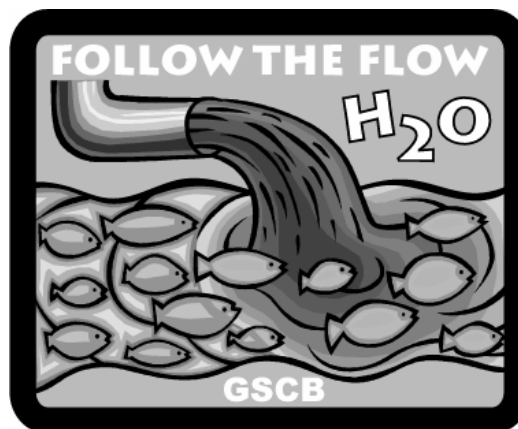


# Follow the Flow:

## H<sub>2</sub>O



### Objective:

This patch is designed to raise awareness of non-point source pollution. It is also designed to teach you how to prevent non-point source pollution from occurring.

Non-Point Source Pollution is a serious threat to our environment, but many people have no idea what it is. Almost everyone knows that pollution is a problem, and almost anyone can point out a source of pollution if you ask them to. Many will point out a pipe from a factory that is discharging waste into a river. Others will point out an oil tanker that has run aground and is spilling its cargo into a river. These two things are point source pollution. They come from one clearly identifiable source. What many people are not aware of is non-point source pollution. This kind of pollution is generated over large areas with many places of origin and can come from many different sources: animal waste, septic systems, household chemicals and waste oil, fertilizers and pesticides used on lawns, golf courses and crop fields, chemicals used on our streets, parking lots and construction sites, and other sources.

### Levels:

Appropriate for all age level Girl Scouts.

**Requirements:** Complete at least 4 activities to earn the patch.

1. Learn what non-point source pollution is. This could be through research, by talking to someone knowledgeable in the field, or through an Enviroscape program (leaders can be trained to lead this demonstration at Fall School and check the model out from Council).
2. What's in a watershed?
  - a. Learn what a watershed is. One way of understanding this important concept is to look at a leaf. You should see little tiny veins, which lead into medium sized veins, which lead into the central vein. This is the way your watershed works, a small creek near you might lead into a bigger river, which might lead into the ocean, the bay, or the Delaware River. What might this mean for pollutants that make it into that small stream? Go to [www.ctic.purdue.edu/KYW/KYW.html](http://www.ctic.purdue.edu/KYW/KYW.html) for more watershed information.
  - b. What's your watershed address? From the U.S. Geological Survey website at [www.usgs.gov/wsc/index.html](http://www.usgs.gov/wsc/index.html), click on "Map Your Watershed". Use the clickable maps to trace from your region to your local watershed. Look for the yellow box to appear by your cursor before you click for the next level to find the name of each division as you go along.

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3. All of the Delmarva Peninsula south of the C&D Canal is on an unconfined aquifer. Does this mean anything to you? Learn what an aquifer is, what the difference between a confined aquifer and an unconfined aquifer is, and what this has to do with water pollution. One way of doing this is to build your own aquifer—visit <http://www.epa.gov/adopt/patch/html/aquifer.html> for instructions.
4. Find out what kinds of recreation events/sports are done on your local stream or river. How do they affect the quality of the waterway? How does the quality of the waterway affect them?
5. Discover what kinds of fish and wildlife live in your local stream or river. What species in Delmarva waterways have been affected by non-point source pollution?
6. Find out where your drinking water comes from. What kind of treatment does it receive before it comes to your tap?
7. Learn about environmentally-friendly cleansers. Most can be easily made with common household ingredients. Make a few and (with the permission of an adult) try them out.
8. Participate in a storm drain-stenciling project to remind people not to pour harmful chemicals down storm drains. Contact your local municipality and visit <http://www.epa.gov/adopt/patch/html/guidelines.html> for more information.
9. Create a poster or presentation depicting the sources and effects of water pollution in your area. Share your poster or presentation with a group of younger girls to help them learn about non-point source pollution.

**How To Purchase Patches:** You may purchase the patch at the Bay Shop when you are finished with the requirements of this patch.