



Vegetative Filter Strips

Vegetative filter strips are a tool to protect surface waters from pesticide runoff. Learn about the construction, maintenance and use of vegetative filter strips, and the difference between a vegetative filter strip and spray buffer zones.

Vegetative Filter Strips vs. Spray Buffer Zones

A vegetative filter strip and a spray buffer zone are different ways to protect the environment. However, they are complimentary to one another and can be used together to protect non-target habitats.

Vegetative Filter Strips

A vegetative filter strip is a permanently vegetated strip of land. It sits between an agricultural field and downslope surface waters. Vegetative filter strips reduce the amount of pesticide entering surface waters from runoff by slowing runoff water and filtering out pesticides carried with the runoff. Certain pesticide labels will require a vegetative filter strip, other labels will recommend a vegetative filter strip as a best management practice. Read the label for specific instructions on vegetative filter strips.

Spray Buffer Zones

Spray buffer zones are required at the time of application between the area being treated and the closest downwind edge of a sensitive aquatic or terrestrial habitat. Spray buffer zones reduce the amount of spray drift that enters non-target habitats. The size of the spray buffer zone depends on the product used and the crop. Read the pesticide label for the specific spray buffer zone size.

Always read the pesticide label before handling.

Construction and Maintenance of Vegetated Filter Strips

Vegetative Filter Strip Construction

- A vegetative filter strip is constructed along the downslope edge of an agricultural field where it meets a surface water body.
- It must be at least 10 m wide from edge of field to the surface water body (see diagram on back).
- It must be composed of grasses, but may also contain other vegetation (shrubs, trees, etc.).
- Vegetation should be:
 - perennial
 - long-lived
 - hardy
 - stiff stemmed
 - deep rooted
 - native (when possible).



Vegetative Filter Strip Maintenance

- The strip should be mowed occasionally, with grass being at least 15 cm high to maintain effectiveness.
- Avoid soil compaction, do not drive heavy machinery over strip.
- The filter strip should be checked regularly for bare spots, especially after heavy rainfall, irrigation and snowmelt. Damaged areas should be repaired.
- Built up soil should be removed from the strip.

For more information

Environmental Risk Mitigation: <https://www.canada.ca/en/health-canada/services/consumer-product-safety/pesticides-pest-management/growers-commercial-users/environmental-risk-mitigation.html>.

OR search for [PMRA pesticide environmental risk mitigation](#) using your preferred search engine.



Examples of Vegetative Filter Strip and Spray Buffer Zone Use

In these examples, it is assumed that the pesticide being applied requires a spray buffer zone of 15 m to protect sensitive aquatic habitats and a mandatory vegetative filter strip. The spray buffer zone is only required at the time of application between the area being treated and the closest downwind edge of a sensitive habitat.

Diagram 1 – wind direction is blowing to the left:

- A 15m aquatic spray buffer zone is at the top of the hill, protecting the aquatic habitat to the left of the field.
- A spray buffer zone would not be required on the right hand side as the wind is blowing to the left.
- A 10 m wide vegetative filter strip is needed on the downslope edge of the field next to the water body.

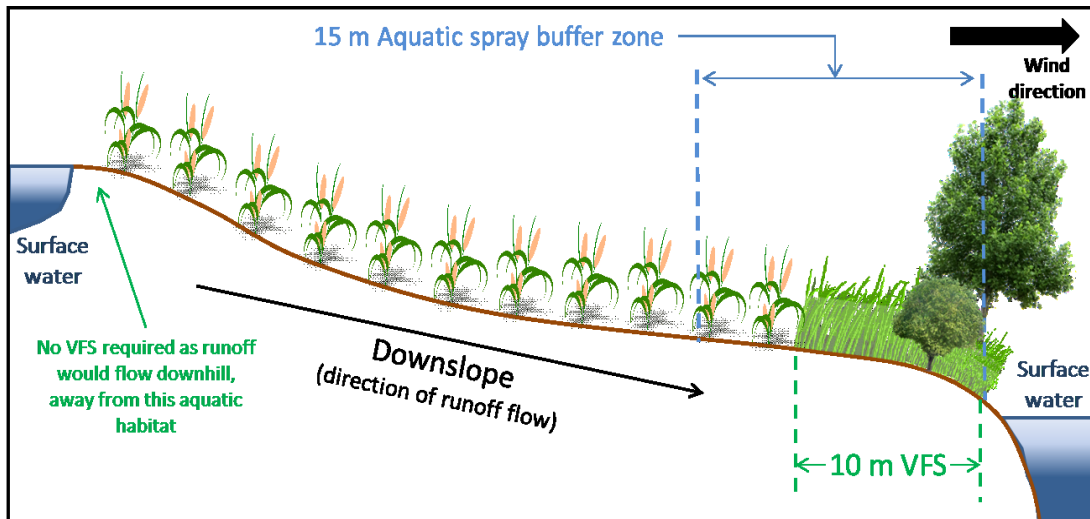
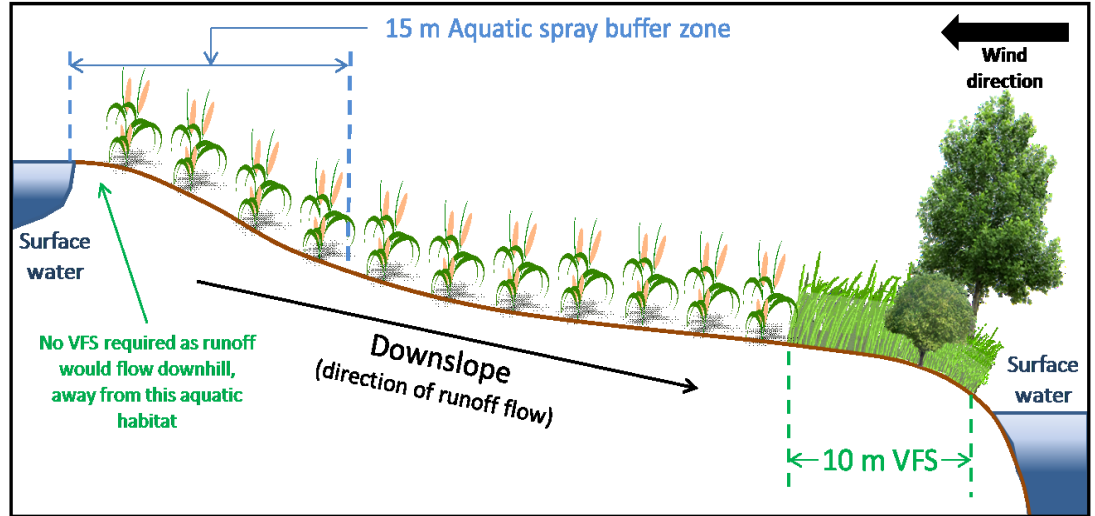


Diagram 2 – the wind direction is blowing to the right:

- A 15 m aquatic spray buffer zone is on the right hand side, protecting the aquatic habitat to the right of the field.
- A 10 m vegetative filter strip is needed on the downslope edge of the field next to the water body.
- In this example, as the 10m vegetative filter strip is within the 15m aquatic spray buffer zone, only 5m of the crop would need to be left unsprayed to comply with the requirement for a 15 m spray buffer zone.

The current PMRA recommendation is that terrestrial buffer zones do not apply to vegetated filter strips unless there is a pre-existing sensitive terrestrial habitat within them. However, care must be taken when applying herbicides to adjacent fields.

To Find the Most Current Labels: <http://pr-rp.hc-sc.gc.ca/lr-re/index-eng.php>

OR Search the words **PMRA Label Search** using you preferred search engine

Download the app: <https://www.canada.ca/en/health-canada/services/consumer-product-safety/pesticides-pest-management/registrants-applicants/tools/pesticide-label-search.html>

The FREE Pesticide Labels App is available for iOS, Android & the Amazon App Store for Blackberry or scan the QR code from your device.

