

Stormwater Report — August 2005



Darn ... there you are, in your car, you're probably late for something, you'd definitely rather be moving, but instead you're stuck in a construction zone. Well, next time that happens, why not pass the time by looking at the erosion and sediment control practices on site. I know...it's not exactly I Spy but at least it gives you something to do. Start with the stabilized construction entrance. It's a gravel driveway pad that traps the mud from the tires of construction vehicles in order to keep the roadway clean. Why bother? Well, mud on the road is not only a safety hazard, but when it rains, all of that mud is going to end up in the nearest creek, ditch or storm drain. That mud will fill up these conveyances and contribute to flooding. Speaking of flooding, ever notice those big ponds on some construction sites? While they're not for fishing or swimming, they do collect the runoff from the site, helping to control flooding and trap eroded soil. Why would anyone install a pond in these days of West Nile Virus? Well, it turns out that properly designed and maintained ponds allow flowing water which discourages mosquito breeding. In contrast, "dry" ponds are never really dry – those small pockets of stagnant water actually encourage mosquito breeding habitat. The downside to these ponds is that they can be attractive nuisances – fencing is usually a good option.

Another thing you'll probably notice is silt fence. Those are the black plastic sheets that you'll see staked in a variety of places on a construction site. Used properly, they help to keep soil in place. Used improperly, they cause erosion. How can you tell? The silt fence should standing upright with the stakes on the downhill side and the bottom should be buried. The silt fence should not be knocked over and you shouldn't be able to see daylight underneath. It's also not good if the silt fence is situated in a ditch where water can flow in a channelized manner. Since the water can't flow through the silt fence, it tends to flow around which widens the eroding area. Silt fence with a hole cut through the top or bottom is also not a very good idea. While water can flow through the hole in the silt fence, it tends to flow at a very high velocity which also creates more erosion. Sometimes you'll see stone check dams in a ditch or swale. These are a great way to control erosion in a place where water flows. Stone check dams dissipate the energy of the flowing water, trap the sediment and contain the eroding area. Speaking of controlling erosion on a construction site, the cheapest and easiest way to accomplish this feat is to seed and mulch the disturbed areas. By applying a fast-germinating seed mix and placing a straw mulch over the top, much of the site can be stabilized and soil loss will be greatly reduced.

So, by now your flag person has probably swiveled their sign from STOP to SLOW and you're happily on your way. You can also feel especially proud of your newfound knowledge of stormwater and erosion and sediment control. Let me be the first to say, Happy Construction Season!

— Jo-Anne Faulkner, Oneida County Soil & Water Conservation District Representative