

Realities of Spreading Manure on Snow and Frozen Land

Manure Management Update
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What AOPA Says

AOPA allows the spreading of manure on snow and frozen ground **under certain conditions.**

Operations that have manure storage for 9 months or utilize short term manure storage (for solid manure) have two options:

1. request permission from the NRCB
2. or Board publishes a notice for a geographical area

What AOPA Says

All operations must:

1. Meet setbacks for residences and common body of water.
2. Must not pose a risk to the environment

Benefits of the Regulations

Asking for permission

- Demonstrates that producers are aware of the environmental risks
- Ensures that practice is managing those risks

Industry Realities



Shortage of Manure Storage

- Weather conditions
- Early snow fall, late spring snow cover and frost conditions that limit ability to get on land.
- Availability of custom applicators
- Liquid manure storage capacity

Winter Pen Management

- Improve animal health and productivity
- Excess snow build up impact on feed bunk area and waterer area.
- Reduce excess moisture in spring



Increased Environmental Risk

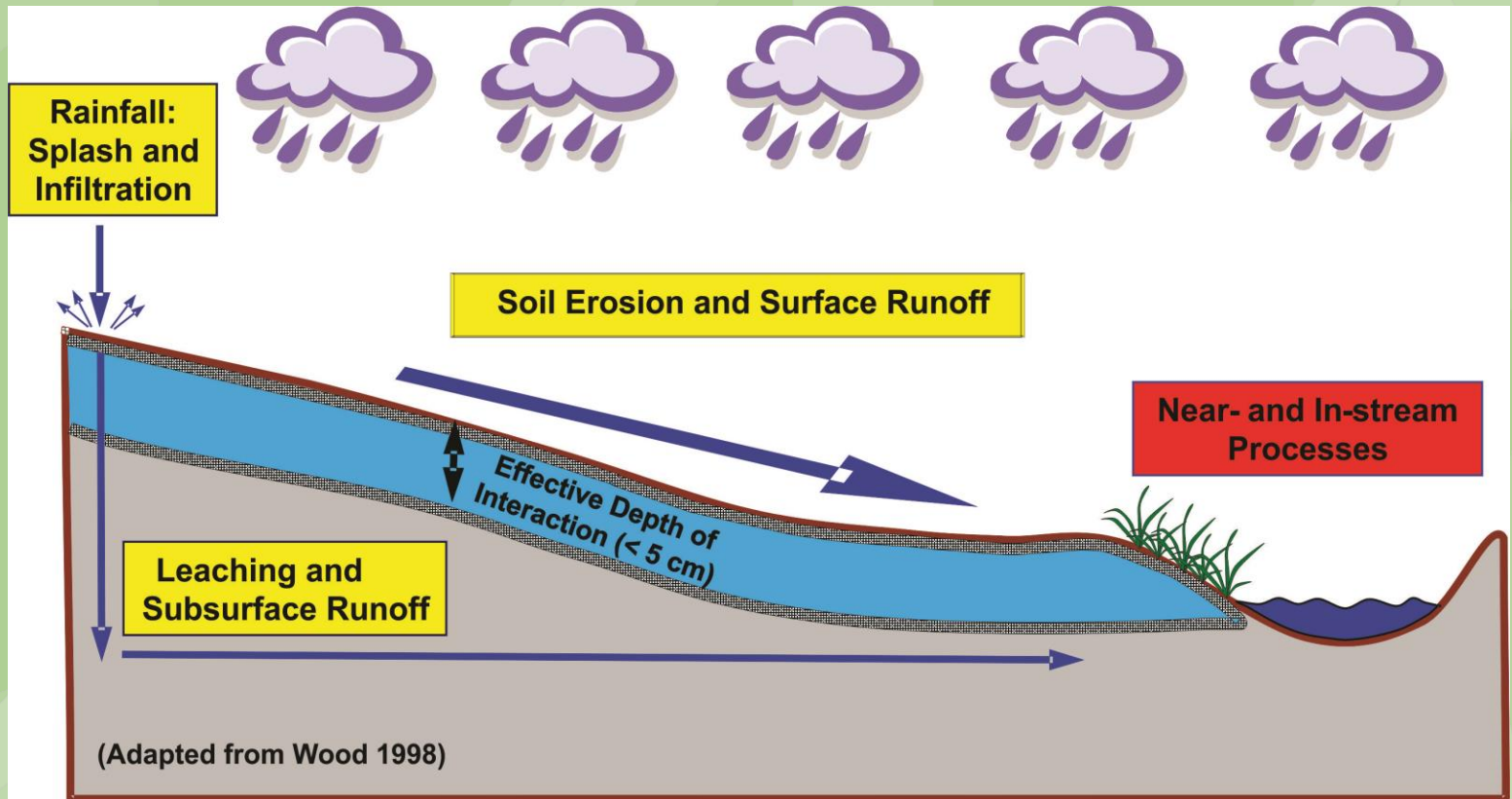


Most Runoff in the Prairies Occurs During Snowmelt

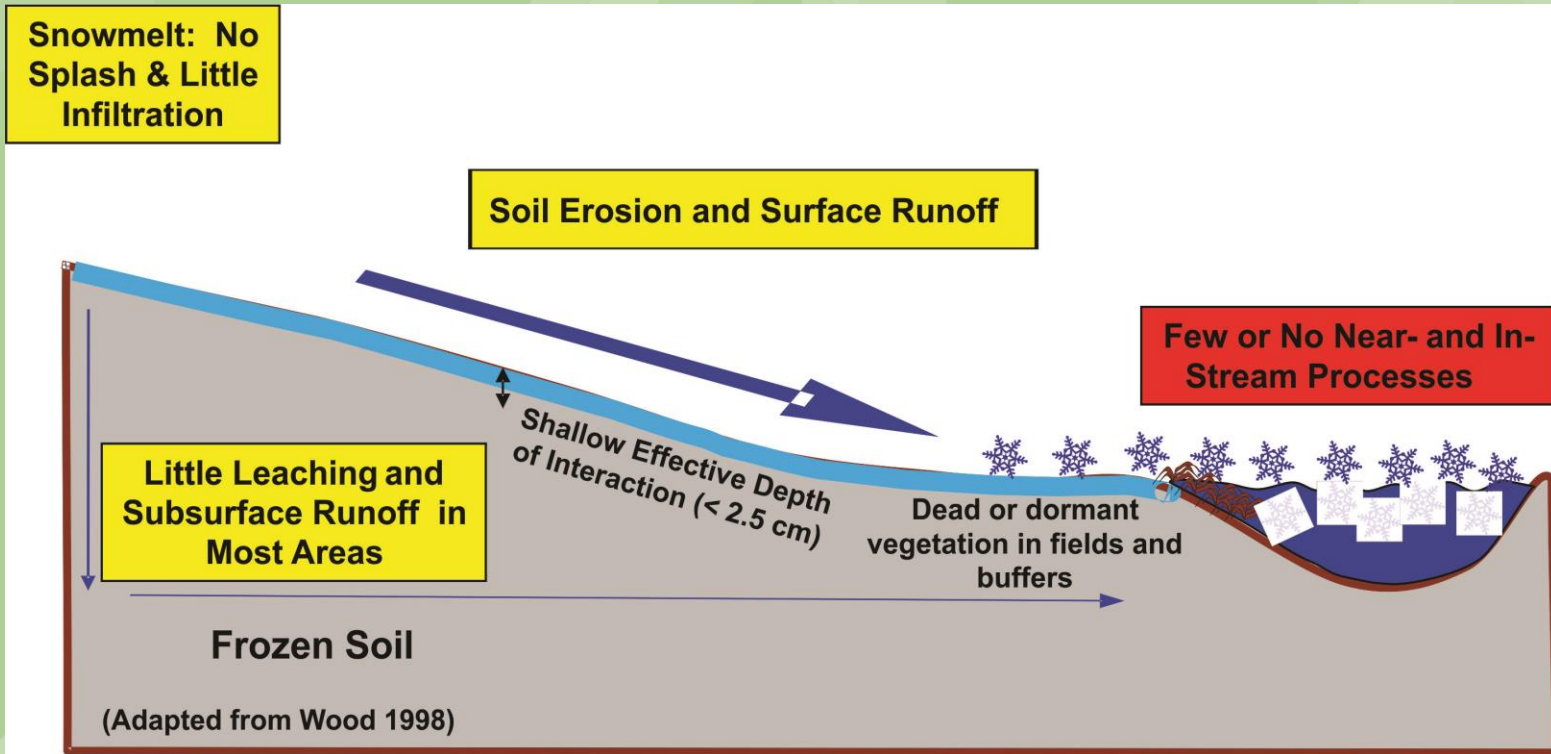
>90% of annual runoff, averaged across 8 watersheds in Alberta (Little et al. 2007)

Up to 76% of annual runoff for Crowfoot Creek, Southern Alberta (Ontkean & Chanasyk 2005)

Rainfall Runoff Events



Snowmelt Runoff Events



Interaction with Soil is Minimized



Dormant Vegetation – Less Treatment



Societies Perspective

Nature of agriculture

- Complex systems
- Site specific options

Connection to Agriculture

- Removed
- Visual
- Media

Environmental understanding

- More education
- Increased awareness of the environment
- What is acceptable?

Challenges

Regulatory

- Definition of frozen
- Definition of snow covered
- Definition of short term manure storage
- Are the regulations working?

Industry

- Fit with operational needs
- Risk mitigation/alternatives
- Cost implications

Society

- What is acceptable?

Opportunities

Regulations work for the industry to demonstrate their social license

- Demonstrates that producers are aware of the risk
- Allows the NRCB to address complaints in a positive manner
- Public acceptance that there is some level of scrutiny