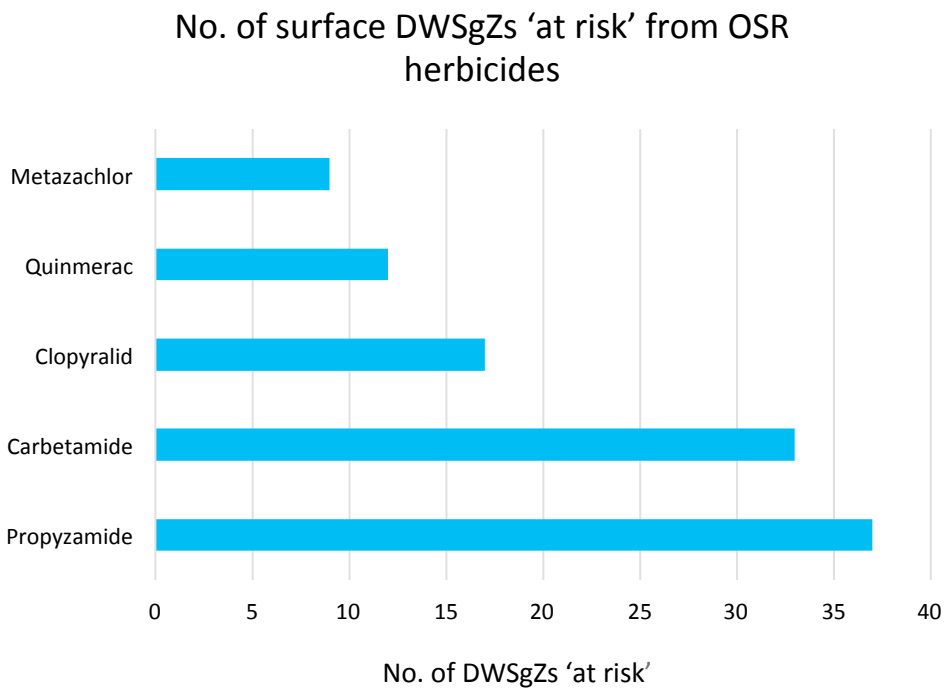
OSR Herbicides?
Think Water

OSR Herbicides? Think Water

WEBINAR

Areas at risk

Drinking Water Safeguard Zones



What's being done?

The Voluntary Initiative (VI) is working with water companies and the agricultural sector in it's entirety to raise awareness of the issue and promote and encourage best practice OSR agronomy to help protect water

OSR Herbicides?
Think Water

Who makes up the OSR Herbicides stewardship group?

What about Metazachlor Matters?

- The Metazachlor Matters stewardship initiative was set up by Adama and BASF in 2015

- To help protect surface water, and preserve the availability of metazachlor and quinmerac based oilseed rape herbicides

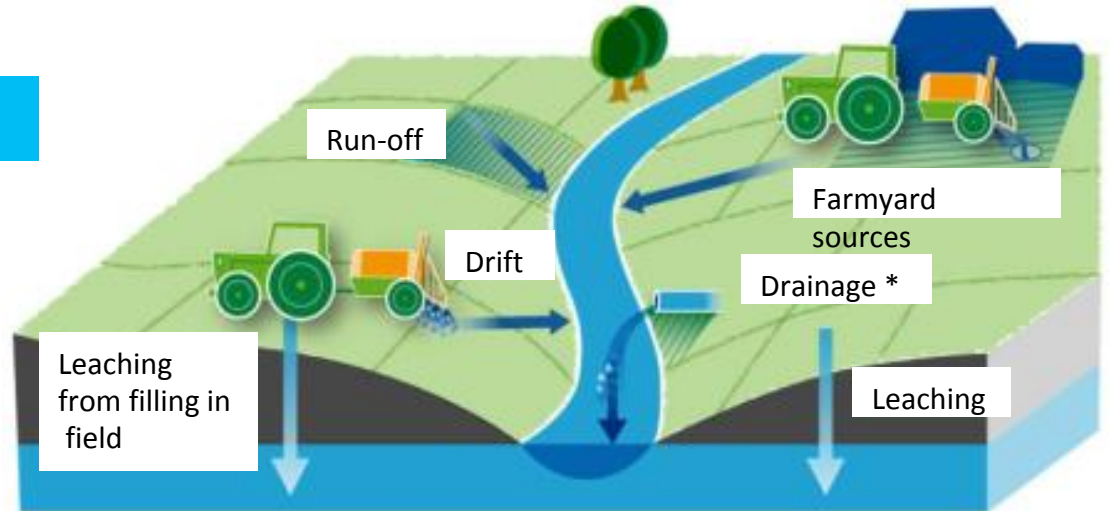
HOWEVER from 2018 onwards….

Metazachlor Matters and the OSR Herbicides? Think Water initiative have aligned to streamline stewardship messages for the agricultural industry

How can OSR herbicides get into water?

1. **<u>Farmyard sources</u>**
   - Handling on farm (filling, cleaning, remnant management)
   - Before/after spraying

Can be avoided



2. **<u>Field sources</u>**
- Spray drift
- Field drainage
- Surface run-off
- Leaching

Can be minimised

OSR Herbicides? Think Water stewardship

There are a series of key steps that farmers can take to help:

1. Identify if your land is in a DWSgZ*

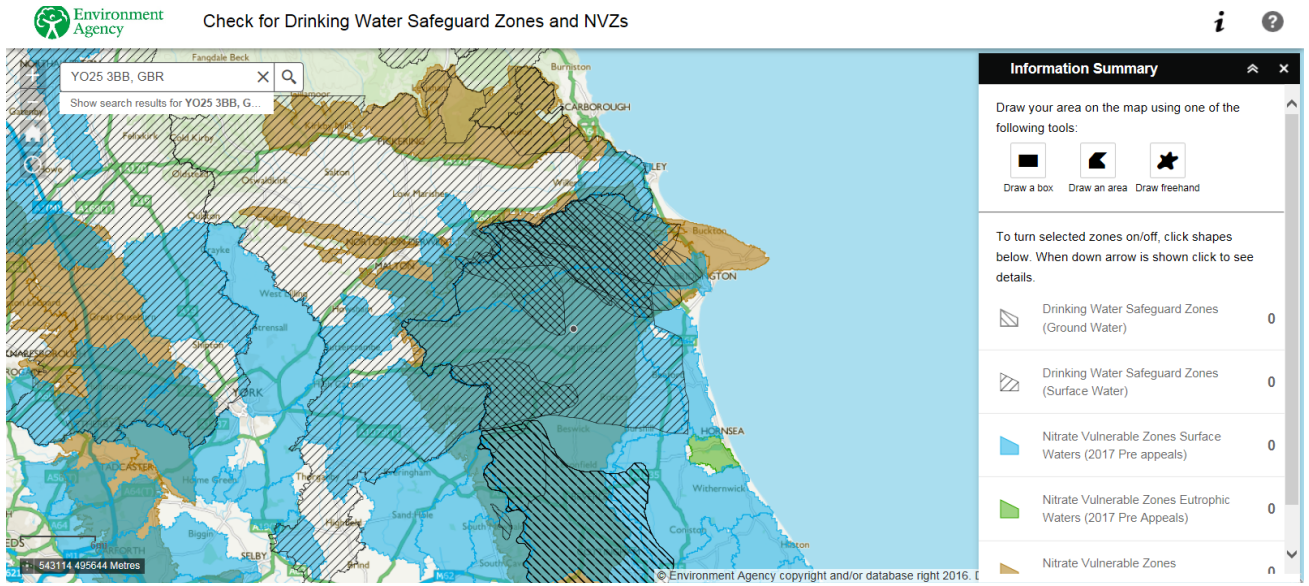
2. Speak to your local water company catchment officer, or agronomists

3. Implement best practice OSR agronomy to protect water

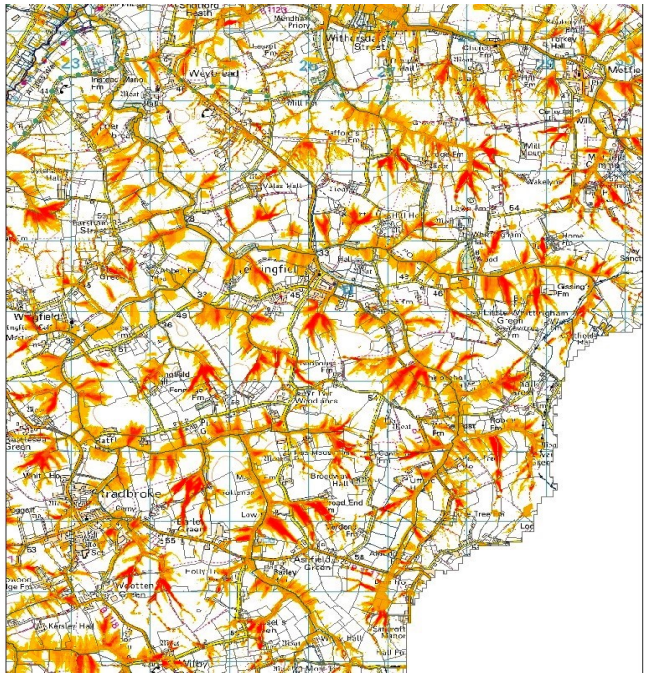
**Drinking Water Safeguard Zone (DWSgZ) = Identified areas where the inappropriate use of fertilisers, pesticides or other chemicals can cause pollution of water that is abstracted for use as drinking water*

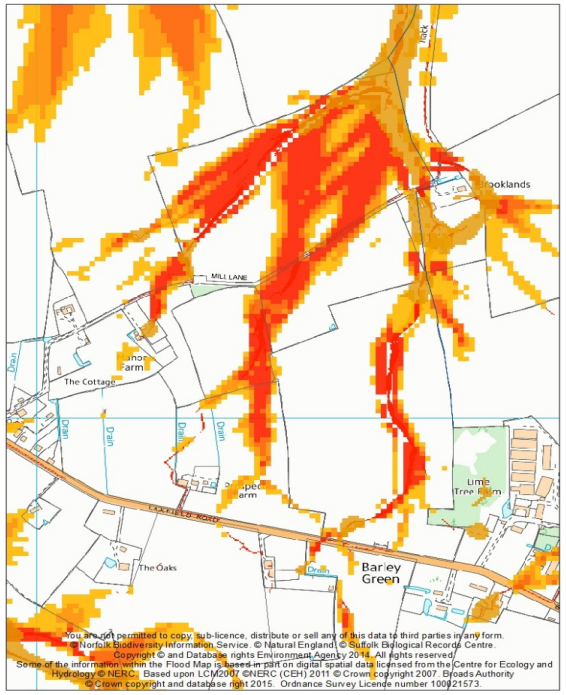
1. Identify if your land is in a DWSgZ

- Visit www.wiyby.co.uk
- Enter your postcode
- A map will appear (see right) – highlighting any DWSgZs
- Click on the DWSgZ to find out which pesticides are of specific concern



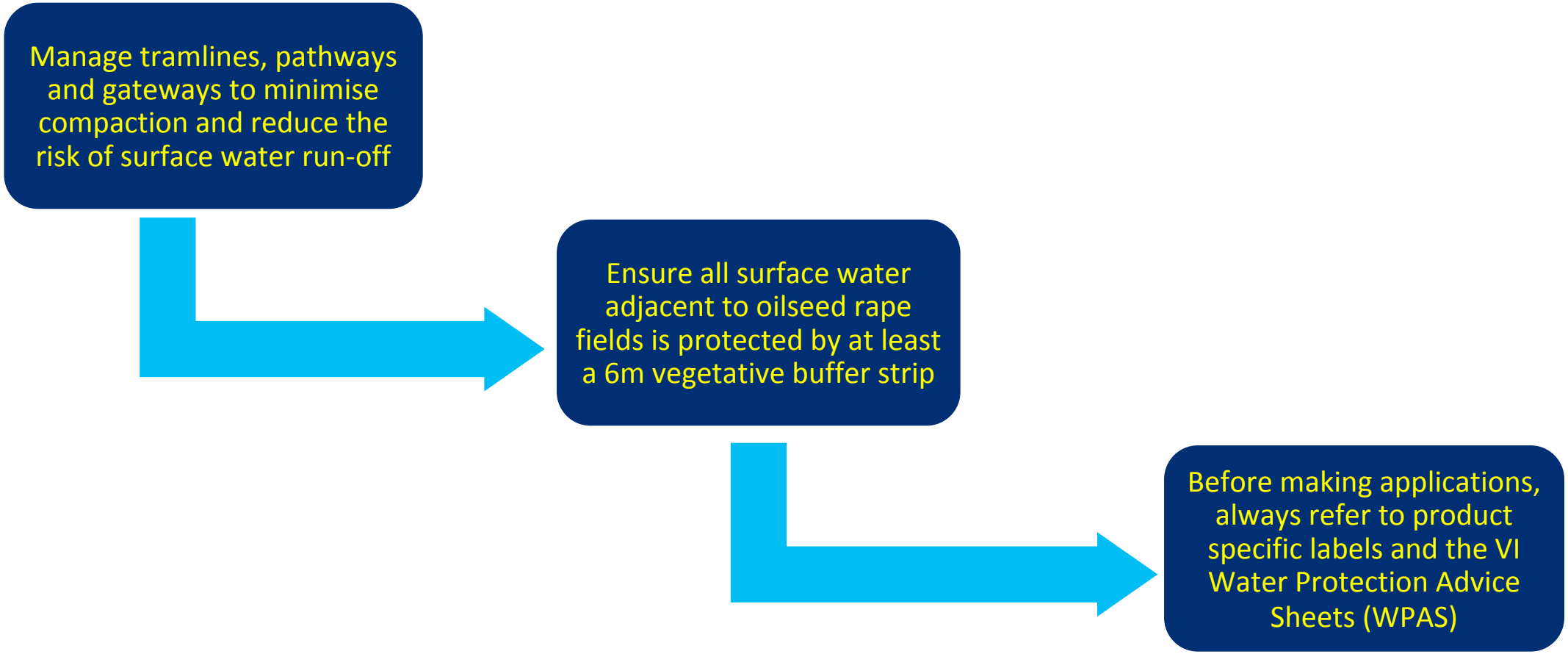
2. If you are farming in a DWSgZ, speak to your local water company catchment officer to understand the potential risk on a field-by-field basis, or speak to your agronomist





Water companies are looking into using ‘hotspot’ data to identify ‘at risk’ field edges

3. Where applicable, implement the following three steps to help minimise the risk of OSR herbicides reaching watercourses

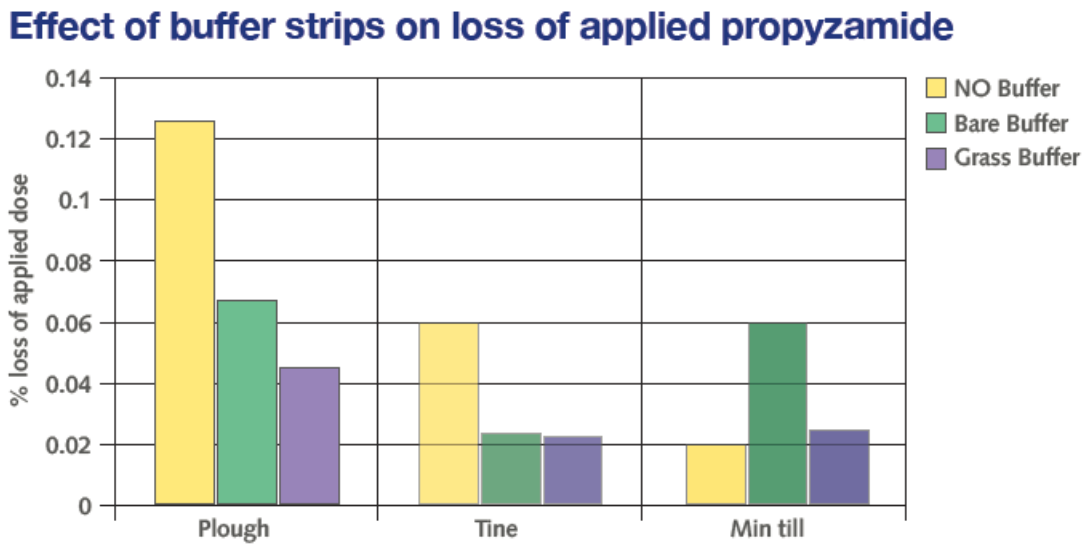


Manage tramlines, pathways and gateways to minimise compaction and reduce the risk of surface water run-off

A significant amount of pesticide run-off from arable fields can arise from tramlines, pathways, and gateways, where soil is often more compacted. Consider the below steps:

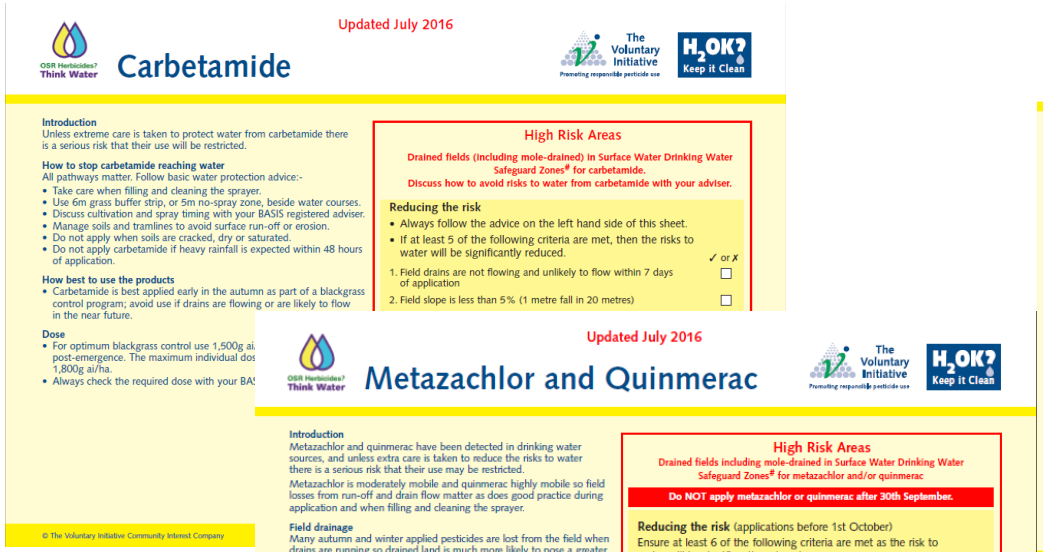
- Use low ground pressure tyres
- Increase tramline spacing (18m -24m)
- Match tyre pressure to tyre operation and axle load
- Avoid establishing tramlines on loose seedbeds or when soils are wet
- Create a headland tramline that is not connected to others to serve as an additional buffer
- Consider direction of drilling to avoid tramlines going up and down the steepest part of the field
- Controlled Traffic Farming (CTF)

Ensure all surface water adjacent to oilseed rape fields is protected by at least a 6m vegetative buffer strip



- Plant the buffer at least a year before sowing winter OSR or winter beans
- The buffer should be a minimum of **6m** wide, measured from the top of the watercourse bank (The wider the better)
- The 6m can include the minimum of 2m for Cross Compliance
- Where fields slope down to watercourses, buffer strips of 12m to 24m wide should be considered
- Environmental Land Management (ELM) – opportunity to be rewarded for the implementation of a buffer strip

Before making applications, always refer to product specific labels and the VI Water Protection Advice Sheets (WPAS)



Updated July 2016

Carbetamide

Introduction
Unless extreme care is taken to protect water from carbetamide there is a serious risk that their use will be restricted.

How to stop carbetamide reaching water
All pathways matter. Follow basic water protection advice:-
- Take care when filling and cleaning the sprayer.
- Use 6m grass buffer strip, or 5m no-spray zone, beside water courses.
- Discuss cultivation and spray timing with your BASIS registered adviser.
- Manage soils and tramlines to avoid surface run-off or erosion.
- Do not apply when soils are cracked, dry or saturated.
- Do not apply carbetamide if heavy rainfall is expected within 48 hours of application.

How best to use the products
- Carbetamide is best applied early in the autumn as part of a blackgrass control program; avoid use if drains are flowing or are likely to flow in the near future.

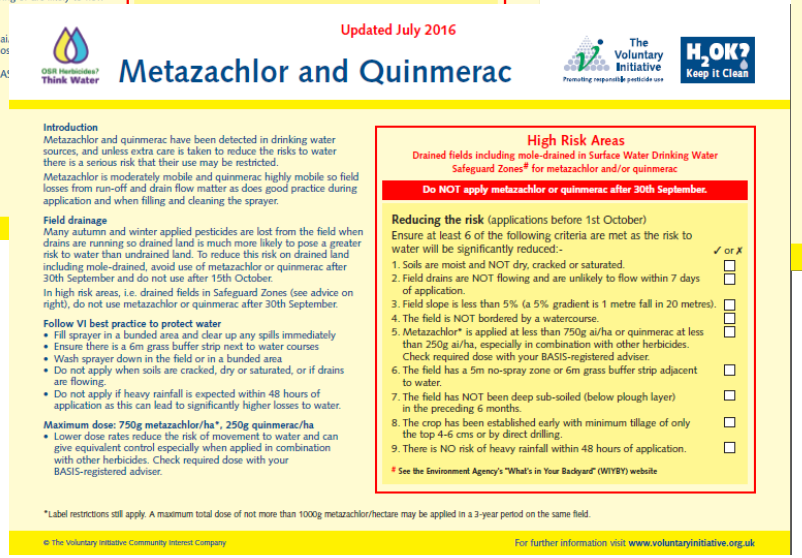
Dose
- For optimum blackgrass control use 1,500g ai post-emergence. The maximum individual dos 1,800g ai/ha.
- Always check the required dose with your BA

High Risk Areas
Drained fields (including mole-drained) in Surface Water Drinking Water Safeguard Zones# for carbetamide.
Discuss how to avoid risks to water from carbetamide with your adviser.

Reducing the risk
- Always follow the advice on the left hand side of this sheet.
- If at least 5 of the following criteria are met, then the risks to water will be significantly reduced.

	✓ or ✗
1. Field drains are not flowing and unlikely to flow within 7 days of application	☐
2. Field slope is less than 5% (1 metre fall in 20 metres)	☐

© The Voluntary Initiative Community Interest Company



Updated July 2016

Metazachlor and Quinmerac

Introduction
Metazachlor and quinmerac have been detected in drinking water sources, and unless extra care is taken to reduce the risks to water there is a serious risk that their use may be restricted.
Metazachlor is moderately mobile and quinmerac highly mobile so field losses from run-off and drain flow matter as does good practice during application and when filling and cleaning the sprayer.

Field drainage
Many autumn and winter applied pesticides are lost from the field when drains are running so drained land is much more likely to pose a greater risk to water than undrained land. To reduce this risk on drained land including mole-drained, avoid use of metazachlor or quinmerac after 30th September and do not use after 15th October.
In high risk areas, i.e. drained fields in Safeguard Zones (see advice on right), do not use metazachlor or quinmerac after 30th September.

Follow VI best practice to protect water
- Fill sprayer in a bunded area and clear up any spills immediately
- Ensure there is a 6m grass buffer strip next to water courses
- Wash sprayer down in the field or in a bunded area
- Do not apply when soils are cracked, dry or saturated, or if drains are flowing.
- Do not apply if heavy rainfall is expected within 48 hours of application as this can lead to significantly higher losses to water.

Maximum dose: 750g metazachlor/ha*, 250g quinmerac/ha
- Lower dose rates reduce the risk of movement to water and can give equivalent control especially when applied in combination with other herbicides. Check required dose with your BASIS-registered adviser.

High Risk Areas
Drained fields including mole-drained in Surface Water Drinking Water Safeguard Zones# for metazachlor and/or quinmerac

Do NOT apply metazachlor or quinmerac after 30th September.

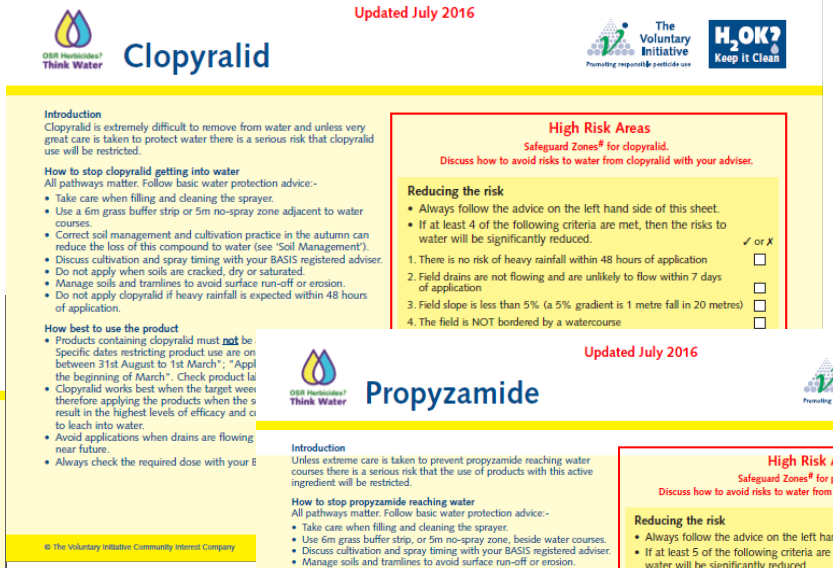
Reducing the risk (applications before 1st October)
Ensure at least 6 of the following criteria are met as the risk to water will be significantly reduced:-

	✓ or ✗
1. Soils are moist and NOT dry, cracked or saturated.	☐
2. Field drains are NOT flowing and are unlikely to flow within 7 days of application.	☐
3. Field slope is less than 5% (a 5% gradient is 1 metre fall in 20 metres).	☐
4. The field is NOT bordered by a watercourse.	☐
5. Metazachlor* is applied at less than 750g ai/ha or quinmerac at less than 250g ai/ha, especially in combination with other herbicides. Check required dose with your BASIS-registered adviser.	☐
6. The field has a 5m no-spray zone or 6m grass buffer strip adjacent to water.	☐
7. The field has NOT been deep sub-soiled (below plough layer) in the preceding 6 months.	☐
8. The crop has been established early with minimum tillage of only the top 4-6 cms or by direct drilling.	☐
9. There is NO risk of heavy rainfall within 48 hours of application.	☐

See the Environment Agency's "What's in Your Backyard" (WIYBY) website

*Label restrictions still apply. A maximum total dose of not more than 1000g metazachlor/hectare may be applied in a 3-year period on the same field.

© The Voluntary Initiative Community Interest Company
For further information visit www.voluntaryinitiative.org.uk



Updated July 2016

Clopyralid

Introduction
Clopyralid is extremely difficult to remove from water and unless very great care is taken to protect water there is a serious risk that clopyralid use will be restricted.

How to stop clopyralid getting into water
All pathways matter. Follow basic water protection advice:-
- Take care when filling and cleaning the sprayer.
- Use a 6m grass buffer strip or 5m no-spray zone adjacent to water courses.
- Correct soil management and cultivation practice in the autumn can reduce the loss of this compound to water (see 'Soil Management').
- Discuss cultivation and spray timing with your BASIS registered adviser.
- Do not apply when soils are cracked, dry or saturated.
- Manage soils and tramlines to avoid surface run-off or erosion.
- Do not apply clopyralid if heavy rainfall is expected within 48 hours of application.

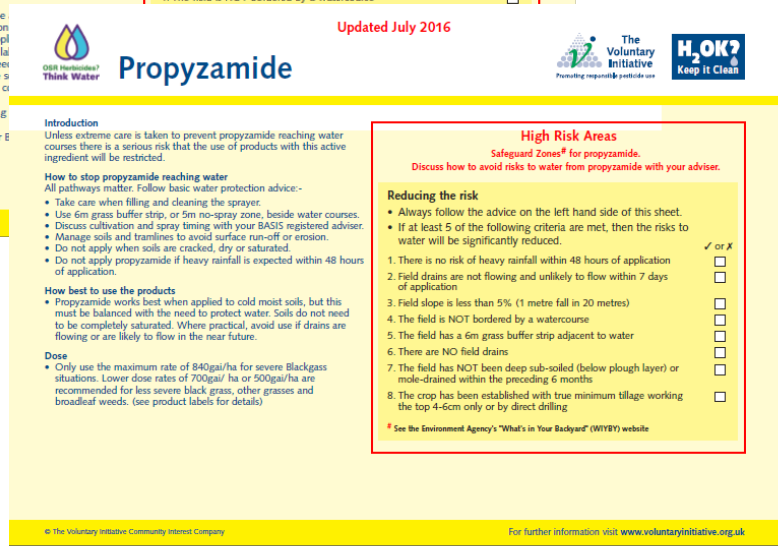
How best to use the product
- Products containing clopyralid must not be
- Specific dates restricting product use are on between 31st August to 1st March*; *Appl the beginning of March*. Check product la
- Clopyralid works best when the target weed therefore applying the products when the s result in the highest levels of efficacy and c to leach into water.
- Avoid applications when drains are flowing near future.
- Always check the required dose with your E

High Risk Areas
Safeguard Zones# for clopyralid.
Discuss how to avoid risks to water from clopyralid with your adviser.

Reducing the risk
- Always follow the advice on the left hand side of this sheet.
- If at least 4 of the following criteria are met, then the risks to water will be significantly reduced.

	✓ or ✗
1. There is no risk of heavy rainfall within 48 hours of application	☐
2. Field drains are not flowing and are unlikely to flow within 7 days of application	☐
3. Field slope is less than 5% (a 5% gradient is 1 metre fall in 20 metres)	☐
4. The field is NOT bordered by a watercourse	☐

© The Voluntary Initiative Community Interest Company



Updated July 2016

Propyzamide

Introduction
Unless extreme care is taken to prevent propyzamide reaching water courses there is a serious risk that the use of products with this active ingredient will be restricted.

How to stop propyzamide reaching water
All pathways matter. Follow basic water protection advice:-
- Take care when filling and cleaning the sprayer.
- Use 6m grass buffer strip, or 5m no-spray zone, beside water courses.
- Discuss cultivation and spray timing with your BASIS registered adviser.
- Manage soils and tramlines to avoid surface run-off or erosion.
- Do not apply when soils are cracked, dry or saturated.
- Do not apply propyzamide if heavy rainfall is expected within 48 hours of application.

How best to use the products
- Propyzamide works best when applied to cold moist soils, but this must be balanced with the need to protect water. Soils do not need to be completely saturated. Where practical, avoid use if drains are flowing or are likely to flow in the near future.

Dose
- Only use the maximum rate of 840gai/ha for severe Blackgass situations. Lower dose rates of 700gai/ ha or 500gai/ha are recommended for less severe black grass, other grasses and broadleaf weeds. (see product labels for details)

High Risk Areas
Safeguard Zones# for propyzamide.
Discuss how to avoid risks to water from propyzamide with your adviser.

Reducing the risk
- Always follow the advice on the left hand side of this sheet.
- If at least 5 of the following criteria are met, then the risks to water will be significantly reduced.

	✓ or ✗
1. There is no risk of heavy rainfall within 48 hours of application	☐
2. Field drains are not flowing and unlikely to flow within 7 days of application	☐
3. Field slope is less than 5% (1 metre fall in 20 metres)	☐
4. The field is NOT bordered by a watercourse	☐
5. The field has a 6m grass buffer strip adjacent to water	☐
6. There are NO field drains	☐
7. The field has NOT been deep sub-soiled (below plough layer) or mole-drained within the preceding 6 months	☐
8. The crop has been established with true minimum tillage working the top 4-6cm only or by direct drilling	☐

See the Environment Agency's "What's in Your Backyard" (WIYBY) website

© The Voluntary Initiative Community Interest Company
For further information visit www.voluntaryinitiative.org.uk

OSR herbicides? Think Water – pilot catchments

- **Affinity Water**

Pilot catchment: Mimmshall Brook

- **Anglian Water**

Pilot catchment: River Kym

- **Northumbrian Water**

Pilot catchment: Instead Brook


Use WIYBY to identify if your land is in a high risk area for OSR herbicides
Speak to your local water company catchment officer, or agronomist to understand the risk on a field-by-field basis
Implement best practice agronomy to minimise the risk of surface water run-off
Introduce at least a 6m vegetative buffer strip
Always refer to product labels and WPAS before making applications
Summary

More information

- Use the VI's Check It Out tool
- Download the OSR Herbicides? Think Water leaflet
- Read the OSR Herbicides Guide
- For best practice advice on keeping pesticides out of water visit our water advice page

All of the above can be obtained from: www.osrherbicides.co.uk