



MAINE DEP FACT SHEET

USE OF HERBICIDES IN WETLANDS IN MAINE

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Increasing numbers of people are concerned with the spread of invasive plants in Maine and want to know what they can do to manage infestations. This Department of Environmental Protection (DEP) document outlines the current guidance and regulatory implications of herbicide treatments in wetlands. Other non-herbicide treatment methods may also be appropriate and effective means of control. Efforts to chemically control invasive plants have the potential to cause far reaching environmental effects. Therefore, when considering using herbicides, you must proceed cautiously to avoid causing adverse impacts to aquatic life and habitats.

State law governs aquatic pesticide applications. If the area to be treated is a water of the State or if the treatment will potentially result in a discharge to a water of the State, you must first obtain a Maine Waste Discharge License (WDL). From State Law:

► *Aquatic pesticide is defined as any substance applied in, on or over waters of the state or in such a way as to enter those waters for the purpose of inhibiting the growth or controlling the existence of any plant or animal in those waters (06-096 CMR Chapter 514).*

► *Waters of the State means any and all surface and subsurface waters that are contained within, flow through, or under or border upon this state or any portion of the state...except such waters as are confined and retained completely upon the property of one person and do not drain into or connect with any other waters of the state...(38 MRSA, §361-A(7)).* By definition, waters of the State include streams, rivers, lakes, ponds, marine waters, coastal and freshwater wetlands and ground water. In Maine, almost all wetlands are connected to either surface or groundwaters, and some are connected to both.

► *No person may directly or indirectly discharge or cause to be discharged any pollutant (to a water of the state) without first obtaining a license...from the department (38 MRSA, §413(1)).* However, Department rules limit such licenses in freshwaters in Maine to *aquatic pesticide or chemical discharges...conducted by the department or an agent of (the) agency for the purpose of restoring biological communities affected by an invasive species...*

The Maine DEP has identified some activities that can be conducted under specific conditions without Department approval. These are outlined below. And, in some fresh and marine waters, a Waste Discharge License may be possible for very limited specific treatment programs that substantially adhere to these same conditions. This guidance is intended to apply to short term treatment programs addressing small areas of such invasive plants as purple loosestrife and phragmites to prevent colonization. It is not intended to apply to long term or large scale eradication programs or programs targeting native plants such as cattails.

To be exempt from Waste Discharge Licensing, an herbicide treatment plan must include:

- Use of non-persistent herbicides that are rapidly absorbed by or bound to the target plants and the surface soil beneath the target plants, thus containing the herbicide to a small area.
- Treatment in areas with no standing water or treatment in private, constructed ponds and wetlands, contained on one person's property with no surface water connections to waters of the State during the herbicide's active period.
- Treatment only during low wind conditions to reduce drift (<15 mph).
- Treatment only when there is no rainfall predicted within 24 hours to allow plant and soil assimilation, thereby reducing the potential for runoff and contact to other waters.
- Targeting applications to individual plants instead of broadcast spraying.
- Applying with moderation, to minimize drift and effects on non-target species.
- Use of a certified applicator.
- A treatment project of limited size and duration such as treating small areas of new growth of invasive plants to keep them from colonizing. Since risks increase with long term or widespread use, additional concerns would be associated with eradicating large, dense, existing stands or long term maintenance projects with unlimited time frames.

Effective invasive plant treatment programs are typically conducted in late summer when ground conditions are at their driest and plants are robust and more susceptible to herbicide effects, but have not yet released seeds. Adhering to these conditions will greatly reduce or eliminate the potential for pollutant discharges to surface or groundwaters. Many treatment programs combine carefully removing flower/seed heads with targeted herbicide treatment of the plant. A treatment program conducted pursuant to these conditions and label instructions does not require a Waste Discharge License.

For all herbicide treatment programs, the following criteria (Ch. 514) must be adhered to:

- A. The pesticide must be registered for the intended use by USEPA and the Maine Dept. of Agriculture.
- B. The applicant or agent must be certified and licensed in aquatic pesticide control by the Maine Board of Pesticide Control (BPC) pursuant to BPC rules.
- C. The applicant must provide adequate protection for non-target species.
- D. The applicant must demonstrate a significant need to control the target species and that the pesticide offers the only reasonable and effective means.
- E. The application must not result in violations of State Water Quality Laws (such as causing a receiving water to not attain its designated classification.)

Items C, D, and E require significant attention. Although glyphosate products such as Rodeo are desirable for herbicide programs, published studies indicate that they are toxic to aquatic life in both short term (acute) and long term (chronic) applications. This is a concern for all herbicides, therefore care must be exercised to avoid adverse impacts.

According to the Maine BPC, a commercial Pesticide Applicator's License is required if:

1. The work involves a contract (fee for services) to apply a pesticide.
2. It involves an area open to the public.
3. It will be applied by a government employee at any level including water districts, schools, etc.

Removal of wetland vegetation may require approval under the Natural Resources Protection Act (38 M.R.S.A., § 480) or Permit by Rule Section 12 (Ch. 305). If you have additional questions, please contact Maine DEP at (207) 287-3901, 17 State House Station, Augusta, Maine 04330-0017.