Home Gardening to Protect Groundwater

Your gardening practices have everything to do with water quality. The impacts of gardening at the homeowner scale are realized through a cumulative effect. The chemical and fertilizer products you use on your landscape could end up in our drinking water through runoff or leaching. Leaching is a particular problem in the Spokane Valley, due to the permeable soils that overlie the Aquifer. If you over water, the chemicals and fertilizers are transported down through the soils and into the groundwater supply, instead of being taken up by plants. The contamination potential of chemicals depends on their solubility (staying dissolved in water) and persistence (length of time it will last in the environment, measured in 'half-life').

<u>Always ask yourself as you're applying products to your landscape,</u> <u>"Would I want to drink this?"</u>

The Good News!

The following list provides alternatives to customary gardening practices that will directly aid in protecting your drinking water:

- Use organic fertilizers that release nutrients slowly.
- Skip fertilizing altogether, or apply smaller amounts throughout the year instead of one large application once a year.
- Plant less lawn area and introduce more planting beds for trees, shrubs, groundcovers and/or perennials.
- Increase the organic matter in your soil. This will help to hold water longer, reducing the need to water so frequently, which can lead to over watering and leaching. A rule of-thumb for watering is: 1/2 inch or less per hour to avoid runoff.
- Do not use chemicals near open water such as streams, rivers or lakes.
- Reduce runoff to storm drains by not watering impermeable surfaces such as concrete, asphalt or compacted ground.
- Keep your plants healthy so that chemicals are not as necessary by planting disease and pest resistant varieties.
- Use mulch or fabric covers to prevent weeds.
- Match plants with growing conditions by choosing plants adapted to this climate (i.e. 18"+ precipitation per year) and shade tolerant plants for shady areas.
- Use chemical methods as a last resort, and then choose the least toxic compounds such as horticultural oils, soaps and botanical insecticides.
- Install drip irrigation to save water and save \$\$\$.