SOL-BASED ENVIRONMENTAL EDUCATION PROGRAMS
FOR SIXTH GRADE
PETER FRANCISCO SOIL & WATER CONSERVATION DISTRICT
Contact Elise Corbin, elise.corbin@vaswcd.org 434-983-7923

- **Where Does Your Water Shed? and Enviroscape Model (Science 6.8)**
  Students will learn about watersheds and map their watershed address from their school to the Chesapeake Bay. Then a watershed model is used to visually demonstrate point and non-point source pollution helping students to understand the environmental impacts of each person in a community. The portable 3-D model uses "rain" from a spray bottle to show pollution coming from urban, rural and industrial areas. The rain carries soil, fertilizer, pesticides (powdered drink mix), factory waste (cocoa), etc. downhill to the lake, where the effects of the pollution become plainly visible. The model then shows measures that can be taken to prevent our everyday pollution.

- **Watershed Tour (Science 6.8)**. Students are given a virtual watershed scenario. They divide into 4 groups and perform water quality tests on their group's water sample to determine which of 4 sites within the watershed that their water came from. Then each group explains to the class about the factors at their site which affected their water sample.

- **Erosion Experiments (Science 6.1 and 6.6)** Students are divided into 4 groups and assigned an erosion scenario (bare soil, gully/ditch, silt fence and sod) and given the appropriate kit that corresponds with their scenario. Each group will set up an erosion box and perform their experiment for the class. Students are given the opportunity to predict which scenario will have the most and which will have the least soil erosion.

- **A Drop in the Bucket, The Sum of its Parts/Dragon Fly Pond (Science 6.1, 6.8, Math 6.1, 6.6)**
  By estimating and calculating the percent of available fresh water on earth, students understand that this resource is limited and must be conserved. Students will divide up into groups of 2 or 3 and each group will be given an 11 x 17 sheet of paper with a section of a river drawn on it. They will also be given photocopied sheets with grocery stores, laundromats, farms, gas stations, houses, etc. so the group can develop their property. Each group's page will be taped together with the flow of the river to discover their effect on those downstream.

- **Water Quality Monitoring (Science 6.1, 6.6, 6.9)**
  This is introduction to water quality parameters include physical, chemical and biological monitoring of a body of water. Temperature, pH, alkalinity, nitrogen, phosphorous, turbidity and dissolved oxygen tests will be performed. Students will also get the opportunity to identify and count macroinvertebrates as a biological assessment of a body of water.