

“A Conversation with Greenable Woodbridge”... Cleaning up pollution

While it would be preferable to prevent pollution in our watershed from happening in the first place, the unfortunate reality is that sometimes that doesn't work. In those instances, we need to be prepared to clean up that pollution and restoring our local ecosystems.

A good way for members of the community to help with cleaning up pollution in our ecosystem is to organize stream clean ups. Get a group of people together and walk down a stream or other water body and pick up any litter you may see. If the stream goes onto private property, be sure to get the owner's permission first, and determine the appropriate disposal site for any trash collected. With some planning, a stream clean up is a great way to help our environment while bringing the community together in service.

That's good for pollution you can pick up, but what about pollution of the water itself?

This is where the NJ Department of Environmental Protection's office of Water Monitoring & Standards comes in. The NJ DEP hosts a volunteer monitoring program. This program matches community volunteers with training opportunities in watershed monitoring. The types of monitoring done, as described by the DEP, are as follows:

- **Biological Monitoring:** This focuses on Benthic Macroinvertebrate sampling. This means collecting and identifying samples of animals without a backbone, large enough to see with the naked eye, that live in the water. Examples throughout NJ include various insects, crayfish, snails, mussels/clams, and worms. The types of animals found in the water can be a good indication of what sort of pollution may be present.
- **Chemical Monitoring:** A way to look at specific water parameters in greater detail in order to determine the health of a stream. Chemical monitoring is like taking a snap shot in time of the stream's chemistry, because the water chemistry can change hour to hour. The method of monitoring would depend on the type of chemical you are concerned with in a particular water body, and the purpose of the data you intend to collect.
- **Visual Monitoring:** A visual assessment looks at observations of a stream's habitat, characteristics, and major physical attributes. A healthy stream is a busy place. Wildlife finds shelter and food near and in its waters. Vegetation grows along its banks, shading the stream and filtering pollutants before they enter the stream. Within the stream itself are fish, insects and other tiny creatures with specific needs: dissolved oxygen to breathe; rocks, overhanging tree limbs, logs and roots for shelter; vegetation and other tiny animals to eat; and special places to breed and hatch their young. For any of these activities, they might also need water of specific velocity, depth and temperature. Many land-use activities can alter these characteristics, causing problems within the entire habitat.

As you can see, there are many ways a community can come together to take care of polluted waters.