

TECHNICAL NOTES

U.S. DEPARTMENT OF AGRICULTURE
PORTLAND, OREGON

NATURAL RESOURCES CONSERVATION SERVICE
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AGRONOMY TECHNICAL NOTE NO. 27

CONSERVATION BUFFERS TO REDUCE PESTICIDE LOSSES

The attached publication, "Conservation Buffers to Reduce Pesticide Losses," summarizes recent research investigating the ability of conservation buffers to trap and degrade pesticides carried in field runoff.

Many pesticides in use today are only moderately absorbed to soil particles and are carried in the dissolved phase with runoff that leaves agricultural fields and other land uses. This publication summarizes research that evaluates the effect of buffers in trapping and degrading pesticides that move off the field with runoff. It also provides guidance for designing buffers for maximum pesticide trapping efficiency.

This publication may be used by NRCS conservation planners, conservation district personnel, and other partners to aid in designing, installing and maintaining buffers for optimal pesticide trapping and gaining other benefits such as erosion and sediment reduction, nutrient trapping and wildlife habitat. Information in this publication should be used in conjunction with the local Field Office Technical Guide and other local and regional research and information sources.

Conservation buffers are not a substitute for integrated pest management (IPM) and careful pesticide selection and use. When used as a component of a Resource Management System (RMS) consisting of other conservation practices, buffers are effective for improving water quality and achieving other environmental benefits.