What are the long term effects of storm water runoff from a school

campus on surrounding bodies of water?

**Time Required:** 

Multiple class periods during the year.

**Objectives:** 

Students will:

1) Develop skills in sampling, testing, and data collection

2) Organize and analyze data

3) Predict the effects on the environment

4) Observe results of long term predicted effects. (if possible)

**Materials:** 

Same as in "School Yard Runoff"

Computer for data collection and display

**Procedure:** 

- 1) Collect data using the "School Yard Runoff" activity.
- 2) Collect data throughout the school year.
- If possible, do same tests as "School Yard Runoff" on a regular schedule at the closest permanent water body to the school campus.

Data:

Data sheets stored in the computer to generate spreadsheets, charts, graphs, etc.

**Questions:** 

- 1) Are the predictions in "School Yard Runoff" supported? Why or Why not?
- 2) What factors could impact the data and results?
- 3) What are the results of long term runoff from the school campus?
- 4) What can be done to minimize the impact of school yard runoff?
- 5) How can the results of this study be used by the community in planning for future development?

## **Extended Activities:**

1) Visit the local Planning/Development Board to see how the local government deals with environmental impact on future development.

- 2) Develop a model for planning new school construction to minimize runoff impact on the environment.
- 3) Using the World Wide Web (www), explore how other communities are addressing this problem.