

## **Washington State Lake Protection Association, *Waterline*, Sept. 2004**

*This is the second in a series of articles addressing the top areas of concern identified by lake residents in the WALPA survey.*

### **Responsible pesticide and fertilizer usage on lake shores and watersheds**

**By BiJay Adams, Lake Protection Manager, Liberty Lake Sewer and Water District**

We all live in close proximity to some source of water, whether it is a lake, river, ocean, stream or aquifer, and our individual actions can have serious impacts to our environment. Small amounts of pollution from each of us may not seem to be a problem, but the combined effects of pollutants from the millions who live in Washington state are threatening our clean water resources. When it rains, rainwater can pick up debris, chemicals, dirt, and other pollutants and flow into a lake, stream, river, wetland, or coastal water. Untreated stormwater flows into the waterbodies we use for swimming and fishing, and to provide drinking water. Polluted stormwater runoff can adversely effect plants, fish, animals and people.

Cumulative effects from residential activities are also a significant source of pollutants, including household chemicals, paints and solvents; fertilizers, pesticides, insecticides, and herbicides used on gardens and lawns; nutrients and fecal matter from failing septic systems and domestic animals; and, metals and toxins from wash water, oil, antifreeze, transmission and brake fluids; and fuel from automobiles.

Used cautiously, fertilizer is not a problem. If you apply too much fertilizer or apply it at the wrong time, it can wash off your lawn or garden, and enter your nearby lake, river, stream or aquifer. Fertilizer provides extra essential nutrients for plants to grow, and if made available to lakes and streams, extra fertilizer can mean excessive algae and aquatic plant growth. Too much algae threatens water quality and makes boating, fishing, and swimming unpleasant. Excess fertilizers and pesticides applied to lawns and gardens wash off and pollute streams, rivers and lakes accelerating the natural aging process of that waterbody.

Pesticides are designed to kill or otherwise adversely affect living organisms, and most pesticides create some risk of harm. Pesticides can harm humans, animals, or the environment, but at the same time, provide benefits to society. Pesticides can kill potential disease-causing organisms, and control insects, weeds, and other pests. If used cautiously and sparingly, pesticides can be environmentally friendly and not cause health risks.

Here are some things you can do to minimize the effects of fertilizer and pesticide use on our environment and watersheds:

- Reduce the size of your lawn so that you are not using as much water, fertilizer, and other lawn care chemicals.
- Don't over water your lawn.
- Don't fertilize before a rain storm.
- Use pesticides and fertilizers sparingly. When use is necessary, use these chemicals in the recommended amounts. Use organic mulch or safer pest control methods whenever possible.
- Try using phosphorus-free fertilizer.
- Practice the use of organic fertilizers and compost, rather than using chemicals that are harmful to waterbodies.
- Dispose of or recycle oil, antifreeze, paints, and other household chemicals at local facilities especially designed to accept household chemical waste.
- Preserve lake and stream shoreline vegetation to create a buffer zone, and to reduce the amount of watering and fertilization.
- Get involved in programs to improve and protect your watershed.

References:

Washington State Department of Ecology

Spokane County Public Works

U.S. Environmental Protection Agency

U.S. Geological Society

British Columbia Ministry of Environment, Lands and Parks

Washington State University Cooperative Extension