Okanogan Pesticide Collection Partnership:

Keeping pollution out of the water

Introduction

2001 Waste Pesticide Turn-In day at the Oroville Airport industrial area.

In 2001, due to elevated levels of DDT and polychlorinated biphenyls (PCBs) in the lower Okanogan River watershed, the Washington State Department of Ecology (Ecology) started a water quality cleanup project. Implementation of these cleanup projects, also known as total maximum daily loads (TMDLs), can take on many forms to improve and protect water quality. From the time Ecology staff began work on the Okanogan River TMDL, they looked for partners to address DDT in any form possible. Luckily, they found an excellent partner: Joe Hoffman of the Washington Department of Agriculture's waste pesticide program.

Promoting Implementation

From the beginning of the Okanogan TMDL, Ecology staff promoted the waste pesticide pickup program for its benefit of reducing the risk of water pollution. Joe and Ecology staff make complementary presentations to groups and at workshops, promoting the why and how of waste pesticide turn-in. During TMDL-based talks, Ecology staff members explain that control of non-point runoff is extremely difficult, and that we are far more effective if we remove the contaminant from the watershed before it disperses into the environment.

Collecting Concentrated Risk

Early in the development of the Okanogan TMDL, Ecology staff helped Joe find new places in the watershed to hold waste pesticide "turn-in events." These continuing periodic events allow individuals to bring in unused pesticides for disposal without charge or penalty. Community-based "turn-in events" are also supplemented by individual "customer site collections" if deemed necessary. These collection events have removed many pounds of DDT from the Okanogan Watershed.

Continuing Success

This year, the staff of the Waste Pesticide program picked up about sixty pounds of unused DDT pesticides in the Oroville area in the Okanogan Valley. Sixty pounds of DDT is equivalent to more than 350 years of DDT pollution entering the Okanogan River from the tributaries and permitted dischargers in this area.

A drive-by drop off at an Oroville Waste Pesticide Turn-In Day. A farmer saw the road sign for the event and brought in this bag of pesticide containing 20% DDT. At the TMDL estimated rate of DDT loading by tributaries and permitted dischargers, this one bag is equivalent to nearly 2.5 years of DDT loading.

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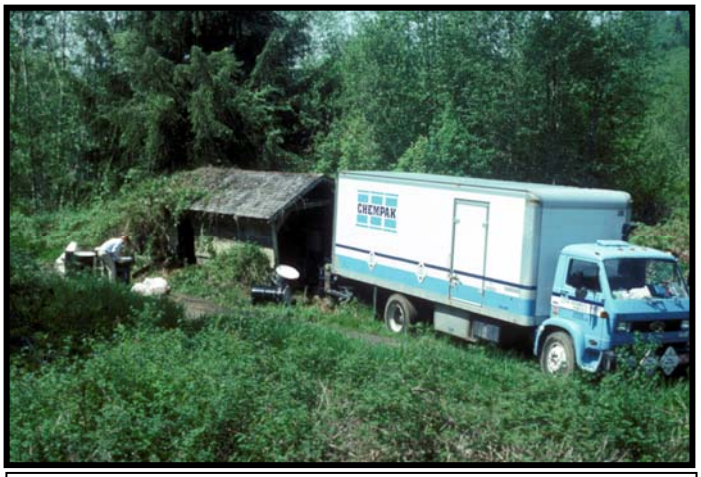

Customer-Site Collection

This large pickup is particularly valuable in supporting the Okanogan TMDL. The TMDL scientists pulled river-bottom sediment cores from the Okanogan area that showed an unusually high spike of DDT concentrations in the mid 1990s. Speculation has been that these high sediment values are from an illegal use, disposal, or the loss of a stockpile in a flood. We will never know the exact source of the DDT spike, but we do know that it is now much less likely to be repeated as the remaining stockpiles of the pesticides are collected.

The success of a TMDL depends on building trust in the watershed community and getting the word out to the community about the available programs that support and protect water quality. Ecology staff recently made a presentation to small acreage landowners in the Okanogan Valley about the need to manage uplands for the protection of water quality. While stormwater and erosion control were the primary topics in the presentation, staff also included information on the waste pesticide collection program. The common goal is to remove more pesticides from the watershed before they are released to the environment.

Partners

Joe Hoffman, of the Washington Department of Agriculture's Waste Pesticide Program, is an energetic driver for the program. Joe also depends on partners to accomplish his goals, including:

- Okanogan Conservation District, who spread the information on the availability and benefits of his program.
- Local governments like the city of Oroville and Okanogan County who provide the space for the waste pesticide turn in events.
- The agricultural industry, which needs to dispose of the pesticides that are no longer legal or usable.

Funding

The Department of Agriculture's waste pesticide program is funded primarily through Washington's Model Toxics Control Act.

For more information

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