



## Frequently Asked Questions about Native Plant Control in Lakes

**Question: Why do people want to treat their native plants? Aren't they an important part of the lakes ecosystem?**

**Answer:** Aquatic plants play a very important role in lake ecosystems. As lakes become more developed and urbanized, it is not the areas where plants grow, but how much they grow that becomes an issue. Many lakes are experiencing heavy plant growth in parts of the lake where people wish to recreate. It is very common to see aquatic plant problems directly related to human activity in the watershed (lawns along the shoreline, septic systems, etc.). The purpose of Ecology's Aquatic Plant and Algae Management permit is to allow people to remove some native plants which interfere with recreation, while protecting the rest. It is a balancing act.

**Question: Why does Ecology allow people to use herbicides to control native plants?**

**Answer:** All aquatic herbicides are registered for use by the Environmental Protection Agency (EPA) and Washington State Department of Agriculture (WSDA). Ecology cannot legally prohibit chemical control of native plants, but does regulate their use under Aquatic Pesticide permitting programs. When challenged by pesticide applicators and citizens, the Pollution Control Hearings Board has reminded Ecology that recreation and aesthetics are beneficial uses of lakes, just like fish and wildlife habitat. We have been instructed to use the best available science, as well as our own professional judgment to put reasonable limits on the chemical control of native plants. Ecology's permits limit the percentage of littoral zone (plant growth area) that may be treated.

**Question: Why doesn't Ecology make people look at all control options prior to allowing chemicals?**

**Answer:** In the past, Ecology's permits required permittees to consider non-chemical alternatives for their plant control. Unfortunately, it is not within Ecology's authority to regulate what plant control method is chosen. Ecology can regulate only those methods which involve chemical or physical water quality impacts. By the time people apply for a permit from Ecology, the method of control has already been chosen. We cannot deny a permit because we think someone should hand pull or work on watershed nutrient inputs instead. Ecology can only regulate the type of pesticide used, and the percentage of plant control. While Ecology's permit does not require vegetation management or lake management plans, we encourage all lake groups to develop these plans.

**Question: How is Ecology being more protective of the environment with their permits than EPA with the pesticide label?**

**Answer:** Coverage under Ecology's permit imposes additional requirements above and beyond the EPA label, including notification, posting, and monitoring. Many states do not have these kinds of permits, and anyone can apply a pesticide to water without

notifying their neighbors. Ecology also regulates which herbicides can be used in water. There are many aquatic herbicides approved by EPA, and even approved by WSDA, that Ecology does not allow for use in natural waters. Copper compounds are used in waters all over the United States, but due to concerns about impacts of copper on salmon, Ecology banned copper use in natural waters in 2001.

**Question: Are other states as protective as Washington?**

**Answer:** No. The use of pesticides in Washington waters is heavily regulated. In fact, there are few states that restrict pesticide use like Washington currently does. In Washington State, not only do you have to use an herbicide approved for aquatic use by EPA, but it also must be approved by Washington State Department of Agriculture (WSDA). In addition, Ecology then completes a full risk assessment on the herbicide prior to its approval under a permit. Washington State also considers any herbicide applied to water to be restricted use, which means it can only legally be applied by a licensed pesticide applicator who has passed an additional test on aquatic pesticide use. This licensing is done by WSDA.

**Question: What is the difference between a pesticide and an herbicide?**

**Answer:** A pesticide is any chemical that kills a target pest. Herbicides, insecticides, fungicides, etc, are all subsets of the term “pesticide.” Herbicides are targeted to kill plants.

**Question: How do these herbicides affect fish and wildlife?**

**Answer:** None of these herbicides have direct impacts on fish or wildlife when applied under our permits. Every pesticide allowed for use under this permit has undergone a risk assessment prior to its use. Many have also had Environmental Impact Statements completed.

Each herbicide approved for use under Ecology’s permits has a different chemical active ingredient, and is applied at a different rate. Please see the risk assessments at: [http://www.ecy.wa.gov/programs/wq/pesticides/seis/risk\\_assess.html](http://www.ecy.wa.gov/programs/wq/pesticides/seis/risk_assess.html). Here you will find herbicide-specific information.

All herbicides go through extensive toxicity testing. Any pesticide can kill non-target organisms at some chemical concentration. Toxicity testing requires that you test at different chemical concentrations until you get an effect (i.e. death, tumors, developmental problems, etc.). These concentrations are usually orders of magnitude higher than the allowable environmental concentration, and does not mean you will see these effects when a pesticide is applied to water.

**Question: Will my pet get sick if they drink or swim in pesticide-treated lake water?**

**Answer:** No. See answer above.

**Question: Why do herbicide labels have words like “Caution” or “Danger” on them if they are safe?**

**Answer:** Those signal words relate directly to the toxicity of the pesticide to humans. It is meant for the pesticide applicator or handler, and indicates what type of protective equipment they need. Many herbicides are skin or eye irritants, and that carries a strong warning on the label. Ecology tends to be more protective than the EPA label when dealing with herbicides that irritate skin or eyes. For those herbicides that are skin or eye irritants, the permit requires that a swimming advisory be posted at the treatment site for 24 hours after treatment. However, the type of irritation seen in lake exposure after herbicide treatment would be less than that of a person exposed to chlorine in a swimming pool.

**Question: Will these herbicides impact my well, or get into the groundwater?**

**Answer:** No. All of these herbicides have been evaluated for potential impacts to groundwater. For the most part, herbicides either dilute rapidly or bind to sediment. Once bound, they are unlikely to release back into the water column, or travel into groundwater. In the event that there was concern over impacts to groundwater, our permit would require specific mitigation or monitoring to address the issue.

**Question: Does getting a permit from Ecology mean you endorse the project?**

**Answer:** No. Ecology regulates the discharge of any material into waters of the state that has the potential either to pollute or to alter the biological or chemical characteristics of the water body (RCW 90.48.080). Ecology is further directed in [WAC 173-201A](#) to require any discharger to waters of the State to comply with the State’s surface water quality standards. Ecology has to issue permits regulating the activity, but it does not mean that we agree or disagree with the project objectives. Ecology’s role is to implement state law.

**Question: Why does a pesticide applicator provide a date range for treatment instead of a specific date?**

**Answer:** Because plant control is dependent on both plant growth and weather, the applicator provides himself a “cushion” of time to treat. Usually this is two to three weeks of time every few months for a treatment season. If you have special needs or concerns (i.e. vacation, birthday party, etc) you should contact the applicator directly – they are usually willing to work with you to adjust treatment dates.

**Question: What are the possible indirect impacts of native plant control?**

**Answer:** Some herbicides can cause short-term impacts on dissolved oxygen levels in the lake. Pesticide applicators are well-trained to understand the potential impact of treatments, and adjust the chemical application to prevent low oxygen conditions. Chemical applications can also increase the likelihood of algae blooms. However, many lakes without pesticide applications experience regular algae blooms.