

# Feedlot Newsletter



September 2023

## Pros & Cons of Land Application

BY: University of Minnesota Extension

### FALL

- **PRO:** Manure with high organic matter may have more time to break down.
- **CON:** There is more time for nutrient loss, especially if soils are warm
- **RECOMMENDATION:** Apply after soil temperatures are below 50°F

### WINTER

- **PRO:** Compaction is minimal.
- **CON:** Nutrients will be lost.
- **RECOMMENDATION:** Apply only if necessary. Apply on grounds with little to no slope at a low rate.

### SPRING

- **PRO:** Chances of losing nutrients is lower.
- **CON:** Manure with high organic matter may have less time to break down and nitrogen release may be slower than expected.
- **RECOMMENDATION:** Wait until all snowmelt has occurred and the soil is completely thawed.

### SUMMER

- **PRO:** Can apply directly to a growing crop and reduce nutrient losses.
- **CON:** Needs specialized equipment.
- **RECOMMENDATION:** Inject or incorporation between rows as soon as possible



“Money is like manure. It stinks when you pile it; it grows when you spread it.” -J. R. D. Tata

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## Minimizing Fish Kills in MN

Credited: Minnesota Pollution Control Agency

1. Report fish kill immediately if you see multiple dead fish by calling (800)- 422- 0798. Timing is critical to test waters or capture spills.
2. Avoid manure application when rain is in the forecast.
3. Pay special attention to areas in fields where water flows frequently, surface water and sensitive areas, and stay clear of steep slopes.
4. Follow proper application rates.

And many more other tips are available on the MPCA website.

[Minimizing fish kills in Minnesota | Minnesota Pollution Control Agency \(state.mn.us\)](https://www.mn.gov/Minneapolis/Minneapolis-Pollution-Control-Agency/state.mn.us)

# MANURE APPLICATION- KNOW (some of) YOUR SETBACKS

<https://www.pca.state.mn.us/sites/default/files/wq-f6-26.pdf>

<https://www.pca.state.mn.us/sites/default/files/feedlots-manureapplication.pdf>

## Perennial & Intermittent Streams

- 300ft set back if no incorporation or incorporation after 24 hr.
- 25ft setback if injected or incorporated within 24 hr.

## Manure Stockpile to stream-

- Must be at least 300ft from a stream.

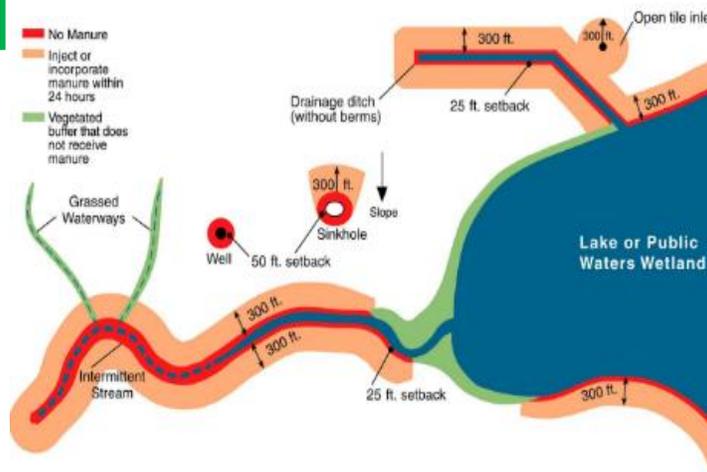
## Winter Feeding-

- Feeders (round bale, trough, etc.) must be at least 100ft from perennial stream.

## Roads Ditches-

- No application directly into the road ditches

## Land application setbacks from waters



NOTE: This graphic summarizes the State setback requirements (more info on pg 20). County and/or Township requirements may be more restrictive.

## Sinkholes-

- 300ft setback if no incorporation or incorporated after 24hr.
- 50ft setback if injected or incorporated within 24hr.

## Floodplain Land Application During Winter Months-

- NO manure application on frozen or snow-covered ground within floodplain

Any questions about setbacks, manure stockpiling, manure application, record keeping, etc. please contact the Mower County Feedlot officer, **Danielle Anderson (507) 279-7149** or email **daniellea@co.mower.mn.us**

## Floodplain Land Application During Growing Season-

- Any application to unfrozen soils must be immediately incorporated.



“Agriculture was the first occupation of man, and as it embraces the whole earth, it is the foundation of all other industries.”

- E. W. Stewart



# LAND APPLICATION RECORDS

- **Minnesota Pollution Control Agency (MPCA)**  
<https://www.pca.state.mn.us/business-with-us/land-application-of-manure>



**EVERYONE** registered for 100-299 animal units **IS REQUIRED** to keep:

1. Land application record keeping worksheet (3 years minimum, 6 years in special protection areas)  
- (Pictured below)
2. Manure analysis from every source of manure (tested once every 4 years)
3. Field maps showing where manure was spread (optional but helpful)

**EVERYONE** registered for 300 or more animal units **IS REQUIRED** to keep:

1. Land application record keeping worksheet (3 years minimum, 6 years in special protection areas)
2. Manure analysis from every source of manure (tested once every 4 years)
3. Soil analysis (sampled once every 4 years)
4. Field maps showing where manure was spread (optional but helpful)

**Land application records for feedlots with 100 to 299 animal units**  
Feedlot Program

**Manure analysis results** (In the spaces provided, enter the most recent analysis alone or as part of a running average - entries must represent manure applied)

Manure source 1:	Manure source 2:	Manure source 3:	Manure source 4:
N: <input type="text"/> P <sub>2</sub> O <sub>5</sub> : <input type="text"/> Units: <input type="checkbox"/> to 1000 gal	N: <input type="text"/> P <sub>2</sub> O <sub>5</sub> : <input type="text"/> Units: <input type="checkbox"/> to 1000 gal	N: <input type="text"/> P <sub>2</sub> O <sub>5</sub> : <input type="text"/> Units: <input type="checkbox"/> to 1000 gal	N: <input type="text"/> P <sub>2</sub> O <sub>5</sub> : <input type="text"/> Units: <input type="checkbox"/> to 1000 gal

**Manure application information**

Field ID	Acres	Crop grown to utilize the manure applied	Crop used recently harvested	Method of application and incorporation	Application rate per acre	NTN	(N2)	(N3)	NTN+N2+N3	Total available N	
Example: 40	40	Corn	Soybeans	Field injection	3000	0	0	0	0	177	183

**Land application records for feedlots with 300 or more animal units**  
Feedlot Program

**Manure analysis results** (In the spaces provided, enter the most recent analysis alone or as part of a running average - entries must represent manure applied)

Manure source 1:	Manure source 2:	Manure source 3:	Manure source 4:
N: <input type="text"/> P <sub>2</sub> O <sub>5</sub> : <input type="text"/> Units: <input type="checkbox"/> to 1000 gal	N: <input type="text"/> P <sub>2</sub> O <sub>5</sub> : <input type="text"/> Units: <input type="checkbox"/> to 1000 gal	N: <input type="text"/> P <sub>2</sub> O <sub>5</sub> : <input type="text"/> Units: <input type="checkbox"/> to 1000 gal	N: <input type="text"/> P <sub>2</sub> O <sub>5</sub> : <input type="text"/> Units: <input type="checkbox"/> to 1000 gal

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To obtain forms, maps, manure testing kits, etc. please contact Mower County Feedlot Officer, **Danielle Anderson (507) 279-7149** or email **daniellea@co.mower.mn.us**

## MANURE SPILL RESPONSE

1. **CONTAIN** the spill
2. **SELF REPORT**- #1: State Duty Officer (651) 649- 6580 #2- Mower County Feedlot officer (507) 951-1275
3. **RECOVER, PUMP, ABSORB**- recover pooled manure & solids, get a pump truck if necessary, scrape large accumulations (leave the vegetation), straw, corn stalk bales, hay, and saw dust are great absorbents that can be land applied



If you have suggestions for informational articles you would like to see in the next newsletter, please contact **Danielle Anderson, Mower County Feedlot Officer (507) 279-7149**

