Soil & Water Conservation Merit Badge Rally

October 16, 2021

WELCOME: Please read all the information below. This information will help you get prepared for your class and be successful in earning your Soil & Water Conservation Merit Badge.

SOIL & WATER CONSERVATION WORKBOOK: Soil & Water Conservation requirements are listed below. Here is the link to the workbook http://usscouts.org/mb/worksheets/Soil-and-Water-Conservation.pdf

SOIL & WATER CONSERVATION MERIT BADGE PAMPHLET: If you need a copy of the pamphlet you can …

1. Ask your Scoutmaster if they have one in their Library
2. Check your local Council store
3. Purchase a digital download at https://www.scoutshop.org/.

NOTE: There is **no Zoom session prior** to your class on October 16th.

- However, you are expected to do the requirements which are listed below. The idea is that when everyone meets on October 16th, if all pre-requisites have been completed, then you will have earned this merit badge.
- Your instructor will be keeping track of what everyone completes on a requirements sheet. That sheet is turned into Gamehaven, and blue cards are sent out via email to the main contact on the registration.

TIME: All Scouts must check in at the admin building to get your Merit Badge Packets and information on where the class is held in the Cub Scout area of Gamehaven Scout Reservation.

MB COUNSELOR: Counselor for Soil & Water Conservation Merit Badge is Ms. Elizabeth Wright brookelinn_02@hotmail.com

SOIL & WATER CONSERVATION REQUIREMENTS: Please read through requirements and answer questions on your workbook. Be prepared to discuss or present in class on 16th. The Merit Badge pamphlet answers many of these questions below.

- **Requirement 1:** Do the following
  a. Tell what soil is. Tell how it is formed
  b. Describe three kinds of soil. Tell how they are different.
  c. Name the three main plant nutrients in fertile soil. Tell how they can be put back when used up.
- **Requirement 2:** Do the following
  a. Define soil erosion
  b. Tell why soil erosion is so important. Tell how it affects you.
  c. Name three kinds of soil erosion. Describe each
  d. Take pictures of or draw two kinds of soil erosion
- **Requirement 3**: Do the following
  a. Tell what is meant by "Conservation practices"
  b. Describe the effect of three kinds of erosion- control practices.
  c. Take pictures of or draw three kinds of erosion-control practices.
- **Requirement 4:** Do the Following
  a. Explain what a watershed is
  b. Outline the smallest watershed that you can find on a contour map.

c. Outline, as far as the map will allow, the next larger watershed that also has the smaller one in it.
d. Explain what a river basin is. Tell why all people living in a river basin should be concerned about land and water use in the basin.
e. Explain what an aquifer is and why it can be important to communities.

- **Requirement 5:** Do the following
  a. Make a drawing to show the hydrologic cycle.
  b. Demonstrate at least two of the following actions of water in relation to soil: percolation, capillary action, precipitation, evaporation, transpiration.
  c. Explain how removal of vegetation will affect the way water runs off a watershed.
  d. Tell how uses of forest, range and farmland affect usable water supply.
  e. Explain how industrial use affects water supply.
- **Requirement 6:** Do the following
  a. Tell what is meant by "water pollution"
  b. Describe common sources of water pollution and explain the effects of each.
  c. Tell what is meant by "primary water treatment" "secondary waste treatment" and "Biochemical oxygen demand"
  d. Make a drawing showing the principle of complete waste treatment.
- **Requirement 7:** This will be discussed at length with your counselor

Website pages to help with Research

- **Envirolink Network -** https://www.envirolink.org/
- **Environmental Protection Agency -** https://www.epa.gov/
- **Natural Resources Conservation service**
  https://www.nrcs.usda.gov/wps/portal/nrcs/site/national/home/