## Environmental Science Merit Badge

## Hidden Oaks Nature Center

Environmental Science is a 5 hour class. Scouts should bring a snack and plenty of water. Please no red liquids.

## What to bring:

- Blue card, pen and pencil.
- Appropriate clothing including closed toe shoes.
- Snack and water.
- Prework.

## Pre work

- 1. Make a time line of the history of environmental science in American identifying contributions made by the Boy Scouts of America to environmental science including dates, names of people or organizations and important events.
- 3e2. Do research on one species that was endangered or threatened but which has now recovered. Find out how the organism recovered, and what its new status is. Write a 100-word report on the species and discuss it with your counselor.
- 5. Pick a construction project for a park from the following list:
- a bridge across a stream,
- a campfire site
- a new trail connecting two existing trails

Identify the items that would need to be included in an environmental impact statement for your planned project. Include ideas for evaluating sensitive plants and animals as well as discuss the impact on soil (erosion issues, compaction, grading, etc.) and how you would safely construct the project to be useful to all park patrons, including the physically-challenged. Does your project impact water quality, air, soil, water or noise pollution? How would you lessen these impacts?

6. Find out about three career opportunities in environmental science. Pick one and find out the education, training and experience required for this profession. Write a brief paragraph including this information as well as why this career would interest you. Some options include:

Arborist

Invasive plant manager

Bioengineer

Environmental engineering

Oceanographer

Volcanologist

Natural Resource Manager

**Invasive Pest Manager** 

Environmental Protection Specialist (EPA)

Soil Scientist/Conservationist

**Biologist** 

Rangeland Management Specialist

Environmental Researcher

For help or questions, contact Emily Cole at <a href="mailto:Emily.cole@fairfaxcounty.gov">Emily.cole@fairfaxcounty.gov</a>, or at (703) 941-1065.