

# 2025 NUTRIENT MANAGEMENT RECORD-KEEPING CALENDAR



The Nebraska Nutrient Management Calendar is a product of Nebraska Extension's Animal Manure Management Team. It was originally developed by: Leslie J. Johnson, Larry Howard, Richard Koelsch, Amy Millmier Schmidt, Charles A. Shapiro, and Charles S. Wortmann.

The authors would like to thank Mara Zelt, Amber Vogel, Lindsey Roark, Javed Iqbal, Aaron Nygren, Beth Zelt, and Agnes Kurtzhals for their contributions and reviews. This publication was produced with the permission of Tamilee Nennich Adolph, on whose work it was based.



Reach out with any of your manure management questions!

#### **NEBRASKA EXTENSION MANURE MANAGEMENT TEAM**

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Javed Iqbal	Agronomy & Horticulture	402-472-1432	Nutrient Management & Water Quality
Amy Schmidt	Biological Systems Engineering	402-472-0877	Manure, Mortality & Environmental Management
Todd Whitney	Phelps County	308-995-4222	Soil Microbial Research, Manure Management
Rick Stowell	Biological Systems Engineering	402-472-3912	Extension Engineer - Animal Environment
Aaron Nygren	Saunders County	402-624-8030	Cropping Systems & Nutrient Management
Alfredo DiCostanzo	Cuming County	402-372-6006	Integrated Livestock Systems

#### Nebraska Department of Environment and Energy (NDEE) Livestock Waste Control Inspection Areas of Coverage



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## **Records for Nebraska Animal Feeding Operations**

#### **Operation ID:**

ID Type: 🗌 IIS Number 📋 Program Number 📋 Premises ID 📄 Operation Name 🗌 Other:\_\_\_

#### **General Directions**

- Record the initials of the person performing the inspection each time (see table below for initial codes).
- Checkmarks will not satisfy the recordkeeping requirements.
- Record any maintenance and/or repairs.
- Correct all deficiencies within 30 days.

#### **DAILY Records and Inspections**

- Inspect all waterlines (drinking and cooling) within the drainage area.
- Record any measurable rainfall that occurs at the facility and subsequent liquid storage levels.
- Record wind speed and direction daily during manure pumping activities.
- Collect carcasses and properly dispose of them within 36 hours.

#### **WEEKLY Records and Inspections**

- Record the liquid depth of the manure storage structure as indicated on the depth marker. Be sure that the recommended pumping levels are indicated on the marker.
- Before use, inspect any equipment used for land application of manure and/or wastewater.
- Inspect all waste control facilities, including lagoons, holding ponds, concrete tanks, pits, and manure storage structures.
- Inspect all stormwater and runoff diversion devices used to channel contaminated stormwater to storage structures.

#### **MONTHLY Records and Inspections**

- Inspect facilities used for disposal of carcasses. Include composting facilities, containers, and recent burial sites in the inspection.
- Do NOT dispose of carcasses in any liquid manure or process wastewater system.

#### YEARLY Records and Inspections

- Evaluate the depth of the sludge layer of the lagoon or holding pond.
- At least 1 representative from an operation must attend Land Application Training every 5 years. See go.unl.edu/ManureEd for more information.
- The Nebraska P-Index must be assessed for land application areas every 5 years, prior to land application. See go.unl.edu/Pindex

#### **YEARLY Sample Collection and Analysis**

- Collect and analyze manure and/or wastewater samples at least annually. Recommended minimum analysis should include: total nitrogen (N), organic N, and phosphorus.
- Collect soil samples every year prior to site being used for N application.
- Analyze soil samples for phosphorus at least once in 5 years.
- Irrigation water must be sampled and analyzed for nitrates every 5 years.

#### **YEARLY Site Requirements**

- Complete and submit an annual report for the previous year to NDEE by March 1 (NPDES permits only).
- Keep records on site for a minimum of 5 years.

Name	Initials	Name	Initials	Name	Initials	Name	Initials

Additional information and space for records is provided in the back of the calendar.

Disclaimer: The information in this calendar should assist producers to meet legal requirements and protect environmentally sensitive areas around their operations. The use of this calendar and accompanying information is intended to serve as a guide and does not guarantee compliance with the NDEE rules and regulations.

#### Manure & Wastewater Applied

Weather information for each date of application, the day prior to, and day after application should be recorded on the calendar or kept separately.

Field ID & Location	Acres Applied	Date
Manure Source	Application Meth	nod
Application Rate	_ Available N/acre*	Applied P
When Applying Effluent: Star	t Pump Time	Stop Pump Time
Total Hours Pumped:	Time of Moni	toring:
Field ID & Location	Acres Applied	Date
Field ID & Location Manure Source		
Manure Source	Application Meth	
Manure Source Application Rate	Application Meth Available N/acre*	nod

\*Nitrogen availability calculation worksheet can be found at the end of this publication.

#### Land Application Training Required Every 5 Years

Large livestock operations with National Pollutant Discharge Elimination System (NPDES) and/or construction and operating permits issued by NDEE are required to take Land Application Training every 5 years. Initial training and recertification workshops are available, typically during the winter months. All employees applying manure or keeping manure records are encouraged to participate. Small & medium operations are encouraged to attend!

An online course is also available at water.unl.edu/lat-online.

More manure information can be found at manure.unl.edu and lpelc.org.

#### **Employee Training**

At least 1 representative must complete Land Application Training every 5 years.				
Training Type	Date			
Employees Trained				
Trainer & Location				
Training Type				
Employees Trained				
Trainer & Location				
Training Type	Date			
Employees Trained				
Trainer & Location				
Training Type				
Employees Trained				
Trainer & Location				
Training Type	Date			
Employees Trained				
Trainer & Location				
Training Type	Date			
Employees Trained				
Trainer & Location				
Notes:				
*Additional space for records is provided in the back of the calendar.				

## **JANUARY 2025**

Monthly Inspections Mo Not

ortality M	lanagement System	Date
otes		

SUN	Mon	TUE	WED	ТНО	FRI	SAT	Notes
					• • •	•//1	Weekly Inspections
			1	2	3	4	Lagoon Depth Marker (ft) Date Manure Storage & Equip. Inspection
			Rainfall	Rainfall	Rainfall	Rainfall	NotesDate
			Wind	Wind	Wind	Wind	Water & Runoff Diversion, Containment Devices Notes Date
			Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Maintenance or Repairs Date Notes
5	6	7	8	9	10	11	Lagoon Depth Marker (ft) Date
				, , , , , ,			Manure Storage & Equip. Inspection
Rainfall Wind	Rainfall Wind	Rainfall Wind	Rainfall Wind	Rainfall Wind	Rainfall Wind	Rainfall Wind	Notes Date Water & Runoff Diversion, Containment Devices
Wind Waterline Inspection	Wind Waterline Inspection	Wind Waterline Inspection	Wind Waterline Inspection	Waterline Inspection	Wind Waterline Inspection	Wind Waterline Inspection	NotesDate
							Maintenance or Repairs Date Notes
12	13	14	15	16	17	18	Lagoon Depth Marker (ft) Date
Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Manure Storage & Equip. Inspection Notes Date
Wind	Wind	Wind	Wind	Wind	Wind	Wind	Water & Runoff Diversion, Containment Devices
Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Notes Date Maintenance or Repairs Date
·	·	·	• 	•	·	•	Maintenance or Repairs Date Notes
19	20	21	22	23	24	25	Lagoon Depth Marker (ft) Date
Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Manure Storage & Equip. Inspection
Wind	Wind	Wind	Wind	Wind	Wind	Wind	Notes         Date           Water & Runoff Diversion, Containment Devices
Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Notes Date
							Maintenance or Repairs Date Notes
26	27	28	29	30	31		Lagoon Depth Marker (ft) Date
Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	7.363	Manure Storage & Equip. Inspection Notes Date
Wind	Wind	Wind	Wind	Wind	Wind	ALL OF AL	Water & Runoff Diversion, Containment Devices
Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection		Notes         Date           Maintenance or Repairs         Date
The second	41 11 11 11 11		And the second second				Notes
				ln c	ase of a spill or disch	harge.	Emergency Contacts 9-1-1 Supervisor:
a man a first and a second	and the second second	Provide and the second s	The same state and the		te measures to conta		Heavy Equipment*:
	are called a second	and a construction of the second seco			at 1-402-471-4239 w	-	Extension:
and the second	The strength of the strength o	and the second s	and the second s		a spill must be subn		Other:
		and a second descent of the second second	a company of the second second second				*Know who to call for help to contain a manure spill

\*Know who to call for help to contain a manure spill!

#### **Manure & Wastewater Applied**

Weather information for each date of application, the day prior to, and day after application should be recorded on the calendar or kept separately.

Field ID & Location\_\_\_\_\_ Acres Applied\_\_\_\_\_ Date\_\_\_\_\_

Manure Source\_\_\_\_\_\_ Application Method\_\_\_\_\_

Application Rate\_\_\_\_\_\_ Available N/acre\*\_\_\_\_\_ Applied P\_\_\_\_\_\_

When Applying Effluent: Start Pump Time\_\_\_\_\_ Stop Pump Time\_\_\_\_\_

 Total Hours Pumped:\_\_\_\_\_\_\_
 Time of Monitoring:\_\_\_\_\_\_

 \*Nitrogen availability calculation worksheet can be found at the end of this publication.

#### **Trading Manure and Crop Residues**

The easiest part of making sure any trade is fair is to make sure that the cash value of both products is similar. Along with fertilizer value, consider who is paying for harvest costs for the residues, application costs for the manure, and transportation costs for both products. Other things to consider include labor, feed value, proximity, loss of residue for soil cover, and soil health impacts.





Notes:

### **Crops Harvested - Nutrients Removed**

Date	Field ID & Location	Crop Туре	Yield	Acreage	N Removed	P Removed

Crop removal rates can be found at the back of this publication.

#### **Crop Nutrient Needs for Next Year**

Date	Field ID & Location	Crop Туре	Yield	Acreage	N Required	P Required

#### **Manure Sold or Given Away**

An information sheet containing your operation name & address along with a written statement that manure/wastewater must not enter waters of the state & the nutrient analysis must be provided to the recipient.

Manure Volume/Weight\_\_\_\_\_ Date\_\_\_\_\_

Recipient Name & Address\_\_\_\_\_

Analysis Number

More manure information can be found at manure.unl.edu and lpelc.org.



\*Additional information and space for records are provided in the back of the calendar. The University of Nebraska-Lincoln does not discriminate based upon any protected status. Please see go.unl.edu/nondiscrimination.

	Monthly Inspections Mortality Management System Date						
SUN	Mon	TUE	WED	THU	FRI	SAT	Notes Weekly Inspections
					1 Rainfall Wind Waterline Inspection	2 Rainfall Wind Waterline Inspection	
3	<b>4</b>	5	<b>6</b>	7	8	9	Lagoon Depth Marker (ft)       Date         Manure Storage & Equip. Inspection       Notes         Notes       Date         Water & Runoff Diversion, Containment Devices       Notes         Notes       Date         Maintenance or Repairs       Date         Notes       Date
Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	
Wind	Wind	Wind	Wind	Wind	Wind	Wind	
Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	
10	11	12	13	14	15	<b>16</b>	Lagoon Depth Marker (ft)       Date         Manure Storage & Equip. Inspection          Notes       Date         Water & Runoff Diversion, Containment Devices          Notes       Date         Maintenance or Repairs       Date         Notes       Date
Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	
Wind	Wind	Wind	Wind	Wind	Wind	Wind	
Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	
17	18	<b>19</b>	20	21	22	23	Lagoon Depth Marker (ft)       Date         Manure Storage & Equip. Inspection       Notes         Notes       Date         Water & Runoff Diversion, Containment Devices       Notes         Notes       Date         Maintenance or Repairs       Date         Notes       Date
Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	
Wind	Wind	Wind	Wind	Wind	Wind	Wind	
Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	
24	25	<b>26</b>	27	28	29	<b>30</b>	Lagoon Depth Marker (ft) Date         Manure Storage & Equip. Inspection         Notes Date         Water & Runoff Diversion, Containment Devices         Notes Date         Maintenance or Repairs Date         Notes
Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	
Wind	Wind	Wind	Wind	Wind	Wind	Wind	
Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	
<b>31</b> Rainfall Wind Waterline Inspection				take immediat contact NDEE	ase of a spill or disch e measures to conta at 1-402-471-4239 wi a spill must be subm	in the spill and	Order your 2026 UNL Nutrient Management Record-Keeping Calendar now!

#### Manure & Wastewater Applied

Weather information for each date of application, the day prior to, and day after application should be recorded on the calendar or kept separately.

Field ID & Location	Acres Applied	Date				
Manure Source	Application Met	hod				
Application Rate	_Available N/acre*	Applied P				
When Applying Effluent: Star	t Pump Time	Stop Pump Time				
Total Hours Pumped:	Time of Mor	nitoring:				
		Date				
Manure Source	Application Met	hod				
Application Rate	_Available N/acre*	Applied P				
When Applying Effluent: Start	t Pump Time	Stop Pump Time				
Total Hours Pumped: *Nitrogen availability calculation workshee		itoring: blication.				
Employee Training						
At least 1 representative must co	omplete Land Application T	raining every 5 years.				
		Date				
Employees Trained						
Trainer & Location						

Date

#### Stockpiled Manure

Manure stockpiles must be located to prevent contamination of water, and should be placed to minimize odors and neighbor nuisances. If there is a chance runoff may leave the site, stockpiles should be covered, diked, or other means must be used to prevent runoff into water until the stockpile material is utilized. Two feet is the recommended minimum height for dikes. Remember, all discharges MUST be reported.



### For more information, go to https://go.unl.edu/deh9

#### Manure Sold or Given Away

An information sheet containing your operation name & address along with a written statement that manure/wastewater must not enter waters of the state & the nutrient analysis must be provided to the recipient.

Manure Volume/Weight	Date
Recipient Name & Address	
Analysis Number	
Manure Volume/Weight	Date

Recipient Name & Address\_\_\_\_\_\_

Analysis Number

Notes:

More manure information can be found at manure.unl.edu and lpelc.org.

The University of Nebraska-Lincoln does not discriminate based upon any protected status. Please see go.unl.edu/nondiscrimination.

Training Type\_

Employees Trained\_\_\_\_ Trainer & Location DECEMBER 2025

Monthly Inspections Mortality Management System\_\_\_\_\_ Date\_ Notes\_\_\_\_\_

Mon	TUE	WED	THU	FRI	SAT	Weekly Inspections
1	2	3	4	5	6	Lagoon Depth Marker (ft) Date Manure Storage & Equip. Inspection
Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	NotesDate Water & Runoff Diversion, Containment Devices
Wind	Wind	Wind	Wind	Wind	Wind	Notes Date
Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Maintenance or RepairsDate Notes
8	9	10	11	12	13	Lagoon Depth Marker (ft) Date
Rainfall	Rainfall	Rainfall ///	Rainfall	Rainfall	Rainfall	Manure Storage & Equip. Inspection Notes Date
						Water & Runoff Diversion, Containment Devices Notes Date
Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Maintenance or Repairs Date Notes
15	16	17	18	19	20	 Lagoon Depth Marker (ft) Date
Dainfall	Dainfall	Dainfall	Dainfall	Dainfall		Manure Storage & Equip. Inspection Notes Date
						Water & Runoff Diversion, Containment Devices Notes Date
Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Maintenance or Repairs Date Notes
22	23	24	25	26	27	Lagoon Depth Marker (ft) Date
Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Manure Storage & Equip. Inspection Notes Date
						Water & Runoff Diversion, Containment Devices
Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Waterline Inspection	Notes       Date         Maintenance or Repairs       Date         Notes       Date
29	30	31				Lagoon Depth Marker (ft) Date
					and the second s	Manure Storage & Equip. Inspection Notes Date
					a last	Water & Runoff Diversion, Containment Devices Notes Date
Waterline Inspection	Waterline Inspection	Waterline Inspection			-	Maintenance or Repairs Date Notes
1 de la			take immediat contact NDEE	te measures to conta at 1-402-471-4239 w	ain the spill and ithin 24 hours.	NEBRASKA MANURE APPLICATION & STOCKPILE SETBACKS for SMALL & MEDIUM Animal Feeding Operations At least 30 ft. from any surface water, wells, open tile lines, etc. All animal feeding operations must maintain a
	1   Rainfall   Wind   Waterline Inspection   8   Rainfall   Wind   Waterline Inspection   15   Rainfall   Wind   Waterline Inspection   22   Rainfall   Wind   Waterline Inspection   22   Rainfall   Wind   Waterline Inspection   29   Rainfall   Wind   Wind	12RainfallRainfallWindWindWaterline InspectionWind89RainfallRainfallWindWindWindWindWindWindWindWindWaterline Inspection16RainfallRainfallWindWindWaterline Inspection222223RainfallWindWindWaterline Inspection2230RainfallWind	123RainfallRainfallRainfallWindWindWindWaterline InspectionWindWaterline InspectionWaterline Inspection8910RainfallRainfallWindWindWindWindWindWindWindWindWindWindWindWindWaterline Inspection101516RainfallRainfallWind	1       2       3       4         Rainfall	1       2       3       4       5         Rainfall	123456Rainfall Wind Waterline InspectionRainfall Wind Waterline InspectionRainfall Wind Waterline InspectionRainfall Wind Waterline InspectionRainfall Wind Waterline InspectionRainfall Wind Waterline InspectionRainfall Wind Waterline InspectionRainfall Wind Waterline InspectionRainfall Wind Waterline InspectionRainfall Wind Waterline InspectionRainfall Rainfall Wind Wind Wind Wind Wind Wind Waterline Inspection111213Rainfall Rainfall Wind Wind Wind Wind Waterline Inspection13151617 Rainfall Wind Wind Waterline Inspection18 Rainfall Wind Waterline Inspection19 Rainfall Wind Waterline Inspection20 Rainfall Wind Waterline Inspection222324 Rainfall Wind Wind Waterline Inspection26 Rainfall Wind Waterline Inspection27 Rainfall Wind Waterline Inspection2930 Rainfall Wind Wind Wind Wind Wind Wind Wind Wind 

## **Records for Nebraska Animal Feeding Operations**

#### **Operation ID:** ID Type: 🗌 ISS Number 🔲 Program Number 🔲 Premises ID 📄 Operation Name 🗌 Other:\_\_\_\_\_ **General Directions Soil Sampling** • Record the initials of the person performing the inspection each time (see table at front of calendar for initial codes). • Checkmarks will not satisfy the recordkeeping requirements. Field ID & Field ID & Sample Date of Sample Date of • Record any maintenance and/or repairs Depth Collection Depth Location Location Collection • Correct all deficiencies within 30 days • More detailed instructions can be found at the start of this calendar. **Accidental Spill or Discharge** Call NDEE at 1-402-471-4239 Date & time of spill or discharge Length of time of spill or discharge Location & Source of spill or discharge\_\_\_\_\_ Date & time of oral NDEE notification (must be within 24 hours) Estimated discharge volume Date of sample collection (analyzed by a laboratory) **Phosphorus Index** Description of the cause of the discharge \_\_\_\_\_ Must be completed every 5 years for all manure fields. More information at go.unl.edu/Pindex. Precipitation amount (if cause of the discharge) Date Within 5 days, send written spill report to: Field ID & Location **Risk Rating** Management Completed Nebraska Dept. of Environment & Energy | Attn: Ag Section | PO Box 98922 | Lincoln, NE 68509 **Annual Report** (for NPDES permits) Date report submitted to NDEE\_\_\_\_\_\_ *Reports are due March 1 of each year.* Location of files & records for inspections Dates of NDEE inspections Disclaimer: The information in this calendar should assist producers to meet legal requirements and protect environmentally sensitive areas

around their operations. The use of this calendar and accompanying information is intended to serve as a guide and does not guarantee

compliance with the NDEE rules and regulations.

#### **Crops Harvested - Nutrients Removed**

Date	Field ID & Location	Crop Туре	Yield	Acreage	N Removed	P Removed

Crop removal rates can be found at the back of this publication.

#### **Crop Nutrient Needs for Next Year**

Date	Field ID & Location	Crop Type	Yield	Acreage	N Required	P Required

#### **Groundwater & Irrigation Water Sampling**

Irrigation water samples must be taken and analyzed for nitrates every 5 years.								
Sampling Location	Date of Collection	Results (ppm nitrate)						

#### Manure Sold or Given Away

An information sheet containing your operation name & address along with a written statement that manure/wastewater must not enter waters of the state & the nutrient analysis must be provided to the recipient.

Manure Volume/Weight\_\_\_\_\_ Date\_\_\_\_\_

Recipient Name & Address\_\_\_\_\_

Analysis Number\_\_\_\_\_



Sampling Location	Sampling Details	Date of Collection

#### **Application Equipment Maintenance**

#### For calibration instruction visit go.unl.edu/calibration.

Date	Equipment	Maintenance Done/ Calibration Type	Manure Source & Rate

#### Due March 1, 2025

#### **EXAMPLE NPDES ANNUAL REPORT to NDEE**

	EXAMPLE NPDES AN			
	Facility ID Number:			Range:
dress:	City, State and	d Zip code:		
	n number of livestock at the CAFO	at any one time during the	e previous calendar	year:
	of(species)			
	Total amount of waste generated			r year, including
manure and process w	vastewater: Solid tons =	Liquid gallons = _		
Transferred Manure	- The total amount of waste sold	or given away by the operation	ation in the previous	s calendar year,
including manure and	process wastewater. Solid tons =	Liquid gall	ons =	
Land Application Res	sponsibility -			
a. Primary responsibili	ty for land application: Name:	Pł	hone Number:	
Address:	City	, State and Zip code:		
	horized representative, owner, or			
c. Most recent date the	person completed land applicati	on training?		
Land Application Are	ea -	-		
	application acros covered by CAL	EO's current Nutrient Man	agomont Plan	acre
a. Total number of lanc	application acres covered by CAI	FOS CUITEIR NULLIEIR Maria	agennenit Fian	
a. Total number of land b. Total number of acre				
b. Total number of acre	es used for land application of live	estock waste during the pre	evious year	acre
b. Total number of acre <b>Discharges -</b> Summar	es used for land application of live y of all livestock waste discharges	estock waste during the pre (including manure and pro	evious year ocess wastewater) fr	acreacre
b. Total number of acre <b>Discharges -</b> Summar areas and the land app	es used for land application of live	estock waste during the pre (including manure and pro	evious year ocess wastewater) fr	acre
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<ul> <li>b. Total number of acre</li> <li><b>Discharges -</b> Summar</li> <li>areas and the land app</li> <li>each discharge:</li> <li>a. Date discharge bega</li> </ul>	es used for land application of live y of all livestock waste discharges plication areas during the previous an and ended	estock waste during the pre (including manure and pro s year. The summary must	evious year ocess wastewater) fr include the followin	acreacre rom the producti g information for
<ul> <li>b. Total number of acre</li> <li><b>Discharges -</b> Summar</li> <li>areas and the land app</li> <li>each discharge:</li> <li>a. Date discharge bega</li> <li>b. Time of day/night di</li> </ul>	es used for land application of live y of all livestock waste discharges plication areas during the previous an and ended scharge occurred ar	estock waste during the pre (including manure and pro s year. The summary must  nd the duration of discharg	evious year ocess wastewater) fr include the followin ge	acre rom the producti g information for hours.
<ul> <li>b. Total number of acre</li> <li>Discharges - Summar</li> <li>areas and the land app</li> <li>each discharge:</li> <li>a. Date discharge bega</li> <li>b. Time of day/night di</li> <li>c. Approximate volume</li> </ul>	es used for land application of live y of all livestock waste discharges plication areas during the previous an and ended scharge occurred ar e of waste discharged (provide su	estock waste during the pre (including manure and pro s year. The summary must 	evious year ocess wastewater) fr include the followin ge	acre rom the producti g information for hours.
<ul> <li>b. Total number of acre</li> <li>Discharges - Summar areas and the land app each discharge:</li> <li>a. Date discharge bega</li> <li>b. Time of day/night di</li> <li>c. Approximate volume</li> <li>Nutrient Manageme</li> </ul>	es used for land application of live y of all livestock waste discharges plication areas during the previous an and ended scharge occurred ar e of waste discharged (provide su int Plan Information - CAFO's cu	estock waste during the pre- (including manure and pro- s year. The summary must  nd the duration of discharg pporting figures) = urrent Nutrient Manageme	evious year ocess wastewater) fr include the followin ge nt Plan on file with t	acre rom the producti g information for hours.
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e. Results of any soil testing for N and P during the preceding 12 months:

- f. Any conversion or availability factors used to determine nutrient availability:
- g. Amount of supplemental fertilizer used in previous 12 months:

NOTE: Changes in nutrient management plans or other major modifications may require the submission of the 1) application to NDEE, 2) the appropriate application fee, and 3) Departmental approval prior to any changes.

#### Manure & Wastewater Applied

Date	Field ID & Location	Vol or Weight	Acreage Applied	Manure Source	Application Method	Available N	Applied P

#### **Crop Removal Rates**

Crop	DM%	Ν	P2O5	Units	Crop	DM %	Ν	P2O5	Units
Corn (grain)	85	0.70	0.31	lb/bu	Corn (stover)	85	17.7	3.5	lb/ton
Corn (silage)	35	9.0	3.2	lb/ton	Oats (grain)	86	0.60	0.23	lb/ton
Oats (straw)	90	12.7	2.5	lb/ton	Wheat (grain)	86.5	1.2	0.50	lb/ton
Wheat (straw)	90	10.1	2.1	lb/ton	Small Grain Hay	85	34	11.7	lb/ton
Soybean (grain)	87	3.5	0.79	lb/ton	Alfalfa (hay)	85	46.2	9.3	lb/ton
Alfalfa (silage)	40	21.8	4.9	lb/ton					

Other crop information can be found on page 89 of the Manure Application Workbook, which can be found at go.unl.edu/manure\_workbooks.

#### **Crop Available Nitrogen Calculations**

#### **N Budget Records**

		N, ppm	c. Planned N-rate*	NI   Cor	d. H <sub>4</sub> N ntent **	e. NH4N Availability Factor	f. Available NH <sub>4</sub> N (dxe)	g Orga Con	;. nic N tent	h. Organic N Availability Factor	i. Available Organic N (gxh)	j. N available from manure (f+i)	k Applio rate n (C	x. cation eeded /j)	l. Actual application rate	m. Actual manure N applied	n. Commercial N applied ***	o. Irrigation N applied ***	p. Other N applied ***	q. Total N applied	r. Actual yield
Ex.	Home 80, feedlot solids, Corn, 200 bu.	15	100	4.8	<u>lb/ton</u> lb/1000 gal lb/ac-in	<b>ి.హ</b> (see figure below)	2.4	16.4	<u>lb/ton</u> lb/1000 gal lb/ac-in	0.40 (see figure below)	6.6	9	11	<u>tons/acre</u> 1000 gal/acre ac-in/acre	10	90	0	10	0	100	215
1					lb/ton lb/1000 gal lb/ac-in				lb/ton lb/1000 gal lb/ac-in					tons/acre 1000 gal/acre ac-in/acre							
2					lb/ton lb/1000 gal lb/ac-in				lb/ton lb/1000 gal lb/ac-in					tons/acre 1000 gal/acre ac-in/acre							
3					lb/ton lb/1000 gal lb/ac-in				lb/ton lb/1000 gal lb/ac-in					tons/acre 1000 gal/acre ac-in/acre							
4					lb/ton lb/1000 gal lb/ac-in				lb/ton lb/1000 gal lb/ac-in					tons/acre 1000 gal/acre ac-in/acre							
5					lb/ton lb/1000 gal lb/ac-in				lb/ton lb/1000 gal lb/ac-in					tons/acre 1000 gal/acre ac-in/acre							

\* This number should include all sources of N in Ib/acre. Guidelines for fertilizer rates can be found in UNL publications listed on the manure resources page at go.unl.edu/manurepubs.

\*\* Use "as is" basis from manure analysis. Units should be selected in NH-N column and used throughout the table.

\*\*\* Actual manure application rates should be adjusted for these N applications.

#### **Future N Available**

	S. Next Year (lxgx0.20)	t. 2 years from now (lxgx0.10)	u. 3 years from now (lxgx0.05)
Ex.	33	16	8
1			
2			
3			
4			
5			

#### **Availability Factors for Manure Nitrogen**

Ammonium-N	(NH <sub>4</sub> -N)	Available	this Year
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		=			
Sidedress Application		Preplant application	Solid	Liquid*	Liquid <sup>**</sup>
Incorporated	0.95	Incorporated***		·	
Sprinkler Irrigation		Immediately	0.95	0.95	0.95
>0.4 inches applied	0.8	One day later	0.50	0.70	0.70
≤0.4 inches applied	0.4	Two days later	0.25	0.45	0.55
		Three days later	0.15	0.25	0.45
		7+ days later	0.00	0.00	0.40
* Applied when air temp is above 50 . ** Applied when air temp is at or bel		Not incorporated	0.00	0.00	0.00

\*\* Applied when air temp is at or below 50 F.

\*\*\* Incorporation can be accomplished by tillage or rainfall of one-half inch or greater.

#### Organic- N Available this Year <sup>†</sup>

0.15
0.45
0.40
0.20
0.10
0.05

*t* Organic-N availability assumes spring seeded crops. For fall seeded crops multiply organic N availability factor by 0.7.