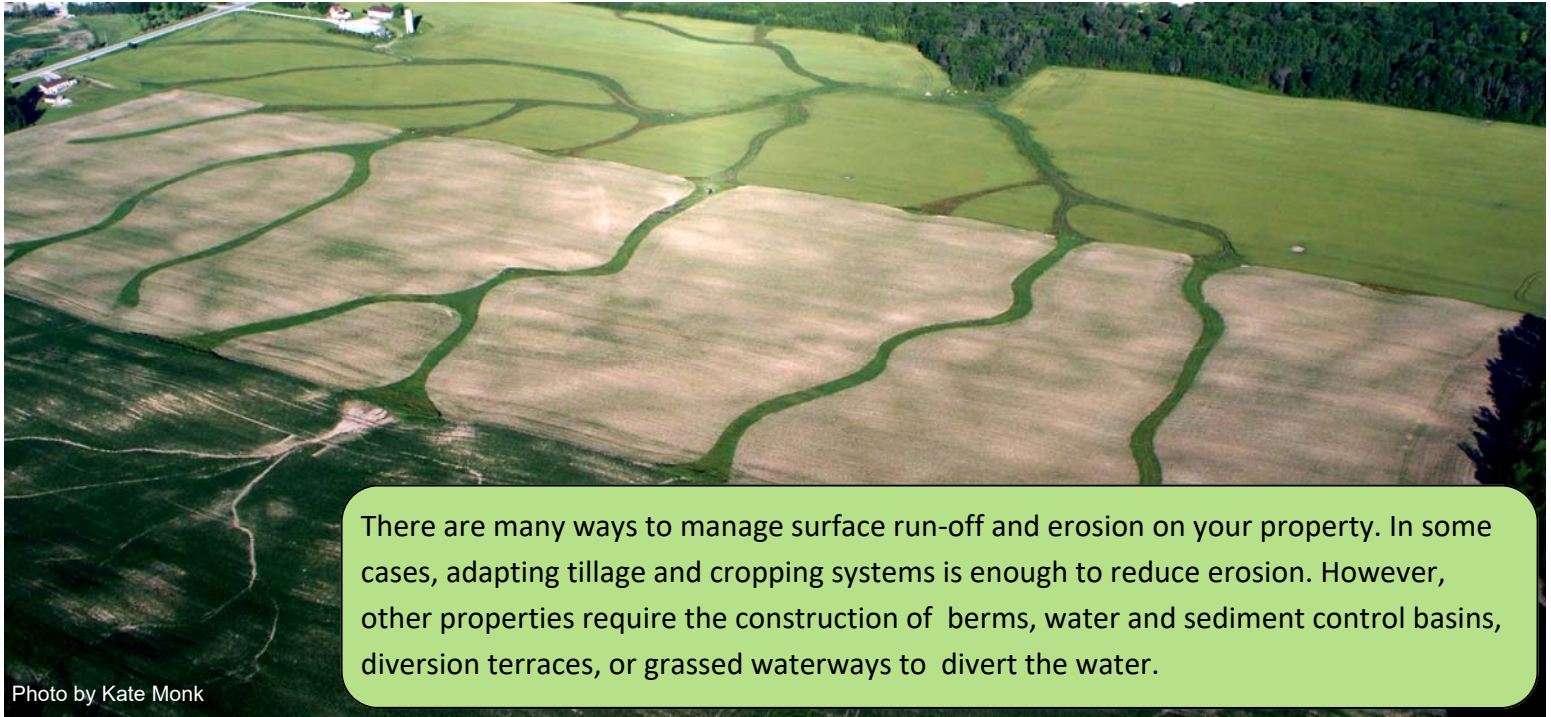


Grassed Waterways



There are many ways to manage surface run-off and erosion on your property. In some cases, adapting tillage and cropping systems is enough to reduce erosion. However, other properties require the construction of berms, water and sediment control basins, diversion terraces, or grassed waterways to divert the water.

Photo by Kate Monk

What is a grassed waterway?

A grassed waterway is a graded channel designed to carry surface water across farmland to a suitable outlet. The permanent vegetation cover slows down the water and protects the channel from eroding.

Where to install a grassed waterway?

Grassed waterways help to control erosion caused by intense flows of water running through a field. This type of erosion occurs commonly in low-lying areas or slopes between hills. Professionals recommend using grassed waterways in watersheds 20 ha (50 acres) or larger.

Construction

Constructing a grassed waterway in a natural draw requires minimal shaping, smoothing and seed bed preparation. The best time to construct a grassed waterway is in the late summer or early spring so vegetation can establish quickly. An expert should be involved in the construction process.

Harvesting the Grassed Waterway

The vegetation grown on the grassed waterway can be used for livestock forage. Including species like alfalfa in a seeding mix can provide good cover and benefit livestock.

Grassed waterway with French drain and erosion control berm



The saucer shape of the grassed waterway guides water to where you want it to go



Photo by Kate Monk

Seeding

It is very important for vegetation to grow on the grassed waterway as soon as possible after construction. Use a seeding mixture with a quick growing annual for short-term control and hardy perennials for lasting protection. See the chart below for seeding recommendations.

Application	Mix Percentage	Application Rate
Permanent Seed		
Creeping red fescue	50	Broadcast at 80kg/ha (70 lb/ac) Drill at 50kg/ha (45 lb/ac)
Perennial ryegrass	45	
White Clover	5	
Quick Growth		
Spring or fall grain (wheat, rye, oats, barley, etc.)	100	Broadcast at 80kg/ha (70 lb/ac) Drill at 50kg/ha (45 lb/ac)

Table adapted from Ministry of Agriculture , Food and Rural Affairs (2008)



In-field rill erosion



Seeding mixture



Mowed grassed waterway



Grassed waterway construction

Maintenance Do's and Don'ts

Please Do:

- Inspect after heavy rains and repair damaged areas
- Apply fertilizer for healthy grass growth
- Mow 2-3 times a year
- Raise farm equipment when crossing the grassed waterway
- If tilling neighbouring fields, perform passes on right angles to direct any surface water into the grassed waterway
- Use best management practices on neighbouring fields to avoid sediment from entering the grassed waterway

Please Do Not:

- Spray the grassed waterway with herbicide
- Use the grassed waterway as a travel or turn around lane
- Let livestock access the grassed waterway

Thank you to our partners!



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