2013 Freshwater Emergent Weed Monitoring Report

For

Herbicide Applications to Freshwater Emergent Noxious and Quarantine Weeds performed under the Noxious Weed National Pollutant Discharge Elimination System (NPDES) Permit WAG9993000

Prepared by

Washington State Department of Agriculture
Pest Program
January 2014
NPDES WAG993000 requires that the Washington State Department of Agriculture (WSDA) submit an annual freshwater emergent weed monitoring plan to the Washington State Department of Ecology (WSDOE) and conduct monitoring as necessary.

WSDA proposed to monitor a subset of imazamox, bispyribac-sodium, penoxsulam, flumioxazin, or carfentrazone-ethyl treatments if these active ingredients were used under the permit in 2012. A small number of entities proposed to use imazamox in 2013 and were contacted by WSDA for monitoring purposes. A single application of imazamox was conducted in 2013 and water monitoring samples were collected. No applications of any of the other active ingredients in question occurred.

On July 22nd, 2013, purple loosestrife (*Lythrum salicaria*) and garden loosestrife (*Lysimachia vulgaris*) plants growing along the shoreline of the Sammamish River near Luke McRedmond Landing in Redmond, WA (WRIA 8) were treated with a solution of two percent imazamox (Clearcast®) herbicide and one-half percent Competitor® surfactant using backpack sprayers. The treatments were conducted under the supervision of staff from the King County Noxious Weed Control Board. There was no precipitation during the application. The total active ingredient used for the imazamox was 9.68 ml. and the area treated was 3,434 square feet (0.0788 acres).

WSDA staff collected the monitoring samples using established protocols. The samples were hand delivered to Pacific Agricultural Laboratory in Portland, OR on July 24th. This laboratory was selected with the approval of WSDOE. The sampling information and resultant laboratory results are reported below. All detectible levels of herbicide are reported in micrograms per liter (ug/L). One microgram per liter equals one part per billion (ppb).

<table>
<thead>
<tr>
<th>Sample Timing</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 hour before treatment</td>
<td>Not Detected</td>
</tr>
<tr>
<td>1 hour after treatment</td>
<td>0.073 ug/L</td>
</tr>
<tr>
<td>24 hours after treatment</td>
<td>Not Detected</td>
</tr>
</tbody>
</table>

For more information on sampling procedures and protocols contact WSDA.
Signatory Page

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiries of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Jim Marra, Ph.D.
Acting Pest Program Manager
Washington State Department of Agriculture