



## **Out of Sight, Out of Mind?**

When it comes to lots of things, once something is out of our sight, we often no longer think about its consequences. Did you ever think about what happens to the salt you threw on your sidewalk last week to melt the ice? When that big pile of snow the snowplow left at the end of the street melted, where did all that salt mixed in the snow go? Water (from melting snow) dissolves that salt (or other contaminants) and can infiltrate into the groundwater that we all drink, especially in areas where sinkholes or other features exist that promote the rapid infiltration of groundwater. Here are some things that you can do to help:

1. Where possible, use non-chemical methods (such as sand/kitty litter for traction).
2. When using salt, use the minimum amount required for effective traction control.
3. Avoid using salt in sinkhole areas and try to direct run off from streets away from sinkholes to prevent contaminated water from rapidly infiltrating into the groundwater. Slow infiltration allows for the soil to act as a filter and remove some types of contamination.

## **Don't Be a 'Drain' to the Water Supply**

The most likely people to contaminate the local water supply are not rogue individuals or a terrorist group, it is you and your neighbors. Well meaning consumers dispose of hazardous materials down their kitchen and bathroom sinks on a regular basis. Some hazardous household wastes include: paints, household cleaners, herbicides and pesticides, floor/furniture polish, batteries, and automobile fluids. These are items that should not be dumped down drains or disposed of with the curbside trash.

## **Garbage In, Garbage Out**

Have you seen the naturally occurring bowl or cone shaped holes in or around your subdivision? These holes known as sinkholes are common in areas where carbonate rocks, which easily dissolve in groundwater, are present below the surface. Historically sinkholes have been inviting sites for people to dump trash and other wastes. However, dumping can contaminate the groundwater since sinkholes act as a direct conduit to the groundwater, your drinking water source. The direct conduit from the sinkhole to the groundwater allows very little filtering of the material coming in. Think of it as "garbage in (to the sinkhole), garbage out (of your tap)". Besides direct dumping, sinkholes are also affected by other sources of contamination including the application of fertilizers, herbicides, and pesticides, leakage associated with improperly lined landfills, and faulty septic systems that seep directly into the groundwater. Prevent potential contamination of your water source by not dumping garbage into sinkholes and minimize the use of chemicals around them. Remember what you put in a sinkhole could end up in your tap.

## **Where Does Your Water Come From?**

Did you know that your water comes from a river? The surface water intake pumps water from the Roanoke river to the treatment plant for treatment prior to distribution to the community. To help protect the water source, your water provider has created a source water protection plan that talks about how your water could be vulnerable and how to protect it. If you're interested in finding out what you could do to protect your water, contact your water provider and ask to see the source water protection plan.



### **Are You Fertilizing Your Water?**

Have you ever thought about what happens to the fertilizer you put on your grass or in your flower beds? If you over fertilize, the fertilizer might not get completely used and could end up going into your water source. To prevent this from happening, make sure you read and follow the directions on the fertilizer package about the amount and rate of application. You should also fertilize at the times of year and only the plant types specified on the package. If this information is not available on the package, contact the manufacturer. You should also talk with anyone you hire to maintain your lawn or garden to ensure they are not over fertilizing. Using the correct application rates at the suggested times for the recommended plants can prevent fertilizer from filtering into the ground and potentially into your water. So, when you fertilize, be careful to not over fertilize or you could end up drinking it.

### **Who Cares About Rusty Old Tanks?**

Ever notice large tanks sticking out of the ground or sitting above the ground? Those tanks are called Above Ground or Underground Storage Tanks (ASTs or USTs). ASTs and USTs can hold a variety of substances such as propane, fuel, or other chemicals and can be found at local businesses, farms, and even private residences. Although storage tanks are great ways to hold large amounts of substances, they can rust and develop cracks over time causing the substances they're holding to leak into the ground. When these substances leak into the ground they can work their way into your water.

So how can you prevent storage tanks from affecting your water? If you have a storage tank on your property, make sure you check it regularly for signs of leakage. Regular monitoring is the best way to prevent underground storage tanks from leaking. If you notice someone else's tank is leaking, let them know so they can correct the problem. Placing tanks on concrete pads or asphalt makes leaks more visible and prevents them from getting into the ground. Painting and repairing tanks when you first notice rust or cracks also prevents the tanks from leaking.

### **How Much Is Too Much?**

Sometimes you just need to spray those bugs! Whether Japanese beetles are eating your roses or weeds are overwhelming your grass, pesticides and herbicides are the only way to minimize the damage to your plants, right? Not necessarily.

Integrated pest management (IPM) is the use of biological, cultural and chemical methods to create a comprehensive pest management program. IPM techniques include planting cover crops to prevent weed growth in your garden and putting beneficial insects in your garden to eat the undesirable insects and minimize insect infestations. Another important factor to consider is buying the right plant for the right place. Plants placed in the required conditions for that plant tend to have fewer insect problems and require less water. Applying pesticides according to manufacturer's requirements for plant type, rate, and at specified times can also decrease your pesticide use and is considered a part of IPM.

The use of IPM protects the water resources in your area. Not only can you protect local wildlife using IPM, you also can protect your drinking water source. If not applied properly, the chemicals you use in your yard can infiltrate in the ground and contaminate your drinking water source. So, think about the chemicals you're spraying in your yard because sometimes the amount you're using just might be too much.