## 2024 CEAP/ARMS 2/Veg Chem Workshop

Conservation Effects Assessment Project (CEAP) – Project Code 912 Agricultural Resource Management Survey-Phase 2 (ARMS 2) – Project Code 906 Vegetable Chemical Use Survey – Project Code 136





### 2024 CEAP/ARMS 2/Veg Chem Workshop

Welcome, Introductions and Workshop Overview





### Introductions

- Order
  - NASDA
  - UMR Staff
- Please share with us
  - Name
  - Town or Area of State
  - Years of Service







- Housekeeping Items
  - Please silence any electronic devices
  - Emergency/urgent calls feel free to take it, but please leave the room
  - Questions
    - Get presenter's attention when you have an opportunity
    - Unique to the area ask in supervisory group breakouts
  - Keep side conversations to a minimum so other participants can hear the presenters and presenters can stay focused
  - See NASDA Coordinator for any hotel and meeting room issues





- Door Prizes
- Restroom locations
- Refreshments during breaks
- Please have the workshop folder and other training materials readily available
- Turn on iPad and connect to hotel Wi-Fi, if needed





- Content Overview
  - Generally Speaking
    - Lectures
    - Hands-on Exercises
    - Activities
    - Group Breakout Sessions
- Goals
  - Highlight the purpose of the survey and data uses
  - Highlight changes, updates, or problematic areas
  - Keep training interactive and engaging
  - Group Practice to learn from each other





- Day 1
  - Highlight key points in CEAP questionnaire
  - Complete practice exercises
  - Administrative Items
  - Handout CEAP assignment and supplies
- Day 2
  - CEAP (Wrap-up)
  - Veg Chem Use Minnesota and Wisconsin
  - ARMS 2 Minnesota only
  - Wrap up





### Workshop Folder Contents

- Workshop Booklet with Agenda
- Roster
- Questionnaires
- Respondent Booklets
- Workshop Booklet Answers (Supervisors Only)





### Resources Available on the UMR NASDA Hub

#### • CEAP

- Interviewer's Manual
- Questionnaire & Respondent Booklet
- Questionnaire Guide
- Training Videos
- Evaluation Link
- Workshop Presentations





### Questionnaire Guide

- How to use the questionnaire guide:
  - Make notes in your questionnaire guide during training
  - Take the questionnaire guide with you when completing interviews
  - Reference the questionnaire guide when editing your completed questionnaires.





### Questionnaire Guide

- Table of Contents
- Questionnaire Guide Legend:

<u>Questionnaire Guide Legend</u> Yellow Highlight: Skip Options Green Highlight: Information to be INCLUDED Red Highlight: Information to be EXCLUDED Blue Highlight: Important Information Red Text: Examples





### Next on the agenda...

**CEAP** Purpose and Data Uses





## Face Page





### Label

State POID NRI Point Operation County id/name



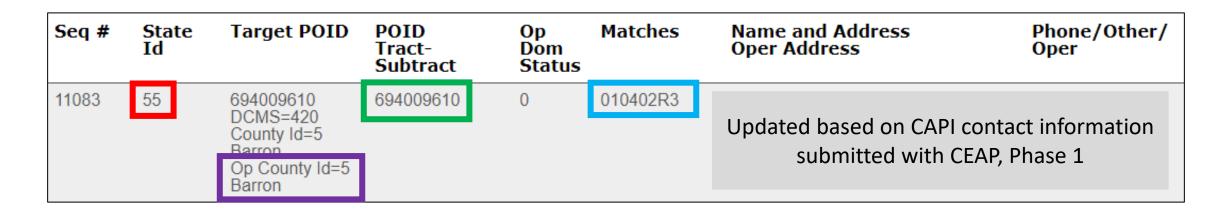
#### NRI Sample Point Number = State County id \_ NRI Point

Assignment Listings = State POID





### **Contact Information**



State POID NRI Point Operation County id/name





# Section A – Field Characteristics &

### Section B – Conservation Plan





## Section A – Field Characteristics





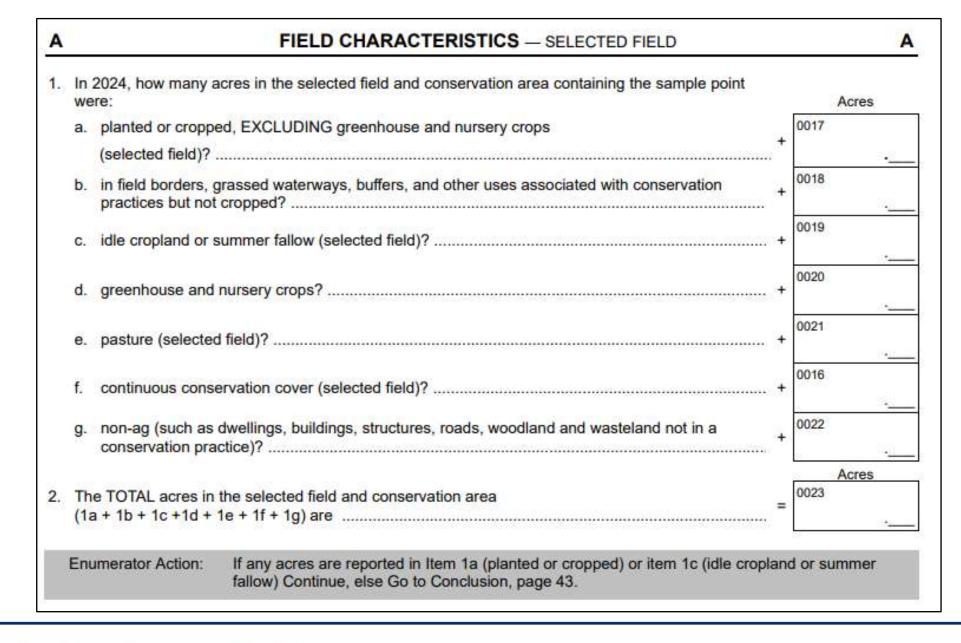
### Purpose

• Confirm selected field and conservation area.

- If necessary, redraw boundaries in NRI Application.
- Identify field acreage.
- Capture enrollments and land tenure.

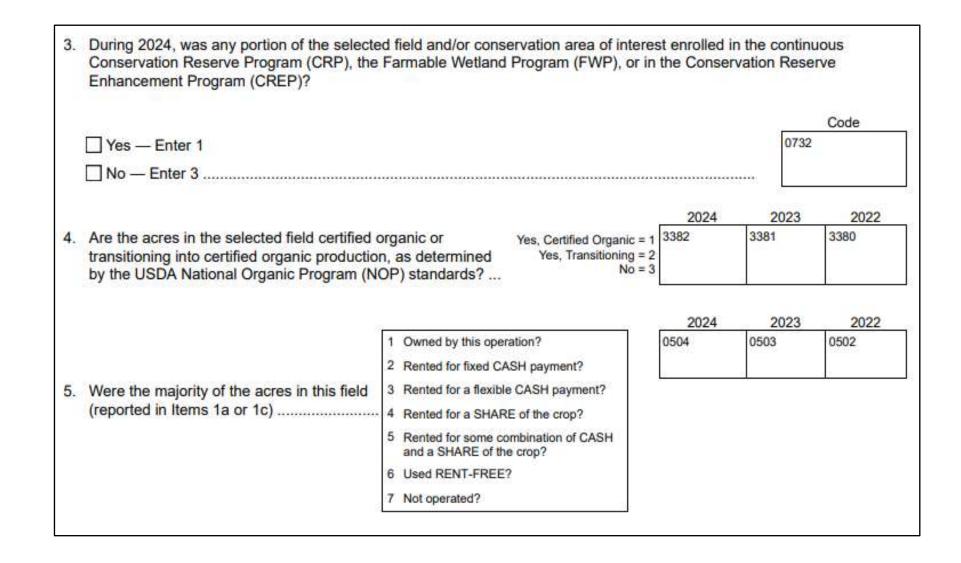
















### Section A - Example

- In 2024, the operator stated 25.9 acres of the selected field was planted. Looking at the FSA map, the operator identifies 0.1 acres in the selected field that is a grassed waterway.
- The selected field is not enrolled in CRP, FWP, or CREP.
- The operator did not want to answer the organic questions.
- A majority of the acres were owned by the operation.





### Acreage

A		FIELD CHARACTERISTICS - SELECTED FIELD		Α
1.	In 2 wei	2024, how many acres in the selected field and conservation area containing the sample point re:	A	cres
	a.	planted or cropped, EXCLUDING greenhouse and nursery crops	0017	State of the second
		(selected field)?	*	25.9
	b.	in field borders, grassed waterways, buffers, and other uses associated with conservation practices but not cropped?	+ 0018	0.1
	C.	idle cropland or summer fallow (selected field)?	+ 0019	
	d.	greenhouse and nursery crops?	+ 0020	
	e.	pasture (selected field)?	+ 0021	
	f.	continuous conservation cover (selected field)?	+ 0016	
	g.	non-ag (such as dwellings, buildings, structures, roads, woodland and wasteland not in a conservation practice)?	+ 0022	
			A	cres
2.		e TOTAL acres in the selected field and conservation area a + 1b + 1c +1d + 1e + 1f + 1g) are	= 0023	26. <u>0</u>
	Enu	imerator Action: If any acres are reported in Item 1a (planted or cropped) or item 1c (idle croplan fallow) Continue, else Go to Conclusion, page 43.	nd or sum	mer





#### **Field Characteristics**

3. During 2024, was any portion of the selected field and/or conservation area of interest enrolled in the continuous Conservation Reserve Program (CRP), the Farmable Wetland Program (FWP), or in the Conservation Reserve Enhancement Program (CREP)? Code Yes - Enter 1 0732 3 X No — Enter 3 2024 2023 2022 4. Are the acres in the selected field certified organic or Yes, Certified Organic = 1 3382 3381 3380 transitioning into certified organic production, as determined Yes, Transitioning = 2 ---by the USDA National Organic Program (NOP) standards? ... No = 32023 2022 2024 1 Owned by this operation? 0504 0503 0502 2 Rented for fixed CASH payment? 5. Were the majority of the acres in this field 3 Rented for a flexible CASH payment? (reported in Items 1a or 1c) ..... 4 Rented for a SHARE of the crop? 5 Rented for some combination of CASH and a SHARE of the crop? 6 Used RENT-FREE? 7 Not operated?





### Section A - Reminders

- Selected Field:
  - Continuous area of land devoted to one crop or land use
- Conservation Area:
  - Any area of land adjoining or adjacent to the Selected Field
- Show boundaries drawn in CEAP Phase 1
- Confirm boundaries and acreage
- Redraw if necessary









### Purpose

• Record Written Conservation Plan

• Record if Cost Share or Incentive Payments were made

• Record Technical Assistance Provided





Written Conservation Plan is a formal document customized for the producer that details the use and best management of the natural resources on the land.





a.

В	CONSERVATION PLAN — SELECTED FIELD/CONSERVATION AREA	
1. C	Do you have a written Conservation Plan(s) for the selected field and/or conservation area?	
[/	A "written plan" is a plan prepared in accordance with Federal, State, and/or Conservation District standards.]	
This	INCLUDES a Conservation Plan, Conservation Compliance (HEL) Plan, or Conservation Plan	
writte	en as a result of participating in a conservation program, such as:	
	Conservation Stewardship Program (CSP)	
	Conservation Reserve Program (CRP)	
	Conservation Reserve Enhancement Program (CREP)	
	Environmental Quality Incentive Program (EQIP)	
	Farmable Wetland Program (FWP)	
	Agricultural Conservation Easement Program (ACEP)     Beginnel Conservation Datasetic Program (BCPD)	
1	Regional Conservation Partnership Program (RCPP)	
	Yes — [Enter 1 and continue with Item 1a.]	
	Don't Know — [Enter 2, then go to Item 2.] Co	de
	□ No — [Enter 3, then go to Item 2.]	
	[Encourage the respondent to get their Conservation Plan to answer the following questions.]	

i i	Do	es the written plan include any of the following? (Select all that apply.)		Code
	i.	Practices to reduce soil erosion	Yes = 1 No = 3	CT AL POTO C
	II.	Nutrient management plan practices	Yes = 1 No = 3	
	iii.	Pest management plan practices	Yes = 1 No = 3	1. TO 1. TO 1. S. 1.
	iv.	Irrigation water management plan practices	Yes = 1 No = 3	
	V.	Wildlife habitat enhancement practices	Yes = 1 No = 3	15-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
	vi.	Manure management and handling practices	Yes = 1 No = 3	177 S. 7. 15. 1
	vii.	Agricultural water management plan that meets state or local requirements	Yes = 1 No = 3	
	viii.	Soil health management plan practices	Yes = 1 No = 3	





**Cost Share payments** are a one-time payment received by the producer to offset the cost of establishing a particular conservation practice after installation is complete.

**Incentive Payments** are annual payments, for a set number of years, as part of a conservation program contract.







Did you receive cost share or incentive payments in 2024, 2023, or 2022 for any conservation practices implemented on this field and/or conservation area?				
[Be sure to include payments for establishing grassed adjoining the field.]	waterways and filter strips or riparian buf	fers on or		
Yes — [Enter 1 and continue.]	- [Enter 3, then go to Item 3.]	0707		
a. If Yes, for what program? (Select all that apply.)	Code			
i. CSP	Yes = 1 0786 No = 3			
ii. CRP	4 0700			
iii. CREP	14			
iv. EQIP				
v. FWP	Yes = 1 0788			
	Code			
vi. ACEP	Yes = 1 0789 No = 3			
vii. RCPP	Yes = 1 0790 No = 3			
viii. State Programs				
ix. Other	Yes = 1 0712			
(Specify) 0791				





**Technical Assistance** includes any person or agency that helped develop or write the conservation plan

<u>or</u>

was involved in planning, installation or maintaining the conservation practice.





2.	If Yes to Item 3a or 3b, please identify who provided the assistance for the development of the Conservation Plan
	and/or conservation practice(s) on the field/conservation area.

INCLUDE:

- assistance for planning, installing, maintaining, or using conservation practices or systems for this land.
- grassed waterways and filter strips or riparian buffers on or adjoining this field.
- · assistance from any source whether paid for or free.

Dic	l you receive any help or a	ssistance with the development of:	
a.		s field/conservation area? ten conservation plan for this field, Item 1 = 1 (Yes).]	
	0780 1 Yes	3 🗌 No	
b.	Conservation practices c	urrently in place on this field/conservation area?	
	0781 1 Yes	3 🗌 No	

Source	Select all that apply Yes = 1	Were you charged for the service? Yes = 1	Which of these was your PRIMARY source of assistance Select only 1 Yes = 1
NRCS	0714	0720	0726
Conservation District	0715	0721	0727
Technical Service Providers (NRCS certified)	0716	0722	0728
Private Consultant (Not NRCS certified)	0747	0760	0762
Trade Organizations	0751	0761	0763
University Extension	0717	0723	0729
State Agencies	0718	0724	0730
Other	0719	0725	0731

Completion Code for Conservation Plan				
1 = Incomplete/Refusal	0700			





3.

ume	erator /		espondent reports "Yes ise, Go to the next pra		lete the additional questions	s about t	that practice
a.	Terra	ces?					1328
				= primarily grassed	1	5. 1885-929	1329
	i. V	Vere these terra	ces? 2 :	= primarily cropped		Code	
b.	Ripa	rian (stream side	e) forest buffer?			Yes = 1 No = 3	1333
	i. W	dth of buffer				Feet	3320
	33 - 333 - 333		1 = evergreen	1000000			3321
	ii. S	nacias	2 = deciduous 3 = mixed			Contra	
						Yes = 1	1334
C.	Ripar	ian (stream side	) herbaceous non-woo	dy plants buffer?		No = 3	3322
	i. W	idth of buffer?				10 cm 10 0s	
	ii. Is	the buffer maint	tained, for example, by	fertilizing, mowing, or r	epairing any gullies?	Yes = 1 No = 3	3323
	iii. Is	the huffer desig	ned to capture		8. J.T.C. 207		9
		2	5 (St.			Yes = 1	3330
	(a	) sediment?				No = 3 Yes = 1	3331
	(b	) nutrients?				No = 3	
	(c	) pesticide resid	lue?			Yes = 1 No = 3	3332
d	Field	borders?			-	Yes = 1 No = 3	1337
1000						and and a	3333
						Yes = 1	3334
	ii. Is	the field border	maintained, for examp	le, by fertilizing, mowin	g, or repairing any gullies?	No ≈ 3	
	iii. Is	the field border	designed to capture -	_ 1		en e	i Indum
	(a	) sediment?				Yes = 1 No = 3	3341
	(b	) nutrients?				Yes = 1 No = 3	3342
		1				Yes = 1	3343
		1.00				Yes = 1	1338
e.	Filter	strips?				No = 3	
	i. W	idth of filter strip	1?			Feet	3344
	ii. Is	the filter strip m	aintained, for example	, by fertilizing, mowing,	or repairing any gullies?	Yes = 1 No = 3	3350
			esigned to capture -				
		and a set of the second se				Yes = 1	3352
						Sec. 1944	3353
	(1	numents?					3354

- 2				Code
		rassed waterways?	Yes = 1 No = 3	1330
4	a. V	egetative barriers (in-field)?	Yes = 1	1331
-		adramu plantingo?	Yes = 1	1332
- 1			No = 3 Yes = 1	1335
- 2		erbaceous wind barrier?	No = 3 Yes = 1	3360
- 2			No = 3 Yes = 1	1336
- 1		ontour buffers (in-field)?	No = 3 Yes = 1	1339
1	. c	ritical area planting?	No = 3	1340
e	n. G		Yes = 1 No = 3	
1	n. D	rainage water management?	Yes = 1 No = 3	3361
4	o. Ir	rigation tailwater recovery system?	Yes = 1 No = 3	3373
	. C	ontour farming?	Yes = 1 No = 3	3362
	1. S	trip cropping?	Yes = 1 No = 3	3363
	ŝ		Yes # 1	0793
- 2		· · · · · ·	No = 3 Yes = 1	0794
1		Yes — Continue with Item (i.). If No — Go to Item t.]	No = 3	
	(1.		1	0795
		a no-till system?	Years	
		[Go to Item u.]		amba: (
t	. u	se reduced, mulch till, or seasonal no-till?	Yes = 1 No = 3	0796
	[]	Yes — Continue with Item (i.), If No — Go to Item 5].		
	(i.	How many years has the land been continuously managed as a reduced, mulch till, or seasonal no-till system?	Years	0797
1		What was the primary purpose of shifting to conservation tillage continuous no-till, seasonal no-till, reduced till, or mulch till)?		
		1 Soil health	4	Code
		2 Pest management 3 Cost		0798
		4 Fuel use		-
		5 Carbon sequestration		



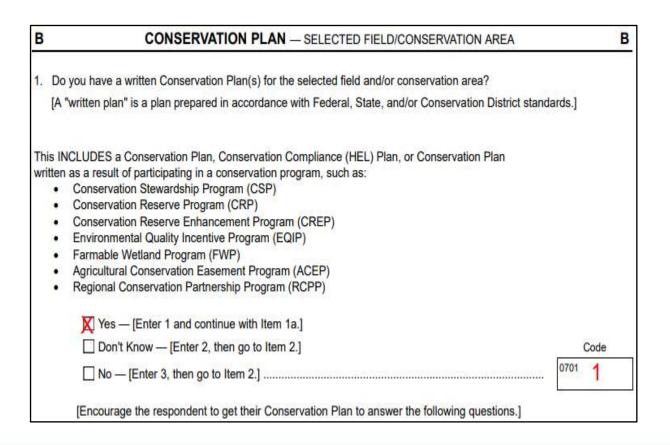


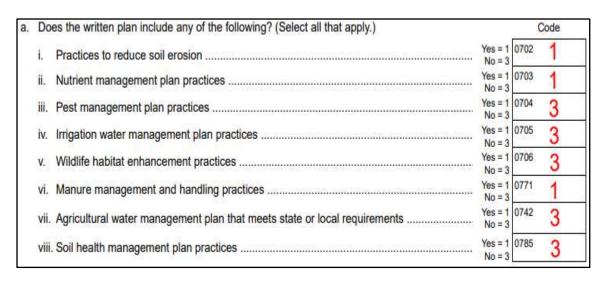
#### Section B – Example Items 1 – 3

- The operator reports having a written conservation plan that includes practices to reduce soil erosion, nutrient management plan practices, and manure management and handling practices.
- There was no cost share or incentive payments for 2024, 2023, and 2022.
- Assistance for a conservation plan and conservation practices was provided by NRCS and a Private Consultant. The Private Consultant is the operations primary source of assistance and charges a fee.













adjoining the field.]		Cod
Yes — [Enter 1 and continue.]	No — [Enter 3, then go to Item 3.]	0707 3
. If Yes, for what program? (Select all that apply.)	Code	
i. CSP	Yes = 1 No = 3	
ii. CRP	Yes = 1 No = 3	
iii. CREP	14	
iv. EQIP		
v. FWP		
	Code	
vi. ACEP	Yes = 1 0789 No = 3	
vii. RCPP		
viii. State Programs	Yes = 1 0711	
	No = 3 Yes = 1 No = 3	





## Section B – Conservation Plan

3.	Die	d you receive any help or	assistance with the development of:
	a.	e entre entre internet entre e	is field/conservation area? itten conservation plan for this field, Item 1 = 1 (Yes).]
		0780 1 X Yes	3 🗌 No
	b.	Conservation practices	currently in place on this field/conservation area?
		0781 1 X Yes	3 🗌 No

c. If Yes to Item 3a or 3b, please identify who provided the assistance for the development of the Conservation Plan and/or conservation practice(s) on the field/conservation area.

#### INCLUDE:

- assistance for planning, installing, maintaining, or using conservation practices or systems for this land.
- grassed waterways and filter strips or riparian buffers on or adjoining this field.
- · assistance from any source whether paid for or free.

Source	Select all that apply	Were you charged for the service?	Which of these was your PRIMARY source of assistance Select only 1		
NDCS	Yes = 1	Yes = 1	Yes = 1		
NRCS	0/14	0720	0/20		
Conservation District	0715	0721	0727		
Technical Service Providers (NRCS certified)	0716	0722	0728		
Private Consultant (Not NRCS certified)	0747 1	0760 1	0762 1		
Trade Organizations	0751	0761	0763		
University Extension	0717	0723	0729		
State Agencies	0718	0724	0730		
Other	0719	0725	0731		

Completion Code for Conservation Plan
1 = Incomplete/Refusal
0700





### Section B – Example Items 4 – 7

- Grassed waterways were the only conservation practice in the selected field for 2024.
- The operator reported NO to using continuous no-till.
- The operator has not modified or added any conservation practices to the selected field to improve habitats of any kind.
- No vegetative cover was managed for wildlife.
- No practices have been installed to restore, enhance, or create wetlands.



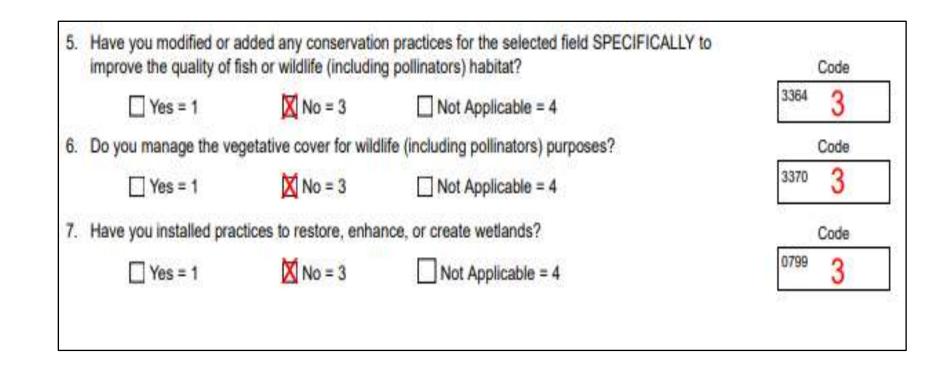


nume	ator Action : If the respondent reports "Yes" to any practice, complete the additional questions Otherwise, Go to the next practice.	s about	that pr	actice
a.	Terraces?	Yes = 1 No = 3	1328	3
	1 = primarily grassed		1329	
		. Code		
b.	Riparian (stream side) forest buffer?	Yes = 1 No = 3	1333	3
	Width of buffer	Feet	3320	10
	1 = evergreen	1001	3321	
	2 = deciduous			
	ii. Species	Yes = 1	1334	0
C.	Riparian (stream side) herbaceous non-woody plants buffer?	No = 3	687222	3
	Width of buffer?	Feet	3322	
	ii. Is the buffer maintained, for example, by fertilizing, mowing, or repairing any gullies?	Yes = 1	3323	
		110 0	2 5	
	iii. Is the buffer designed to capture —	Yes = 1	3330	
	(a) sediment?	No = 3	3330	
	(b) nutrients?	Yes = 1 No = 3	3331	
	(c) pesticide residue?	Yes = 1	3332	
		Yes = 1	1337	0
d.	Field borders?	No = 3	CONTRACTOR OF CONTRACTOR	3
	. Width of field border?	Feet	3333	
	ii. Is the field border maintained, for example, by fertilizing, mowing, or repairing any gullies?	Yes = 1 No = 3	3334	
	iii. Is the field border designed to capture —	10-5		
		Yes = 1	3341	
	(a) sediment?		0040	
	(b) nutrients?	Yes = 1 No = 3	3342	
	(c) pesticide residue?	Yes = 1 No = 3	3343	
		Yes = 1	1338	3
e.	Filter strips?		3344	0
	. Width of filter strip?		anness.	
	ii. Is the filter strip maintained, for example, by fertilizing, mowing, or repairing any gullies?	Yes = 1 No = 3	3350	
	iii. Is the filter strip designed to capture —			
	(a) sediment?	Yes = 1	3352	
		Max - 1	3353	
	(b) nutrients?		3354	
	(c) pesticide residue?	- No = 3	3334	

			. 1	Code
f.	Grassed waterways?	Yes = 1 No = 3	1330	1
1.	Vegetative barriers (in-field)?		1004	3
1.	Hedgerow plantings?	Mag a d	1000	3
1	Windbreak?		1335	3
	Herbaceous wind barrier?	Vos = 1	3360	3
े द	Contour buffers (in-field)?			3
	Critical area planting?		(and the second	3
n	Grade stabilization structure?			3
1.	Drainage water management?	Max - 4	2204	3
ta i	Irrigation tailwater recovery system?		0.070	3
	Contour farming?	Yes = 1	3362	3
).	Strip cropping?		<u> </u>	3
1-			-	3
6	Alley cropping?	Voc = 1	_	3
\$.	Use continuous no-till? [If Yes — Continue with Item (i.). If No — Go to Item t.]	No = 3		3
	(i.) How many years has the land been continuously managed as a no-till system?	Years	0795	
	[Go to Item u.]			
t,	Use reduced, mulch till, or seasonal no-till?	Yes = 1 No = 3		3
	[If Yes - Continue with Item (i.), If No - Go to Item 5].			
	(i.) How many years has the land been continuously managed as a reduced, mulch till, or seasonal no-till system?	Veam	0797	
u.,	What was the primary purpose of shifting to conservation tillage (continuous no-till, seasonal no-till, reduced till, or mulch till)?	Years	L	
	1 Soil health		1	Code
	2 Pest management		0798	
	3 Cost		2	
	4 Fuel use			
	5 Carbon sequestration			











## Reminders

• Looking for Written Conservation Plan(s)

- Selected field only.
- Properly record assistance received.





# Section C Cropping History and Conservation Practices





# PURPOSE

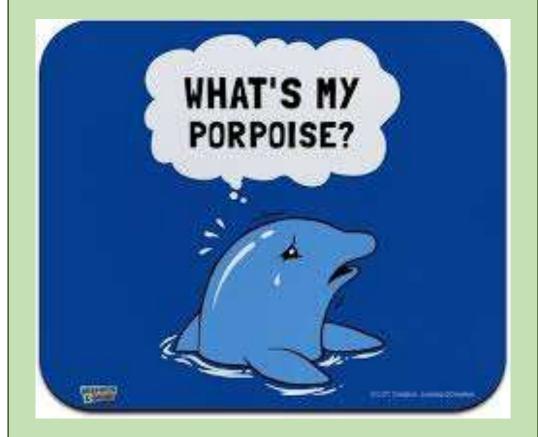


IDs Farming practices



Crop data used to estimate residue levels

Impact of conservation practices









# History

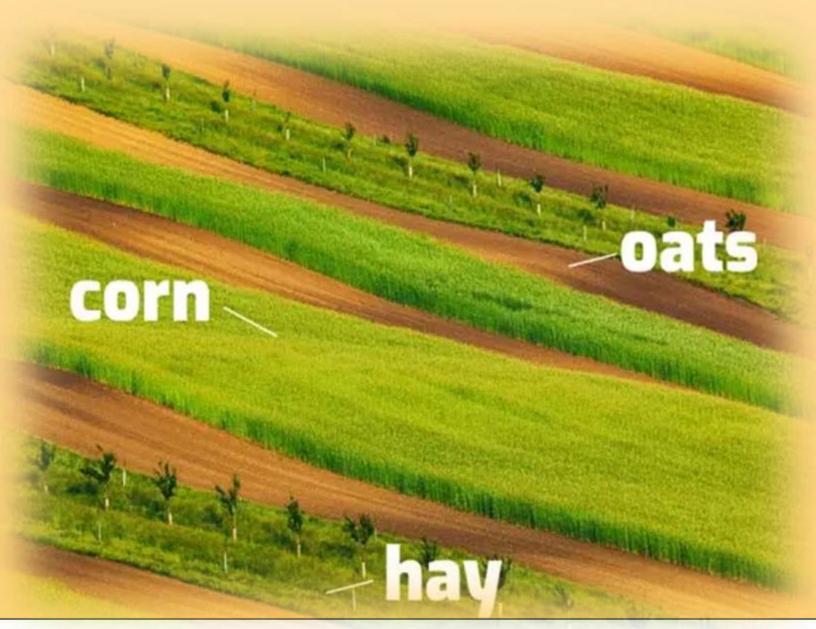
- Collect information from the last 3 years
  - Record all crop planted sequentially
  - Record max of 3 crops
  - Only record the dominate crop





### Strip Cropping

Multiple crops grown in the same field









### Nurse Cropping

### A plant helps another plant grow.



**United States Department of Agriculture** National Agricultural Statistics Service



### Additional Notes



# Pre-plant tillage operations



#### Replanted fields





				1	2	3
Le	et's begin with the 2024 crop year. What was/were the:			2024	2024	2024
С	rop(s) planted or Land Use?	Crop				
a.	Crop(s) code or Land Use Code. [See Respondent. Booklet pgs. 4 - 7 for codes.]	Code	1005	Enter Cro	1037 p Code	1069
b.	Intended use of Crop(s). [See Respondent Booklet pg. 7 for codes.]	Code	1006		<sup>°1038</sup> han 1 use - cod	e as "other"
C.	Acres planted? [Include previous planted crops.]	Acres	1007		1039	
d.	Date planted, transplanted, or established? (MM DD YY)	Date	1008		1040	1072
e.	Row Width (for row crops)?	Inches	1011	·	1043	1075
f.	Was precision technology used to change seeding rate within the field?	Yes = 1 No = 3	0800		0801	0802
g.	Was precision technology used to change crop variety within the field?	Yes = 1 No = 3	0803		0804	0805
h.	Was a soil test performed on this field prior to planting (anytime from harvest of previous year's crop to planting of current year's crop) to determine crop nutrient or soil health needs?	Yes = 1 No = 3	0806		0807	0808
i.	Did you apply soil carbon amendments (e.g., biochar, compost, compost teas, etc.) to improve soil health?	Yes = 1 No = 3	0809		0810	0811
j.	Was this crop irrigated?	Yes = 1 No = 3	1029		1061	1093
k.	EXPECTED yield/acre at planting (yield goal)?	Number	1012	·	1044 ·	1076 ·
	(1) Unit: [See Respondent Booklet pg. 7 for codes]	Code	1013	Make a n	otte⁵if unit is no	t <sup>1</sup> fisted
I.	Acres harvested?	Acres	1015	•	1047	1079 ·
	(1) Date harvested? (MM DD YY)	Date	1016	Enter Las	t date harveste	1080 d





m.	ACTUAL yield at harvest/acre?	Number	<sup>1017</sup> ·	1049		
	(1) Unit: [See Respondent Booklet pg. 7 for codes.]	Code	<sup>1018</sup> Make a not	1050 if unit is not	listed	
n.	Acres Abandoned or NOT harvested?	Acres	1019	1051	1083	
0.	Was the grass vegetation, straw, or stubble harvested?	Yes = 1 No = 3	1020	1052	1084	
p.	Was the field grazed? [If Yes — Enter 1 and continue. If No — Enter 3, then Go to Item t.]	Yes = 1 No = 3	1023	1055	1087	
q.	What type of livestock grazed the field (primarily)? [See Respondent Booklet pg. 7 for codes.]	Code	1024	1056	1088	
r.	Regardless of ownership, how many head ofgrazed this field BEFORE harvest or termination?	Head	1025	1057	1089	
	(1) How many TOTAL days was the field grazed BEFORE harvest or termination?	Days	1026	1058	1090	
S.	Regardless of ownership, how many head of grazed this field AFTER harvest or termination?	Head	1027	1059	1091	
	(1) How many TOTAL days was the field grazed AFTER harvest or termination?	Days	1028	1060	1092	
t.	Was any forage intentionally left behind for wildlife use, cover, and/or shelter?	Yes = 1 No = 3	2610	2611	2612	
		-	Completion Code for 2024 Cropping History			
			1 = Inaccessible/Re	fusal	1004	





	_	1	2	3
Let's continue with the 2023 crop year.		2023	2023	2023
Did you make day-to-day farming/ranching decisions for this field in 2023? If Yes — Continue. If No — Go to page 9.	Yes = 1 No = 3	0010		
What was/were the :				
Crop(s) planted or Land Use?	Crop			
<ul> <li>Crop(s) code or Land Use Code.</li> <li>[See Respondent Booklet pgs. 4 - 7 for codes.]</li> </ul>	Code	1101	1133	1165
<ul> <li>Intended use of Crop(s).</li> <li>[See Respondent Booklet pg. 7 for codes.]</li> </ul>	Code	1102	1134	1166
		4400	4400	4407

		1	2	3
Let's continue with the 2022 crop year.		2022	2022	2022
Did you make day-to-day farming/ranching decisions for this field in 2022? If Yes, continue. If No, go to page 10.	Yes = 1 No = 3	0011		
What was/were the :				
Crop(s) planted or Land Use?	Crop			
<ul> <li>a. Crop(s) code or Land Use Code.</li> <li>[See Respondent Booklet pgs. 4 - 7 for codes.]</li> </ul>	Code	1197	1229	1261





### Planned Crop Rotation



**Growing Crops** in a repeating sequence for 2 or more years



#### **Benefits**

Do you have a planned crop rotation for this field? 2.

> 1343 1 X Yes — Continue 3 No — Go to Item 3.

a. Let's record your crop rotation plan. Use the crop codes from the Respondent Booklet pgs. 4-7. Use multiple codes to capture strip cropping, double cropping, and cover crops in a planned rotation.

Enter the crop name and crop code for the crops in rotation [only use as many years as are in the rotation scheme.]	Crops	Crop Code	Crop Code	Crop Code
i. 1 <sup>st</sup> year of rotation	Corn	<sup>1344</sup> 188	1351	1358
ii. 2 <sup>nd</sup> year of rotation	Soybeans	1345 120	1352	1359
iii. 3 <sup>rd</sup> year of rotation		1346	1353	1360
iv. 4 <sup>th</sup> year of rotation		1347	1354	1361
v. 5 <sup>th</sup> year of rotation		1348	1355	1362
vi. 6 <sup>th</sup> year of rotation		1349	1356	1363





3. Was a cover crop planted on this field for the 2024, 2023, or 2022 crop years?

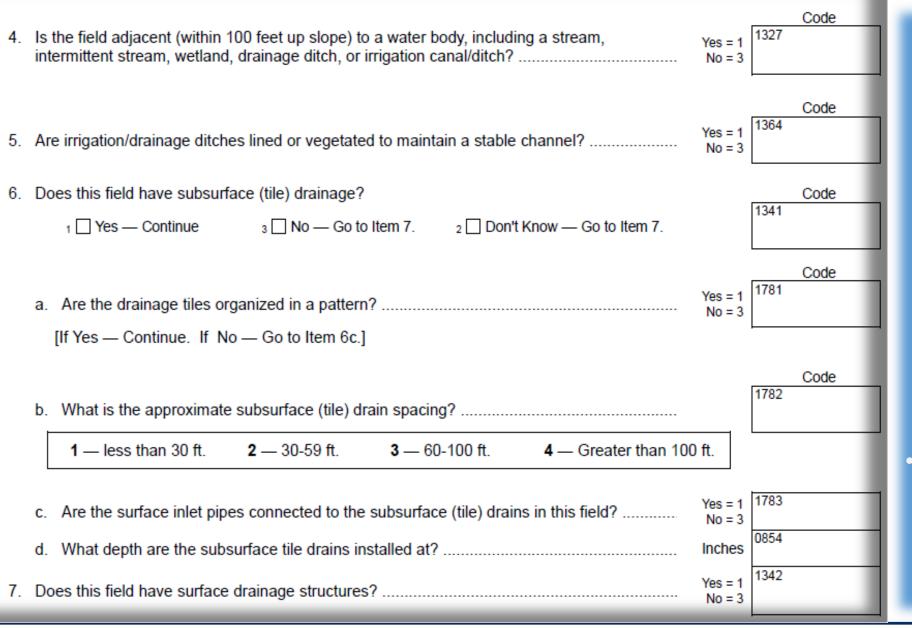
1471 1 Yes — Continue

3 No — Go to Item 4.

a.	When was the cover crop						2024		2023	2	022
	planted?					1472		1483		1571	
			MM E	DD	YY	_10	<u>2523</u>				
If	What type of cover crop was planted? (Enter code) the crop is not listed, ake a note	3 Rye 4 Othe	at grass er small n /winter		Legume (clover, cowpeas, etc.). Other	1473	1	1491		1572	
C.	What was the primary intended benefit of the cover crop? (Enter code)	2 Soil 3 Soil 4 Cont week	cts,&	5 6	Carbon sequestration Other	0836	2	0837		0838	
d.	Did you apply commercial fertilizer for the benefit of the cover crop?				Yes = 1 No = 3	0839	3	0840		0841	
e.	Did you apply manure for the benefit of the cover crop?				Yes = 1 No = 3	0842	1	0843		0844	
f.	Did you apply pesticides for the benefit of the cover crop?				Yes = 1 No = 3	0845	3	0846		0847	
g.	Did you irrigate the cover crop?				Yes = 1 No = 3	0848	3	0849		0850	
h.	Was the cover crop grazed?				Yes = 1 No = 3	0851	3	0852		0853	
i.	When was the cover crop terminated?		MM	DD	YY	1481	41524	1492		1573	
j.	How was the cover crop terminated? (Enter code)	2 Mow 3 Harv	ested	5 6 7 8	Rolled/crimped Harvested for grain Burned (fire) Winter kill	1482	6	1493		1581	







# Watering and Drainage

- Adjacent Body of Water
- Irrigation Ditches Lined or Vegetated
- Subsurface and Surface Drains



<sup>•</sup> Surface drains

### Example 2024

- The farmer planted 25.9 acres oats that will for grain were planted on April 5, 2024, and all acres were harvested on Aug 4, 2024. The farmer expected 60 bushels/acres and got 70 bushels/acres. The farmer also harvested the grass vegetation, straw, and stubble on Aug 4, 2024.
- On April 5, 2024, the farmer also planted 25.9 acres of Alfalfa with and expected yield of 2 tons/acre. The farmer baled all the alfalfa acres on Nov 5, 2024, and got 2.5 tons/acre.
- If the question is not addressed the answer is assumed to be "NO"
- For both oats and alfalfa acres livestock wasn't grazed on either fields.





			1		2		3
t's begin with the 2024 crop year. What was/were the:			2024		2024		2024
op(s) planted or Land Use?	Crop		oats	0	alfalfa		
Crop(s) code or Land Use Code. [See Respondent. Booklet pgs. 4 - 7 for codes.]	Code	1005	110	1037	101	1069	
Intended use of Crop(s). [See Respondent Booklet pg. 7 for codes.]	Code	1006	2	1038	6		
Acres planted? [Include previous planted crops.]	Acres	1007	25. <u>9</u>	1039	25. <u>9</u>	1071	
Date planted, transplanted, or established? (MM DD YY)	Date	1008 C	40524	1040	40524	1072	
Row Width (for row crops)?	Inches	10 <u>11</u>		1043	·	1075	
Was precision technology used to change seeding rate within the field?	Yes = 1 No = 3	0800	3	0801	3	0802	
Was precision technology used to change crop variety within the field?	Yes = 1 No = 3	0803	3	0804	3	0805	
Was a soil test performed on this field prior to planting (anytime from harvest of previous year's crop to planting of current year's crop) to determine crop nutrient or soil health needs?	Yes = 1 No = 3	0806	3	0807	3	0808	
Did you apply soil carbon amendments (e.g., biochar, compost, compost teas, etc.) to improve soil health?	Yes = 1 No = 3	0809	3	0810	3	0811	
Was this crop irrigated?	Yes = 1 No = 3	1029	З	1061	3	1093	
EXPECTED yield/acre at planting (yield goal)?	Number	1012	60_0	1044	2. <u>0</u>	1076	·
(1) Unit: [See Respondent Booklet pg. 7 for codes]	Code	1013	4	1045	3	1077	
Acres harvested?	Acres	1015	25.9	1047	25. <u>9</u>	1079	•
(1) Date harvested? (MM DD YY)	Date	<sup>10</sup> 0°E	30424	1048	110524	1080	
	[See Respondent. Booklet pgs. 4 - 7 for codes.]         Intended use of Crop(s).         [See Respondent Booklet pg. 7 for codes.]         Acres planted? [Include previous planted crops.]         Date planted, transplanted, or established?         (MM DD YY)         Row Width (for row crops)?         Was precision technology used to change seeding rate within the field?         Was precision technology used to change crop variety within the field?         Was a soil test performed on this field prior to planting (anytime from harvest of previous year's crop to planting of current year's crop) to determine crop nutrient or soil health needs?         Did you apply soil carbon amendments (e.g., biochar, compost, compost teas, etc.) to improve soil health?         Was this crop irrigated?         EXPECTED yield/acre at planting (yield goal)?         (1) Unit: [See Respondent Booklet pg. 7 for codes]         Acres harvested?	op(s) planted or Land Use?       Crop         Crop(s) code or Land Use Code.       Code         [See Respondent. Booklet pgs. 4 - 7 for codes.]       Code         Intended use of Crop(s).       [See Respondent Booklet pg. 7 for codes.]       Code         Acres planted? [Include previous planted crops.]       Acres         Date planted, transplanted, or established?       Date         (MM DD YY)       Date         Row Width (for row crops)?       Inches         Was precision technology used to change seeding rate within the field?       Yes = 1 No = 3         Was precision technology used to change crop variety within the field?       Yes = 1 No = 3         Was a soil test performed on this field prior to planting (anytime from harvest of previous year's crop to planting of current year's crop) to determine crop nutrient or soil health needs?       Yes = 1 No = 3         Did you apply soil carbon amendments (e.g., biochar, compost, compost teas, etc.) to improve soil health?       Yes = 1 No = 3         Was this crop irrigated?       Yes = 1 No = 3         EXPECTED yield/acre at planting (yield goal)?       Number         (1) Unit: [See Respondent Booklet pg. 7 for codes]       Code         Acres harvested?       Acres	op(s) planted or Land Use?CropCrop(s) code or Land Use Code. [See Respondent. Booklet pgs. 4 - 7 for codes.]Code1005Intended use of Crop(s). [See Respondent Booklet pg. 7 for codes.]Code1006Acres planted? [Include previous planted crops.]Acres1007Date planted, transplanted, or established? (MM DD YY)Date1008Row Width (for row crops)?Inches1011Was precision technology used to change seeding rate within the field?Yes = 1 No = 30800Was precision technology used to change crop variety within the field?Yes = 1 No = 30803Was a soil test performed on this field prior to planting (anytime from harvest of previous year's crop to planting of current year's crop) to determine crop nutrient or soil health needs?Yes = 1 No = 30809Did you apply soil carbon amendments (e.g., biochar, compost, compost teas, etc.) to improve soil health?Yes = 1 No = 30809Was this crop irrigated?Yes (g. add)?Number1012(1) Unit: [See Respondent Booklet pg. 7 for codes]Code1013Acres harvested?Acres1015	op(s) planted or Land Use?       Crop       Oats         Crop(s) code or Land Use Code.       [See Respondent. Booklet pgs. 4 - 7 for codes.]       Code       1005       110         Intended use of Crop(s).       [See Respondent Booklet pg. 7 for codes.]       Code       1007       25.9         Acres planted? [Include previous planted crops.]       Acres       1007       25.9         Date planted, transplanted, or established?       Date       1008       0405244         Row Width (for row crops)?       Inches       1011          Was precision technology used to change seeding rate within the field?       Yes = 1       0800       3         Was precision technology used to change crop variety within the field?       Yes = 1       0803       3         Was a soil test performed on this field prior to planting (anytime from harvest of previous year's crop to planting of current year's crop) to determine crop nutrient or soil health needs?       Yes = 1       0809       3         Did you apply soil carbon amendments (e.g., biochar, compost, compost teas, etc.) to improve soil health?       Yes = 1       029       3         Was this crop irrigated?       Yes = 1       No = 3       0809       3         (1) Unit: [See Respondent Booklet pg. 7 for codes]       Code       1013       4         Acres harvested?       Acres	Crop (s) planted or Land Use?Crop (Dec)OatsCrop(s) code or Land Use Code. [See Respondent. Booklet pgs. 4 - 7 for codes.]Code $1005$ $1100$ Intended use of Crop(s). [See Respondent Booklet pg. 7 for codes.]Code $1006$ $2$ $1038$ Acres planted? [Include previous planted crops.]Acres $1007$ $25.9$ $1039$ Date planted, transplanted, or established? (MM DD YY)Date $1008$ 0405244 $1040$ 0405244Row Width (for row crops)?Inches $1011$ 	t's begin with the 2024 crop year. What was/were the:20242024op(s) planted or Land Use?CropOatsalfalfaCrop(s) code or Land Use Code. [See Respondent. Booklet pgs. 4 - 7 for codes.]Code $1005$ $110$ Intended use of Crop(s). [See Respondent Booklet pg. 7 for codes.]Code $1006$ $2$ $1038$ Acres planted? [Include previous planted crops.]Acres $1007$ $25.9$ $1039$ $25.9$ Date planted, transplanted, or established? (MM DD YY)Date $1008$ $0405244$ $1040$ $0405244Was precision technology used to change seeding ratewithin the field?No = 30800308013Was precision technology used to change crop varietywithin the field?Yes = 1No = 30800308043Was a soil test performed on this field prior to planting(anytime from harvest of previous year's crop to plantingcompost, compost teas, etc.) to improve soil health?No = 30809308103Was this crop irrigated?Yes = 1No = 31029310613EXPECTED yield/acre at planting (yield goal)?Number101260.010442.0(1) Unit: [See Respondent Booklet pg. 7 for codes]Code1013410453Acres harvested?Acres101525.9104725.9(1) Unit: [See Respondent Booklet pg. 7 for codes]Code1013410453Acres harvested?Acres$	t's begin with the 2024 crop year. What was/were the:       2024       2024         op(s) planted or Land Use?       Crop       Oats       alfalfa         Crop(s) code or Land Use Code.       Code       1005       110       1037       1001       1069         Intended use of Crop(s).       Code       1006       2       1038       6       1070         See Respondent. Booklet pg. 7 for codes.]       Code       1007       25.9       1039       25.9       1071         Date planted? [Include previous planted crops.]       Acres       1007       25.9       1039       25.9       1071         Date planted, transplanted, or established?       Date       1008       040524       1040       1075         Was precision technology used to change seeding rate within the field?       Yes = 1       0800       3       0801       3       0802         Was a soil test performed on this field prior to planting carry errop to determine crop nutrient or soil health needs?       No = 3       0809       3       0807       0808         Did you apply soil carbon amendments (e.g., biochar, compost teas, etc.) to improve soil health?       No = 3       0809       3       0811       3       0811         Mas this crop irrigated?       Yes = 1       No = 3       1029       1







m.	ACTUAL yield at harvest/acre?	Number	1017	70 <u>.0</u>	1049	2.5	1081	·
	<ol><li>Unit: [See Respondent Booklet pg. 7 for codes.]</li></ol>	Code	1018	4	1050	3	1082	
n.	Acres Abandoned or NOT harvested?	Acres	1019		1051		1083	•
0.	Was the grass vegetation, straw, or stubble harvested?	Yes = 1 No = 3	1020	1	1052	3	1084	
p.	Was the field grazed? [If Yes — Enter 1 and continue. If No — Enter 3, then Go to Item t.]	Yes = 1 No = 3	1023	3	1055	3	1087	
q.	What type of livestock grazed the field (primarily)? [See Respondent Booklet pg. 7 for codes.]	Code	1024		1056		1088	
ſ.	Regardless of ownership, how many head of grazed this field BEFORE harvest or termination?	Head	1025		1057		1089	
	(1) How many TOTAL days was the field grazed BEFORE harvest or termination?	Days	1026		1058		1090	
S.	Regardless of ownership, how many head of grazed this field AFTER harvest or termination?	Head	1027		1059		1091	
	(1) How many TOTAL days was the field grazed AFTER harvest or termination?	Days	1028		1060		1092	
t.	Was any forage intentionally left behind for wildlife use, cover, and/or shelter?	Yes = 1 No = 3	2610	3	2611	3	2612	
				Completion	Code f	for 2024 C	ropping Histo	ry
			1 = Inac	cessible/Re	fusal		1004	





### Example for page 10 - 11

- The farmer does have a 6-year crop rotation plan, by planting Alfalfa for 3 years then corn for silage in year 4, corn for grain in year 5 and oats/alfalfa for the year 6.
- No cover crops were planted in 2022-2024.
- If the question is not addressed the answer is assumed to be "NO"





2 Do you have a planned crop rotation for this field?

> 1343 1 Yes — Continue 3 No — Go to Item 3.

a. Let's record your crop rotation plan. Use the crop codes from the Respondent Booklet pgs. 4-7. Use multiple codes to capture strip cropping, double cropping, and cover crops in a planned rotation.

Enter the crop name and crop code for the crops in rotation [only use as many years as are in the rotation scheme.]	Crops	Crop Code	Crop Code	Crop Code
i. 1 <sup>st</sup> year of rotation	alf	1344 101	1351	1358
ii. 2 <sup>nd</sup> year of rotation	alf	<sup>1345</sup> 101	1352	1359
iii. 3 <sup>rd</sup> year of rotation	alf	<sup>1346</sup> 101	1353	1360
iv. 4 <sup>th</sup> year of rotation	corn	1347 189	1354	1361
v. 5 <sup>th</sup> year of rotation	corn	<sup>1348</sup> 188	1355	1362
vi. 6 <sup>th</sup> year of rotation	oats/alf	<sup>1349</sup> 110	<sup>1356</sup> 101	1363

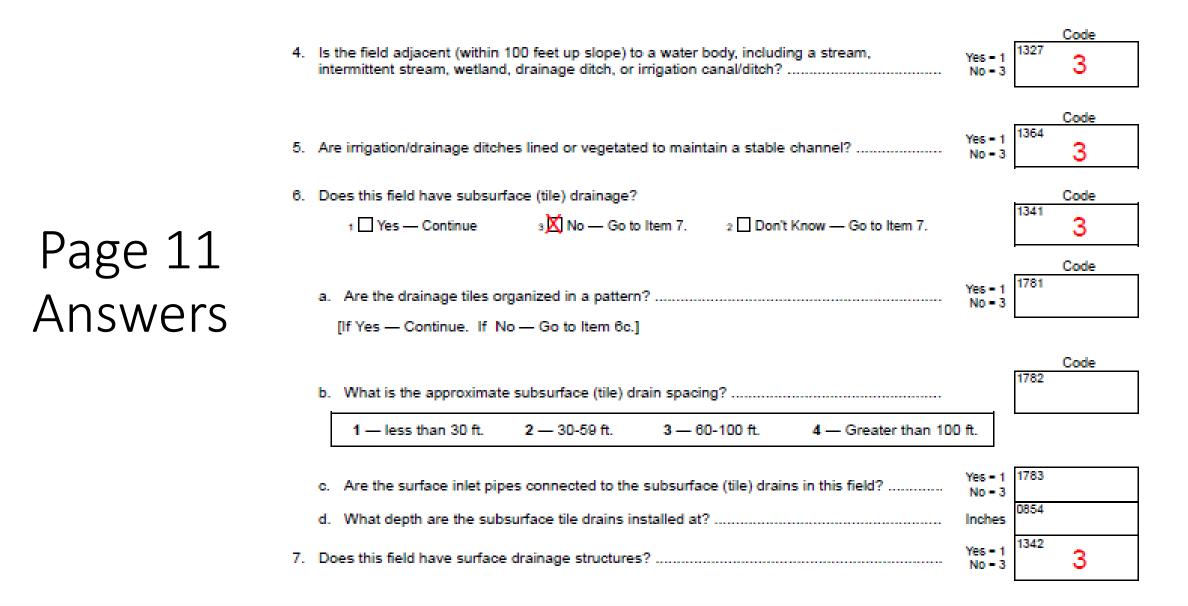
Was a cover crop planted on this field for the 2024, 2023, or 2022 crop years?

1471 1 Yes — Continue 3 🕅 No — Go to Item 4.



Page 10 Answers









# Section D – Commercial Fertilizer Application and Section E – Manure Application





# Section D – Commercial Fertilizer Application





### Purpose

- Section D Commercial Fertilizers
  - Determine whether commercial fertilizer products were applied to meet crop growth needs.
  - Determine the rate fertilizer products were applied on the field.
  - Determine when fertilizer products were applied.
  - Determine the form of products applied.
  - Determine how the fertilizer products were applied.





### What are Fertilizers

- Can be Organic or Inorganic
- Natural or Synthetic

- Supplies one or more essential nutrients for crop growth
  - Nitrogen (N)
  - Phosphorus (P<sub>2</sub>O<sub>5</sub>)
  - Potassium (K<sub>2</sub>O)





### Commercial Fertilizers vs. Manures

- Reported separately for CEAP
  - Section D Commercial Fertilizers
  - Section E Manures
- Why Separate Fertilizers and Manures
  - Manures are bulkier and stored/applied differently
  - Differences affect N & P losses on the field





### Section D – Commercial Fertilizers

D	COMMERCIAL FERTI	LIZER APPLICATION - SELEC	TED FI	ELD	D
1.	Were commercial FERTILIZERS applied to the	field for:		Code	Completion Code
	a. The 2024 crop?		Yes = 1 No = 3	0221	0234
	b. The 2023 crop?		Yes = 1 No = 3	0235	0233
ł	c. The 2022 crop?		Yes = 1 No = 3	0237	0232
					Code
2.	Is your soil phosphorus level elevated to a poin be applied to this field for the 2024 crop year?	t where no additional phosphorus nutri	ients ca	Yes = 1	0247
J.	Were phosphorus nutrients applied to this field		022 to		Code
	supply phosphorus for subsequent years of the	15 5 7 / /			0248
	1 Yes — Enter 1, then Continue. 3	No — Enter 3, then Go to Item 4			
					MM DD YY
	a. When were the phosphorus nutrients applie	d?		0249	09 01 21

- Start with 2024 and work back to 2022
- Don't record Manure for Question 1
- Questions 2 & 3 apply to Phosphorus





### Section D – Commercial Fertilizers

4.	Wh	at types of information did you use to inform fertilizer application decisions?		9	Code
	a.	Fertilizer costs	Yes = No =		
	b.	Current weather conditions	Yes = No =		
	C.	Mid to long-term forecasted climate conditions	1000	857	
	d.	Crop market prices	Max -	858	
	e.	Nutrient Management Plan (right source, method, rate, and timing for the specific field conditions)	Yes =	859	
	f.	Availability of application equipment	Yes = No = :		
			2024	2023	2022
5.		which of the following years (2024, 2023, and/or 2022) were soil amendments er than nutrients (such as lime or gypsum) added to this field?	0283 (	285	0287
	[If	Yes — Continue for that year. If No — for all years, Go to Item 6.] No = 3			0
	a.	Were the amendments added to address pH, soil structure, or micronutrient- related problems?	0284 0	286	0288
6.		re any of the following types of soil or tissue tests performed to determine nutrient ed on this field?	205	1	Code
	a.	Pre-plant or pre-sidedress nitrate-nitrogen test	Yes = No =	0272	
	b.	Deep soil profile nitrate-nitrogen test (greater than one foot deep)	Yes = No =		
	C.	Leaf petiole or leaf tissue tests	Yes = No = :	0274	
	d.	Post-harvest stalk test	Yes = No =	0275	
	e.	Chlorophyll analysis (for example leaf color charts, chlorophyll meters, optical sensors, or remote aerial sensing)	Yes = No =		

- Record information used to make application decisions
- Soil amendments other than commercial fertilizer
- Ask for the results/records of soil or tissue tests





### Section D – Commercial Fertilizers

			2024	2023	2022
7.	In which of the following years (2024, 2023, and/or 2022) was Global Positioning System (GPS) device used to georeference and/or produce a map of the soil properties of this field (such as soil nitrate levels, pH, etc.)?	Yes = 1 No = 3	1299	1310	1321
	[If Yes — Any crop year, Continue.]		140 C	8	8
	[If No — All crop years, Go to Item 8.]				
			2024	2023	2022
	a. Was the map based on random sampling?	Yes = 1 No = 3	0277	0279	0281
	b. Was the map based on grid sampling?	Yes = 1 No = 3	0278	0280	0282
	c. Was the map based on an instrument that measured electrical conductivity of the soil?	Yes = 1 No = 3	1301	1312	1323
8.	Was yield monitoring data used to adjust fertilizer application rates within the field?	Yes = 1 No = 3	0861	0862	0863
9.	Was in-soil application fertilizer placement (distance from root zone) adjusted for optimal plant availability?	Yes = 1 No = 3	0864	0865	0866
10.	Was remote sensing used to monitor nutrient needs?		0867	0868	0869
	[Remote sensing is the use of satellites or aircraft (planes, drones, etc.) to scan a field to obtain information about the plant or soil conditions within the field.]	Yes = 1 No = 3			





### Commercial Fertilizer Applications Tables

- Separate table for 2024, 2023, and 2022.
- Ask the operator to obtain records to assist with tables.
- Data Collection should match what was reported earlier.

1.	Were commercial FERTILIZERS applied to the field for:		Co	de	Completion Code
		Yes = 1 No = 3	0221	1	0234
		Yes = 1 No = 3		1	0233
	TL 0000 0	Yes = 1 No = 3	0237	1	0232

- Respondent booklet pages 4-7, 8-9.
- Survey Supplement sheet available.





### Section D – Respondent Booklet

- Crop Codes on pages 4-7
- Common fertilizer products on pages 8-9

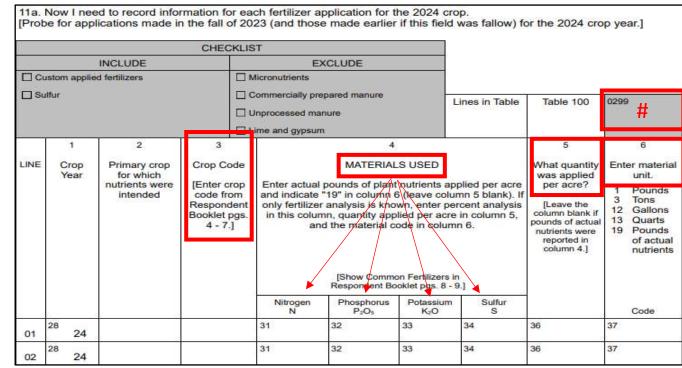
	8				
Section D, item 11a, b, and c Common	Fertilizers and T	heir Percent	Analysis		
[Enumerator Note: If Respondent cannot report the formulation for	Section D, Item 11a,	b, and c, use th	e formulations bel	ow.]	
			Percent Active In	gredients	
Name	Form	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	S
Ammonia	D/L	80		1000	
Ammoniated superphosphate	D	12-17	22-35		
Ammonium metaphosphate	D	12	51		
Ammonium nitrate	D	32-34			
Ammonium phosphate	D	11-18	46-48	(222)	22
Ammonium phosphate nitrate	D	27-30	10-15		322
Ammonium phosphate sulfate (APS)	D	13-16	20	-	15
Ammonium polyphosphate (APP)	L	10-11	34-37		
Ammonium polysulfide (Ammonium Sulfate)	L	20-21		30003	24
Ammonium sulfate nitrate	D	20-30			5





## **Commercial Fertilizer Applications Tables**

- Sheet 1 Table columns 1-6
  - Target crop
  - Product used
  - Rate
  - Unit
  - Line #







## **Commercial Fertilizer Applications Tables**

### • Sheet 2 – Table columns 7-12

- When and How applied
- Form of fertilizer used
- Nitrogen Breakdown
- VRT use

Codes Descriptions: IM pages 90-94

	APPLICATION CODES FOR COLUMN 8			PRODUCT USED TO SLOW BREAKDOWN OF NITROGEN FOR COLUMN 11				FER	FERTILIZER FORM FOR COLUMN 12		
	Broadcast, ground without incorporation     Broadcast, ground with incorporation     Broadcast by aircraft     In seed furrow     In irrigation water (fertigation)     Chiseled/injected or knifed in     Banded/side-dressed on the soil surface     Foliar or directed spray				Nitrification inhibitor     Urease inhibitor     Chemical-coated fertilizers (such as sulfur-     coated and polymer-coated urea)     Other Inhibitors (specify)         0907     S None				1 Ammonia-based 2 Not ammonia-based		
LINE	7 When was this applied? MM DD YY	8 How was this applied? [Enter code from box above.]	9 How m acres v treated i applicat	vere n this tion?	10 Was variable rate technology (VRT) used? [Include "on-the-go" sensing.] Yes = 1 No = 3	11 Nitrogen slow- breakdown product [Enter code from box above.]	12 Fertilizer [Enter co from bo above	ode ox	NOTES		
01	30	39	40	*	29	26	27				
02	30	39	40	2	29	26	27				





### 2024 Table Practice

- <u>Oats</u> have been planned in the Selected Field in <u>2024</u>. The operator reports applying commercial fertilizer <u>twice</u>.
- The operator provides the <u>nutrient analysis</u> for both applications.

#### Application 1(Sheet 1 - Line 1):

The percent analysis reported is 60% Potassium and 5% Sulfur at 200 pounds per acre.

### Application 1(Sheet 2 – Line 1):

On April 3, 2024, fertilizer was applied to 25.9 acres by ground broadcast with incorporation. VRT was used on the selected field. Nitrogen breakdown products were not used and the fertilizer not ammonia based





# Nutrient Analysis

#### Sheet 1 – Line 1

			CHECK	LIST								
		INCLUDE			EX	CLUDE						
Cu	istom applied	d fertilizers	[	Mic:	ronutrients							
Su	lfur		[	Unp	nmercially prep processed man e and gypsum			Line	s in Table	Table 100	029	2
	1	2	3			4				5		6
LINE	Crop Year	Primary crop for which nutrients were intended	Crop Code [Enter cro code from Responde Booklet pg 4 - 7.]	n a nt c	ind indicate " only fertilizer a in this column	MATERIAL oounds of plant 19" in column 6 analysis is know n, quantity app the material co [Show Commo Respondent Bo	nutrients a 6 (leave co wn, enter p lied per ac ode in colu	lumn s bercen re in c imn 6.	5 blank). If analysis column 5,	What quantity was applied per acre? [Leave the column blank if pounds of actual nutrients were reported in column 4.]	Ent 3 12 13 19	
				F	Nitrogen N	Phosphorus P <sub>2</sub> O <sub>5</sub>	Potassiur K <sub>2</sub> O	n	Sulfur	1		Code
01	28 24	oats	110	3	1	32	<sup>33</sup> 60	34	5	<sup>36</sup> 200	37	1





## Nutrient Analysis

#### Sheet 2 – Line 1

63	APPLICATION COD	ES FOR COL	UMN 8		DUCT USED TO OF NITROGEN F				LIZER FORM FOR COLUMN 12
the second second second	1 Broadcast, ground 2 Broadcast, ground 3 Broadcast by aircra 4 In seed furrow 5 In irrigation water ( 6 Chiseled/injected of 7 Banded/side-dress 8 Foliar or directed s	with incorpor aft fertigation) or knifed in sed on the soi	ation	2 Ur 3 Ch co 4 Ot	rification inhibitor ease inhibitor emical-coated fe ated and polymer her Inhibitors (spe 0907	rtilizers (such a -coated urea)	s sulfur- 2		nia-based nmonia-based
	7 When was this applied?	8 How was this applied? [Enter code from box above.]	9 How ma acres w treated in applicat	ere n this ion?	10 Was variable rate technology (VRT) used? [Include "on-the-go" sensing.] Yes = 1	11 Nitrogen slow- breakdown product [Enter code from box above.]	12 Fertilizer f [Enter co from bo above.	ode ox	NOTES
$\downarrow$	MM DD YY		Acre	s	No = 3				
	<sup>30</sup> 040324	39 2	40 25	5.9	29	<sup>26</sup> 5	27		





#### 2024 Table Practice

- <u>Oats</u> have been planned in the Selected Field in <u>2024</u>. The operator reports applying commercial fertilizer <u>twice</u>.
- The operator provides the <u>nutrient analysis</u> for both applications.

#### Application 2(Sheet 1 - Line 2):

The percent analysis reported is 21% Nitrogen and 24% Sulfur at 50 pounds per acre.

#### Application 2(Sheet 2 – Line 2):

On April 10, 2024, fertilizer was applied to 25.9 acres by ground broadcast with incorporation. VRT was used on the selected field. Nitrogen breakdown products were not used and the fertilizer not ammonia based





# Nutrient Analysis

Sheet 1 – Line 2

				CHEC	KLIST	L, S											
		1	INCLUDE				E)	KCLU	DE								
		applied	d fertilizers		11-11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-		Itrients		2								
□ Su	lfur				🗆 Ur	proc	ercially pre essed maind gypsum	nure	manure		L	ines	in Table	Ĩ	Table 100	029	2
		1	2	3					4	ŝ.					5		6
LINE		rop ear	Primary crop for which nutrients were intended	Crop Co [Enter ci code fro Respond Booklet p 4 - 7.	rop om dent ogs.	and only	indicate fertilizer his colun	pound "19" in analy nn, qu d the [St	MATERIAI ds of plan n column ysis is kno iantity app material c material c	t nutr 6 (lea own, o blied ode	ients ap ave colur enter per per acre in colum	nn 5 rcent in co n 6.	blank). If analysis	W Col pou nu	hat quantity as applied per acre? (Leave the lumn blank if inds of actual itrients were reported in column 4.]	En1 3 12 13 19	Quarts
	~5			.+0		N	itrogen N	Ph	P₂O₅	Po	K <sub>2</sub> O	8	Sulfur				Code
01	28	24	oats	110	)	31	- 11	32	-	33	60	34	5	36	200	37	1
02	28	24	oats	110	)	31	21	32		33	1	34	24	36	50	37	1





# Nutrient Analysis

#### Sheet 2 – Line 2

	APPLICATION CODI	ES FOR COL	UMN 8 PR	OF NITROGEN			FERTILIZER FORM FOR COLUMN 12
	1 Broadcast, ground 2 Broadcast, ground 3 Broadcast by aircra 4 In seed furrow 5 In irrigation water ( 6 Chiseled/injected of 7 Banded/side-dress 8 Foliar or directed s	with incorpor aft fertigation) or knifed in ed on the soi	ation 2 L 3 C 4 C	litrification inhibito Irease inhibitor Chemical-coated fe oated and polyme Other Inhibitors (sp 0907	rtilizers (such a r-coated urea)		ammonia-based lot ammonia-based
	7 When was this applied? MM DD YY	8 How was this applied? [Enter code from box above.]	9 How many acres were treated in this application?	10 Was variable rate technology (VRT) used? [Include "on-the-go" sensing.] Yes = 1 No = 3	11 Nitrogen slow- breakdown product [Enter code from box above.]	12 Fertilizer form [Enter code from box above.]	NOTES
1	<sup>30</sup> 040324	<sup>39</sup> 2	40 25.9	29	<sup>26</sup> 5	27 2	
2	<sup>30</sup> .041024	39	40 25.9	29	<sup>26</sup> 5	27	





#### 2023 Tables

			CHECKLI	ST	2										
		INCLUDE		EXCLUDE											
C	ustom applie	d fertilizers		Micronutrients				L T	APPLICATION CODE	ES FOR COL		DUCT USED TO			FERTILIZER FORM FOR COLUMN 12
🗆 Su	ulfur			Commercially prepared manure	Lines in Table	Table 200	0299		1 Broadcast, ground	f without inco		Vitrification inhib		N 11	COLUMN 12
				Unprocessed manure		1000 200	2		2 Broadcast, ground 3 Broadcast by airci	with incorpo	ration 2 I	Jrease inhibitor Chemical-coated	fortilizare (eur	1	Ammonia-based Not ammonia-based
				Lime and gypsum			×		4 In seed furrow 5 In irrigation water			sulfur-coated an Other Inhibitors (	d polymer-coat		
	1	2	3	4		5	6		6 Chiseled/injected 7 Banded/side-dres	or knifed in	2012 0 10 10 10 10 10 10 10 10 10 10 10 10 1	0908	(aboary)		
LINE	Crop	Primary crop	Crop Code	MATERIALS USED		What quantity	Enter material	6	8 Foliar or directed						
	Year	for which nutrients were	[Enter crop	Enter actual pounds of plant nutrients	applied per acre	was applied per acre?	unit.	16	7	8	9	10	11	12	ę.
		intended	code from	and indicate "19" in column 6 (leave of only fertilizer analysis is known, enter	olumn 5 blank). If	nest controls	1 Pounds 3 Tons		When was this	How was		Was	1.000	Fertilizer fo	NOTTO
			Respondent Booklet pgs.	in this column, quantity applied per a	cre in column 5,	[Leave the column blank if	12 Gallons 13 Quarts	200	applied?	this	How many acres were	variable rate	Nitrogen slow-	(6-5-9-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0	NOTED
			4 - 7.]	and the material code in col	umn 6.	pounds of actual nutrients were	19 Pounds	L	- 1798.W	applied?	treated in this application?	technology (VRT) used?	breakdown product	[Enter coo from box	
						reported in column 4.]	of actual nutrients	NE		[Enter code from	Soft Assessments	Include	Enter code	above.]	
						51 53 42 T 50 60 60 10	2000 A	-		box		"on-the-go"	from box		
				[Show Common Fertiliz						above.]		sensing.] Yes = 1	above.]		
				Respondent Booklet pgs Nitrogen Phosphorus Potassiur		8			MM DD YY		Acres	No = 3			
				N P2Os K2O	S		CODE	01	30	39	40	29	26	27	
01	28 23	corn-s	189	<sup>31</sup> 46 <sup>32</sup> <sup>33</sup>	34	<sup>36</sup> 250	37 1		<u>042023</u>	39	25. <u>9</u>	29	26	27	
	28	corn.c	189	<sup>31</sup> 21 <sup>32</sup> <sup>33</sup>	<sup>34</sup> 24	<sup>36</sup> 100	37 1	02	042023	4	25.9	3	5	1	
02	23	corn-s	Seven to	04	24		37 4		30	39	40	29	26	27	<i>k</i>
03	20 23	corn-s	189	<sup>31</sup> 10 <sup>32</sup> 34 <sup>33</sup>	34	<sup>36</sup> 60	<sup>3</sup> 1	03	042023	4	25.9	3	5	1	





#### 2022 Tables

			CHECKLIS	ST													
		INCLUDE		E	XCLUDE												
□ c	stom applie	d fertilizers		Aicronutrients													
□s	ilfur			Commercially pro Inprocessed ma lime and gypsur	inure		Lines in Table	Table 300	0299		APPLICATION CO 1 Broadcast, groun 2 Broadcast, groun 3 Broadcast by air	nd without inco	orporation 1 N pration 2 L 3 C	DUCT USED TO OF NITROGEN I litrification inhibit Jrease inhibitor Chemical-coated	FOR COLUMN tor fertilizers (suct	11 1 Am 1 as 2 Not	RTILIZER FORM FOR COLUMN 12 monia-based ammonia-based
LINE	1 Crop Year	2 Primary crop for which	3 Crop Code	Enter actual	MATERI	4 ALS USED	applied per acre	was applied	6 Enter material unit.	Ę	4 In seed furrow 5 In irrigation wate 6 Chiseled/injecte 7 Banded/side-dre 8 Foliar or directed	d or knifed in ssed on the se	4 0	ulfur-coated and Other Inhibitors (s 0909 None		d urea)	
		nutrients were intended	[Enter crop code from	and indicate	"19" in column	n 6 (leave co	lumn 5 blank). If		1 Pounds		7	8	9	10	11	12	
			Respondent Booklet pgs. 4 - 7.]	in this colur an		oplied per ac code in colu non Fertilizer	rs in	[Leave the column blank if pounds of actual nutrients were reported in column 4.]	<ul> <li>3 Tons</li> <li>12 Gallons</li> <li>13 Quarts</li> <li>19 Pounds of actual nutrients</li> </ul>	LINE	When was this applied? MM_DD_YY	How was this applied? [Enter code from box above.]	How many acres were treated in this application?	Was variable rate technology (VRT) used? [Include "on-the-go" sensing.] Yes = 1	Nitrogen slow- breakdown product [Enter code from box above.]	Fertilizer form [Enter code from box above.]	NOTES
				Nitrogen N	Phosphorus P <sub>2</sub> O <sub>5</sub>	Potassium K <sub>2</sub> O	n Sulfur S		CODE		30	39	40	No = 3	26	27	
01	28 22	corn-g	188	<sup>31</sup> 46	32	33	34	<sup>36</sup> 250	37 1	01	041822	4	25. <u>9</u>	3	5	2	
02	28 22	corn-g	188	<sup>31</sup> 21	32	33	<sup>34</sup> 24	<sup>36</sup> 100	37 1	02	<sup>30</sup> 041822	<sup>39</sup> 4	40 25.9	29	<sup>26</sup> 5	27 1	
03	28 22	corn-g	188	<sup>31</sup> 10	<sup>32</sup> 34	33	34	<sup>36</sup> 60	<sup>37</sup> 1	03	<sup>30</sup> 041822	<sup>39</sup> 4	40 25.9	<sup>29</sup> 3	<sup>26</sup> 5	<sup>27</sup> 1	





# Fertilizer Tables for 2024, 2023, and 2022

#### <u>Key Points</u>

- Things change from year to year.
- Probe for fertilizer applications in the fall of the previous year.
- Actual Pounds of Nutrients vs. Nutrient Analysis recording.
- Data connects throughout the survey.
- Take your time on the tables.





# Section E – Manure Application





### Purpose

- Section E Manure
  - Determine whether manures were applied
  - Determine the rate manures were applied
  - Determine when manures were applied
  - Determine the form of nutrient content
  - Determine how the manures were applied





#### Manure or Manure Compost

- Includes solids and effluents from:
  - Waste lagoons
  - Waste holding ponds
  - Waste runoff storage ponds
- Include Commercially prepared manure
- If none used in any year, go to Section F







#### Section E – Manure Application

E	MANURE APPLICATIONS - SELECTED FIELD	E
1. Was manure o	r manure compost applied to this field for the 2024, 2023, or 2022 crop	ear?
	tion includes solids and effluents from waste lagoons, waste holding por commercially prepared manure.)	ls, and waste runoff storage
	cations made in the fall of 2021, 2022, and 2023 (and those made earlie 2024 crop years.]	if this field was fallow) for the
1 🗌 Yes — [	Enter 1 and continue.]	Code
3 🗌 No — [E	Enter 3, then Go to SECTION F. ]	0418





## Manure Application

- Sheet 1 Table columns 1-7
  - Years
  - Crops
  - Quantity
  - Units
  - How
  - Testing
  - Inhibitor

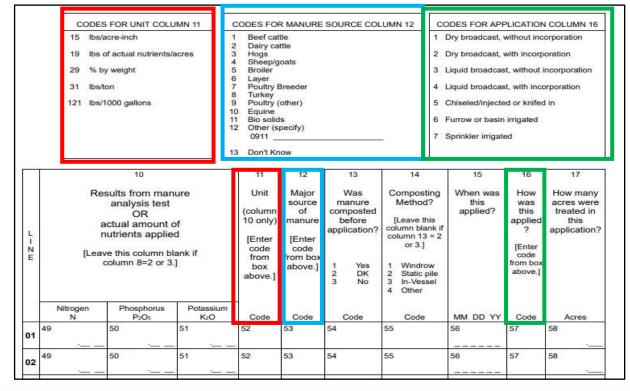
2.	Now I need	to record in	nformation for	each manu	re applicati	on.	s in Table T	able 001 05	599
10	1	2	3	4	5	6	7	8	9
1	Crop Year	Primary crop for which nutrients were intended	Crop Code [Enter crop code from Respondent Booklet pgs.	What quantity of manure was applied per acre?	Unit (column 4 only)	Where was the manure produced?	How was the manure handled?	Was manure tested before application?	Nitrogen inhibitor applied with manure
INE		incided	4 - 7.]		1 Pounds 3 Tons 4 Bushels 12 Gallons 14 Acre - inches	<ol> <li>On this operation</li> <li>Purchased</li> <li>Obtained at no cost off the operation</li> <li>Obtained with compensation</li> <li>Commercially prepared manure</li> </ol>	1 Solid 2 Liquid 3 Slurry	1 Yes 2 Don't Know (DK) 3 No	<ol> <li>Nitrification inhibitor</li> <li>Urease inhibitor</li> <li>None</li> </ol>
	YY		Code		Code	Code	Code	Code	Code
01	42			44	45	46	47	48	59
02	42			44	45	46	47	48	59





## Manure Application

- Sheet 2 Table columns 10-17
  - Test Results or Amounts
  - Unit
  - Sources
  - Composting
  - When
  - How
  - Acres







#### Section E – Manure Example

#### 2023 Manure Application(Sheet 1 - Line 1):

In 2023, Corn for Silage was planted in the selected field. The operator reports 4000 gallons per acre of liquid manure was produced on the operation and applied to the field. The manure was not tested, and nitrogen inhibitors were not applied.

#### 2023 Manure Application(Sheet 2 - Line 1):

The manure was sourced from dairy cattle on the operation and was not composed before applied. Manure was applied on all 25.9 acres on April 15, 2023, by liquid broadcast without incorporation.





#### Section E – Manure Application

#### MANURE APPLICATIONS - SELECTED FIELD

1. Was manure or manure compost applied to this field for the 2024, 2023, or 2022 crop year?

Manure application includes solids and effluents from waste lagoons, waste holding ponds, and waste runoff storage ponds. (Include commercially prepared manure.)

[Probe for applications made in the fall of 2021, 2022, and 2023 (and those made earlier if this field was fallow) for the 2022, 2023, and 2024 crop years.]







E

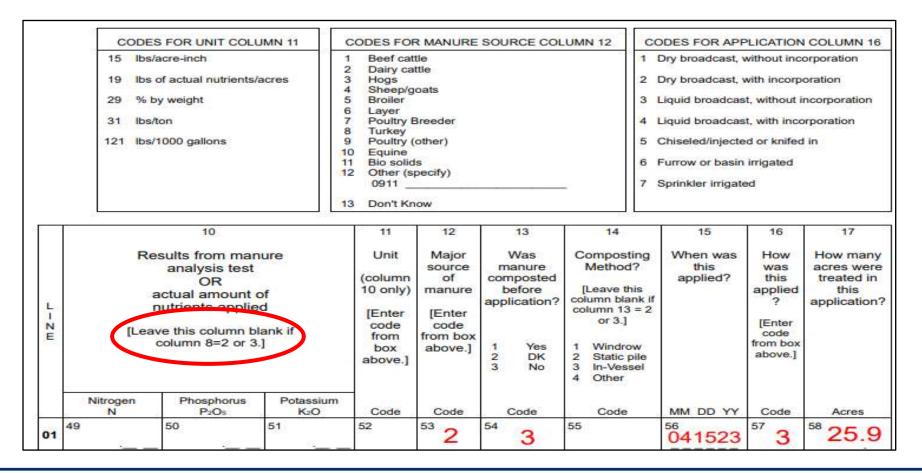
### 2023 Manure Application (Sheet 1 - Line 1)

	1	2	3	4	5	6	7	8	9
L	Crop Year	Primary crop for which nutrients were intended	Crop Code [Enter crop code from Respondent Booklet pgs.	What quantity of manure was applied per acre?	Unit (column 4 only)	Where was the manure produced?	How was the manure handled?	Was manure tested before application?	Nitrogen inhibitor applied with manure
INE			4 - 7.]		1 Pounds 3 Tons 4 Bushels 12 Gallons 14 Acre - inches	<ol> <li>On this operation</li> <li>Purchased</li> <li>Obtained at no cost off the operation</li> <li>Obtained with compensation</li> <li>Commercially prepared manure</li> </ol>	1 Solid 2 Liquid 3 Slurry	1 Yes 2 Don't Know (DK) 3 No	<ol> <li>Nitrification inhibitor</li> <li>Urease inhibitor</li> <li>None</li> </ol>
	YY		Code		Code	Code	Code	Code	Code
01	<sup>42</sup> 23	corn-s	189	44 4000.0	<sup>45</sup> 12	46 1	47 2	48 3	<sup>59</sup> 3





#### 2023 Manure Application (Sheet 2 - Line 1)





United States Department of Agriculture National Agricultural Statistics Service



#### Section E – Manure Example

#### 2022 Manure Application(Sheet 1 - Line 2):

In 2022, Corn for Grain was planted in the selected field. The operator reports 4000 gallons per acre of liquid manure was produced on the operation and applied to the field. The manure was not tested, and nitrogen inhibitors were not applied.

#### 2022 Manure Application(Sheet 2 - Line 2):

The manure was sourced from dairy cattle on the operation and was not composed before applied. Manure was applied on all 25.9 acres on April 15, 2022, by liquid broadcast without incorporation.





## 2022 Manure Application (Sheet 1 - Line 2)

1	1	2	3	4	5	6	7	8	9
L	Crop Year	Primary crop for which nutrients were intended	Crop Code [Enter crop code from Respondent Booklet pgs.	What quantity of manure was applied per acre?	Unit (column 4 only)	Where was the manure produced?	How was the manure handled?	Was manure tested before application?	Nitrogen inhibitor applied with manure
INE			4 - 7.]		1 Pounds 3 Tons 4 Bushels 12 Gallons 14 Acre - inches	<ol> <li>On this operation</li> <li>Purchased</li> <li>Obtained at no cost off the operation</li> <li>Obtained with compensation</li> <li>Commercially prepared manure</li> </ol>	1 Solid 2 Liquid 3 Slurry	1 Yes 2 Don't Know (DK) 3 No	<ol> <li>Nitrification inhibitor</li> <li>Urease inhibitor</li> <li>None</li> </ol>
	YY		Code		Code	Code	Code	Code	Code
01	<sup>42</sup> 23	corn-s	189	<sup>44</sup> 4000.0	<sup>45</sup> 12	<sup>46</sup> <b>1</b>	47 2	48 3	<sup>59</sup> 3
02	42 22	corn-g	188	4000.0	<sup>45</sup> 12	46 1	47 2	48 3	<sup>59</sup> 3





#### 2022 Manure Application (Sheet 2 - Line 2)

02	49	50	51	52	<sup>53</sup> 2	<sup>54</sup> 3	55	5641522	57 3	<sup>58</sup> 25.9
01	49	50	51	52	<sup>53</sup> 2	54 3	55	<sup>56</sup> 041523	57 3	<sup>58</sup> 25.9
	Nitrogen N	Phosphorus P2O5	Potassium K <sub>2</sub> O	Code	Code	Code	Code	MM DD YY	Code	Acres
L-ZE		10 esults from man analysis test OR actual amount o nutrients applie ave this column bi column 8=2 or 3	of d ank if	11 Unit (column 10 only) [Enter code from box above.]	12 Major source of manure [Enter code from box above.]	13 Was manure composted before application?	14 Composting Method? [Leave this column blank column 13 = 2 or 3.] 1 Windrow 2 Static pile 3 In-Vessel 4 Other	this applied? f	16 How was this applied ? [Enter code from box above.]	17 How man acres wer treated in this application
	19 lbs 29 % 31 lbs	/acre-inch of actual nutrients/ by weight /ton /1000 gallons	4 5 7 8 9 1 1	Dairy ca Hogs Sheep/g Broiler Layer Poultry E Turkey Poultry ( Poultry ( Bio solid Other (s) 0911	ttle Joats Breeder other) Is pecify)		2 3 4 5	Dry broadcast, i Dry broadcast, i Liquid broadcas Liquid broadcas Chiseled/injecte Furrow or basin Sprinkler irrigate	with incorp et, without i et, with inco d or knifed irrigated	oration ncorporation prporation





#### Manure Tables

#### Key Points

- Things change from year to year.
- Probe for manure applications in the fall of the previous year.
- Data connects throughout the survey.
- Take your time on the tables.





# Section F – Pest Control and Section G – Pest Management Practices





### Purpose

- Collect pesticide use to estimate
  - the amount of pesticide residue in fields that moves to surface/ground water
  - the impact of conservation practices on pesticide movement from fields
- Identify the use of pest management activities and factors considered when determining which pest control products to use





1.		owing years (2024, 2023, and/or 2022) were any products applied trol weeds, insects, or diseases? [INCLUDE herbicides,		2024	2023	2022
	insecticides, fungi	cides, bio-control agents, bio-pesticides, seed treatments, and I or organic products.]	Yes = 1 No = 3	0315	0345	0346
En	umerator Action:		ompletion ode	0344	0343	0342
2.		owing years (2024, 2023, and/or 2022) did you select and plant genetically engineered traits for:		2024	2023	2022
		specific herbicides(e.g., glyphosate, glufosinate, dicamba or 2,4-D	Yes = 1 . No = 3	0350	0360	0361
	b. insect resistan	ice (Bt)?	Yes = 1 . No = 3	0912	0913	0914





	sprayers?	No = 3	
8.	Did you use precision technology such as GPS, variable rate application, or smart or robotic	Yes = 1	0878
7.	Did you apply practices to reduce potential drift, runoff, or leaching?	Yes = 1 No = 3	0877
	Did you select and plant crop seeds that had been commercially treated with fungicides or insecticides?	Yes = 1 No = 3	0349
	Were pesticides with different mechanisms of action TANK MIXED for the PRIMARY PURPOSE of keeping pests from becoming resistant to pesticides?	Yes = 1 No = 3	0876
	Were pesticides with different mechanisms of action ROTATED for the PRIMARY PURPOSE of keeping pests from becoming resistant to pesticides?	Yes = 1 No = 3	0875
	Did you alter any of your pesticide applications specifically to protect honey bees and/or native pollinators? (For example, utilize an IPM program that specifically protects pollinators, only apply insecticides outside of the bloom period, only apply insecticides at night, etc.)	Yes = 1 No = 3	0348





9. Other than cost and product effectiveness, which of the following factors did you consider in determining which pest control product to use in 2024?

Source							
a.	Potential health risk to applicator or farm worker?	Yes = 1 No = 3	0352				
b.	Risk to populations of beneficial organisms (earthworms, bees, ladybugs, etc)?	Yes = 1 No = 3	0353				
C.	Risk to natural resources (drinking water, wildlife, fish, etc.)?	Yes = 1 No = 3	0354				
d.	Pest resistance management?	Yes = 1 No = 3	0355				
e.	Crop safety?	Yes = 1 No = 3	0356				
f.	Impacts on soil health?	Yes = 1 No = 3	0879				
g.	None?	Yes = 1 No = 3	0880				





## Pesticide Application Tables

- Separate tables for 2024, 2023, and 2022
- Data collected should match what was reported earlier

1.	In which of the following years (2024, 2023, and/or 2022) were any products applied to this field to control weeds, insects, or diseases? [INCLUDE herbicides,		2024	2023	2022
	insecticides, fungicides, bio-control agents, bio-pesticides, seed treatments, and other conventional or organic products.]	Yes = 1 No = 3		0345	0346

- Ask operator to have records handy
- Use Respondent booklet





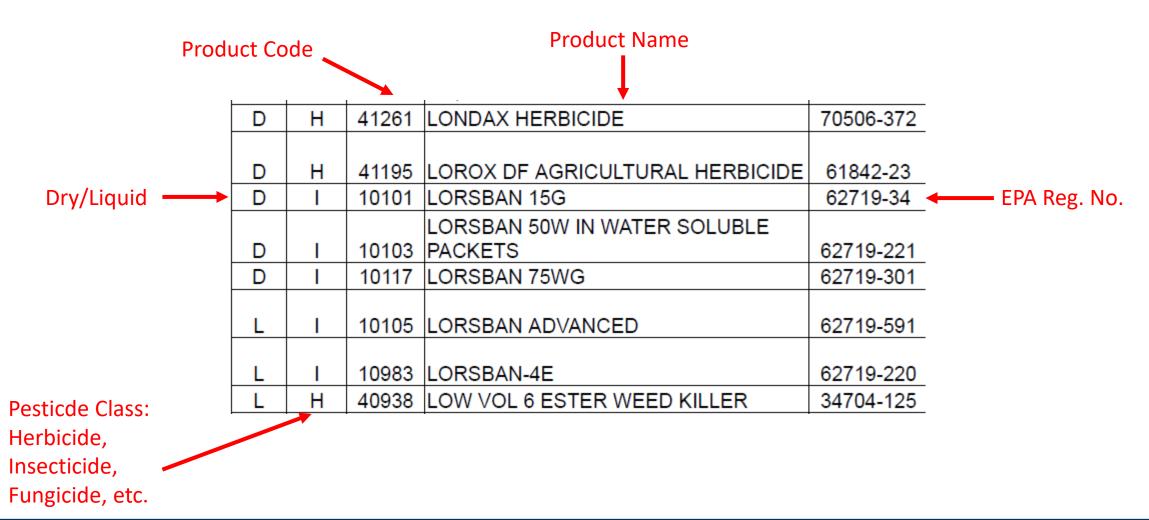
## Pesticide Application Tables

- Start with any applications made after the previous year's crop was harvested/plowed down and continue with any applications through harvest.
- Include applications made by custom applicators
- Exclude adjuvants (ingredients that help the pesticide work better)





#### Respondent Booklet







### Pesticide Application Tables

		1	2	3	4	5	6
PRODUCT NAME	LINE	Crop Year	Primary crop for which control agent was intended.	Crop Code [Enter crop code from Respondent Booklet pgs. 4 - 7.]	What products were applied to this field? [Enter product code from Respondent Booklet pgs. 10 - 36.]	Was this product bought in liquid or dry form? [Enter L or D.]	Was this part of a tank mix? [If tank mix, enter line number of first product in mix.]
	01	<sup>60</sup> 24			61		63
	02	<sup>60</sup> 24			61		63





## Pesticide Application Table

	APPLICATION CODES FOR COLUMN 11						
4	Seed furrow	21 Broadcast, ground, incorporated					
5	Chemigation (in irrigation water)	31 Broadcast, by aircraft					
6	Chisel/injected or knifed in	32 Broadcast, foliar, by aircraft					
8	Direct spray, foliar	71 Banded/side dressed					
10	Seed treatment by producer prior to planting	73 Banded/side-dressed, foliar					
11	Broadcast, ground, not incorporated	76 T-Banded (combo of banded and injected					
13	Broadcast, ground, foliar	77 Broadcast, by drone					
		78 Broadcast, foliar, by drone					

	7	8 <b>O</b>	<b>R</b> 9	10	11	12	13
L I E	When was this applied?	How much was applied per acre per application?	What was the total amount applied per application in this field?	[Enter unit code] (col. 8 or 9 only) 1 Pounds 12 Gallons 13 Quarts 14 Pints 15 Liquid Ounces 28 Dry Ounces 30 Grams 40 Kilograms 41 Liters	How was this product applied? [Enter code from box above.]	Was this product applied to the entire field, to only a portion of the field, or as a spot treatment? 1 Entire field 2 Part of field 3 Spot Treatment 4 Entire field plus borders and buffers	How many acres in this field were treated with this product?
	MM DD YY			Code	Code	Code	Acres
01	83	65 . <u> </u>	73	74	76	84	77
02	83	65 ·	73 ·	74	76	84	77





#### Unlisted Pesticides

For pest control products not listed in Respondent Booklet please specify —

Line	Pest Control Product Type (Herbicide, Insecticide, Fungicide, etc.)	EPA Number or Trade name and Formulation	Form Purchased (Liquid or Dry)	Where Purchased (Ask only if EPA Number cannot be reported)		
5	Fungicide	Flourish 55146-83	L	Dane County Co-Op		





### Let's Do A Practice

#### • 2024

- Did not apply any pesticides
- 2023
  - Applied a tank mix on 6/20/23, broadcast, not incorporated to all 25.9 acres
  - Cornerstone Plus: 26 oz/a
  - Status Herbicide: 4 oz/a
- 2022
  - Same application as 2023, but applied on 6/22/22





#### Practice Answers

1. In which of the following years (2024, 2023, and/or 2022) were any products applied<br/>to this field to control weeds, insects, or diseases? [INCLUDE herbicides,<br/>insecticides, fungicides, bio-control agents, bio-pesticides, seed treatments, and<br/>other conventional or organic products.]202420232022111111





#### Practice Answers - 2024

INCLUDE: herbicides, insecticides, fungicides, defoliants, growth regulators, microbial agents, miticides, nematicides, rodenticides, soil fumigants, and seed treatments. INCLUDE biological and botanical pest control products.			CLUDE: fertilizers . wetting agents, eaders, etc.).	•	Nor	ne in 20	)24
control products.					Lines in Table	Table 100	0399
		1	2	3	4	5	6
PRODUCT NAME	LINE	Crop Year	Primary crop for which control agent was intended.	Crop Code [Enter crop code from Respondent Booklet pgs. 4 - 7.]	What products were applied to this field? [Enter product code from Respondent Booklet pgs. 10 - 36.]		Was this part of a tank mix? [If tank mix, enter line number of first product in mix.]
	01	<sup>60</sup> 24			61		63





		1	2	3	4	5	6
PRODUCT NAME	LINE	Crop Year	Primary crop for which control agent was intended.	Crop Code [Enter crop code from Respondent Booklet pgs. 4 -7.]	What products were applied to this field? [Enter product code from Respondent Booklet pgs. 10 - 36.]	Was this product bought in liquid or dry form? [Enter L or D.]	Was this part of a tank mix? [If tank mix, enter line number of first product in mix.]
<b>Cornerstone Plus</b>	01	<sup>60</sup> 23	corn-s	189	<sup>61</sup> 40520	L	63 <mark>1</mark>
Status Herbicide	02	<sup>60</sup> 23	corn-s	189	<sup>61</sup> 41110	D	63 <u>1</u>





	7	8 <b>O</b>	<b>R</b> 9	10	11	12	13
LINE	When was this applied?	How much was applied per acre per application?	What was the total amount applied per application in this field?	[Enter unit code] (col. 8 or 9 only) 1 Pounds 12 Gallons 13 Quarts 14 Pints 15 Liquid Ounces 28 Dry Ounces 30 Grams 40 Kilograms 41 Liters	How was this product applied? [Enter code from box above.]	Was this product applied to the entire field, to only a portion of the field, or as a spot treatment? 1 Entire field 2 Part of field 3 Spot Treatment 4 Entire field plus borders and buffers	How many acres in this field were treated with this product?
	MM DD YY			Code	Code	Code	Acres
01	<sup>83</sup> <u>062023</u> _	<sup>65</sup> 26 <u>.00</u>	73 ·	<sup>74</sup> 15	<sup>76</sup> 11	<sup>84</sup> 1	<sup>77</sup> 25 <u>.9</u>
02	<sup>83</sup> 062023	<sup>65</sup> 4.00	73	<sup>74</sup> 28	<sup>76</sup> 11	<sup>84</sup> 1	<sup>77</sup> 25.9





		1	2	3	4	5	6
PRODUCT NAME	LINE	Crop Year	Primary crop for which control agent was intended.	Crop Code [Enter crop code from Respondent Booklet pgs. 4 - 7.]	What products were applied to this field? [Enter product code from Respondent Booklet pgs. 10 - 36.]	Was this product bought in liquid or dry form? [Enter L or D.]	Was this part of a tank mix? [If tank mix, enter line number of first product in mix.]
<b>Cornerstone Plus</b>	01	<sup>60</sup> 22	corn-g	188	<sup>61</sup> 40520	L	<sup>63</sup> 1
Status Herbicide	02	<sup>60</sup> 22	corn-g	188	<sup>61</sup> 41110	D	<sup>63</sup> 1





	7	8 <b>O</b>	<b>R</b> 9	10	11	12	13
LINE	When was this applied?	How much was applied per acre per application?	What was the total amount applied per application in this field?	[Enter unit code] (col. 8 or 9 only) 1 Pounds 12 Gallons 13 Quarts 14 Pints 15 Liquid Ounces 28 Dry Ounces 30 Grams 40 Kilograms 41 Liters	How was this product applied? [Enter code from box above.]	Was this product applied to the entire field, to only a portion of the field, or as a spot treatment? 1 Entire field 2 Part of field 3 Spot Treatment 4 Entire field plus borders and buffers	How many acres in this field were treated with this product?
	MM DD YY			Code	Code	Code	Acres
01	<sup>83</sup> _062222_	<sup>65</sup> 26. <u>00</u>		<sup>74</sup> <b>15</b>	<sup>76</sup> 11	<sup>84</sup> 1	<sup>77</sup> 25.9
02	83_062222	<sup>65</sup> 4.00	73 ·	<sup>74</sup> 28	<sup>76</sup> 11	<sup>84</sup> 1	<sup>77</sup> 25.9





### Section G – Pest Management Practices

- 2024 Crop year only
- Scouting questions

Pest management questions





# Section I: Field Operations





### Section I: Objective

- How is the Field Operations information used
- Identify what should be included and excluded
- Overview of the table and how to complete it
- Special Situations
- Practice Exercise





## Why collect Field Operations Data?

- Field Operations section is used to identify:
  - Tillage systems
  - Timing of events
  - Crop residue levels
- Impact on Farm Bill





### Field Operations Table

#### FIELD OPERATIONS - SELECTED FIELD

 Including custom operations, what operations were performed by hand or machines on this field for the 2024, 2023, and 2022 crop years?

- Begin with the first field operation for the 2024 crop (after harvesting of 2023 crop)
- List the operations in order by crop year, through harvest
- Maintain the order of tandem hook-ups
- Include field operations performed by hand
  - a. Let's start with the 2024 crop year

		CHECKI	LIST				
INCLUDE all fie	ld work done by han	d or using machines for	EXCLUDE all field work done by hand or using machines for				
Land Forming	Planting	Hauling within field	Lime & Gypsum applications				
Tillage	Harvesting	Residue Management	Fertilizers, Manure & Pesticides applications				
Preparing for Irrigation	before seeding		Пн	auling from field edge to a	storage		
Custom Operations	Pruning, hedgi	ng, topping					

Lines in Table

Table 100

0499





### Field Operations Table

	1	2	3	4	5	6	7	8	9
LINE	Crop Year	Sequence Number	What crop was associated with this operation?	Crop Code [Record from Respondent Booklet pgs. 4 - 7.]	What operation or equipment was used on this field?	Machine Code [Record from Respondent Booklet pgs. 39 - 41.]	Was this operation used to incorporate a fertilizer or manure application? Yes = 1 No = 3	What was the timing of the field operation?	What was the depth of tillage for tillage/planting operations?
	Year	Number	Crop Name	Code		Code	Code	MM DD YY	Inches
01	<sup>86</sup> 24	87				88	99	96	97
02	<sup>86</sup> 24	87				88	99	96	97
03	<sup>86</sup> 24	87				88	99	96	97
04	<sup>86</sup> 24	87				88	99	96	97
05	<sup>86</sup> 24	87				88	99	96	97
06	<sup>86</sup> 24	87				88	99	96	97
07	<sup>86</sup> 24	87				88	99	96	97





### Respondent Booklet

- Crop codes
  - Pages 4-7
- Machine codes
  - Pages 39-41
- If code not listed, probe for more details or leave a note

#### PLANTERS

- 108 Sprig Planter
- 111 Bedder-shaper Planter
- 112 Lister-bedder
- 113 No-till, Minimum Till (Ripper Planter)
- 114 Conventional, Regular (Tye, Flex)
- 115 Air Delivery/vacuum
- 116 Ridge Till
- 117 Twin Row Planter
- 351 Hand Planting
- 359 Vegetable Seed Planter
- 365 Vegetable Transplanter
- 397 Tree Planting Auger





### Special Situations

- Cover crops
- Multiple harvest of same crop
- Livestock and grazing
- Partial and complete crop failure





### Practice Exercise

Please take out your handout with scenarios





### Practice Exercise # 1

In 2024, oats were planted as a nurse crop for alfalfa that was also planted. In the Fall of 2023, (November 10, 2023) a disk chisel plow was used with a depth of 6 inches. In the spring of 2024 (April 5, 2024) a field cultivator was used with a depth of 3 inches. Both oats and alfalfa were planted on April 5, 2024, with a depth of 1 inch. After the seeds were planted a culti-packer was used across the field. On August 1, 2024, a PTO swather was used for the oats. After they had dried for a couple days, a self propelled 2wd combine was used for the oats on August 3, 2024. The following day on August 4, a PTO small baler was used for the oat, then a hay wagon was used to haul it out of the field. On November 5, 2024, a disk drum mower was used for the alfalfa. Two days later on November 7, 2024, a silage harvester was used to chop the hay, then a forklift was used to haul it away.





	1	2	3	4	5	6	7	8	9
LINE	Crop Year	Sequence Number	What crop was associated with this operation?	Crop Code [Record from Respondent Booklet pgs. 4 - 7.]	What operation or equipment was used on this field?	Machine Code [Record from Respondent Booklet pgs. 39 - 41.]	Was this operation used to incorporate a fertilizer or manure application? Yes = 1	What was the timing of the field operation?	What was the depth of tillage for tillage/planting operations?
	Year	Number	Crop Name	Code		Code	No = 3 Code	MM DD YY	Inches
01	<sup>86</sup> 24	<sup>87</sup> 1	oats	110	chisel	<sup>88</sup> 9	<sup>99</sup> 3	<sup>96</sup> 111023	97 <u>6.0</u>
02	<sup>86</sup> 24	<sup>87</sup> 1	alf	101	chisel	<sup>88</sup> 9	<sup>99</sup> 3	<sup>96</sup> <u>111023</u>	<sup>97</sup> 6. <u>0</u>
03	<sup>86</sup> 24	<sup>87</sup> 2	oats	110	fld cult	<sup>88</sup> 21	<sup>99</sup> 3	<sup>96</sup> <u>040524</u>	<sup>97</sup> 3. <u>0</u>
04	<sup>86</sup> 24	<sup>87</sup> 2	alf	101	fld cult	<sup>88</sup> 21	<sup>99</sup> 3	<sup>96</sup> 040524	<sup>97</sup> 3. <u>0</u>
05	<sup>86</sup> 24	<sup>87</sup> 3	oats	110	plant	<sup>88</sup> 107	<sup>99</sup> 3	<sup>96</sup> 040524	<sup>97</sup> 1. <u>0</u>
06	<sup>86</sup> 24	<sup>87</sup> 3	alf	101	plant	<sup>88</sup> 107	<sup>99</sup> 3	<sup>96</sup> <u>040524</u>	<sup>97</sup> 1. <u>0</u>
07	<sup>86</sup> 24	<sup>87</sup> 4	oats	110	pack	<sup>88</sup> 51	<sup>99</sup> 3	<sup>96</sup> 040524	97
08	<sup>86</sup> 24	<sup>87</sup> 4	alf	101	pack	<sup>88</sup> 51	<sup>99</sup> 3	<sup>96</sup> 040524	97





09	86	24	87	5	oats	110	swath	88	126	99	3	<sup>96</sup> 080124 <sup>97</sup>
10	86	24	87	6	oats	110	combine	88	122	99	3	<sup>96</sup> 080324 <sup>97</sup>
11	86	24	87	7	oats	110	bale	88	147	99	3	<sup>96</sup> 080424 <sup>97</sup>
12	86	24	87	8	oats	110	haul	88	195	99	3	<sup>96</sup> 080424 <sup>97</sup>
13	86	24	87	9	alf	101	mow	88	152	99	3	<sup>96</sup> <u>110524</u> <sup>97</sup>
14	86	24	87	10	alf	101	chop	88	204	99	3	<sup>96</sup> 110724_ <sup>97</sup>
15	86	24	87	11	alf	101	haul	88	224	99	3	<sup>96</sup> <u>110724</u> <sup>97</sup>
									1 = In:		-	Code 2024 Field Operations





1. Including custom operations, what operations were performed by hand or machines on this field for the

2024, 2023, and 2022 crop years?

- Begin with the first field operation for the 2024 crop (after harvesting of 2023 crop)
- List the operations in order by crop year, through harvest
- Maintain the order of tandem hook-ups
- Include field operations performed by hand
- Lines in Table Table 100 0499 15 a. Let's start with the 2024 crop year CHECK LIST INCLUDE all field work done by hand or using machines for EXCLUDE all field work done by hand or using machines for Planting Land Forming Hauling within field Lime & Gypsum applications Harvesting Tillage Residue Management Fertilizers, Manure & Pesticides applications Preparing for Irrigation before seeding Hauling from field edge to storage Custom Operations Pruning, hedging, topping 2 5 6 7 8 9 4 3 LINE Crop Code Crop Sequence What crop What Machine Was this What was the What was the depth of tillage Year Number operation or Code operation timing of the field was. equipment Record used to for associated operation? with this was used on Record from incorporate tillage/planting from Respondent this field? Respondent a fertilizer or operations? operation? Booklet Booklet pgs. manure pgs. 4 - 7.1 39 - 41.] application? Yes = 1 No = 3Crop Name Year Number Code Code Code MM DD YY Inches





### Practice Exercise # 2

Corn for Silage in 2023

In the spring of 2023 (April 15, 2023), a disk chisel plow was used with a depth of 6 inches. A couple days later on April 17, 2023, a field cultivator ran through the field with a depth of 3 inches. The corn was planted on April 20, 2023, at a depth of 1.5 inches. On October 20, 2023, a silage harvested was used to harvest the corn silage. A forage wagon was used to haul it out of the field.





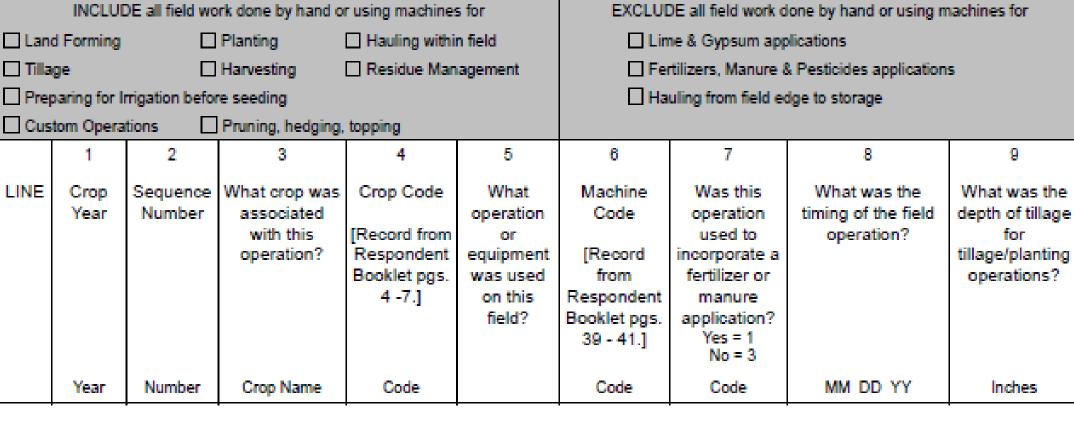
	1	2	3	4	5	6	7	8	9
LINE	Crop Year	Sequence Number	What crop was associated with this operation?	Crop Code [Record from Respondent Booklet pgs. 4 -7.]	What operation or equipment was used on this field?	Machine Code [Record from Respondent Booklet pgs. 39 - 41.]	Was this operation used to incorporate a fertilizer or manure application? Yes = 1 No = 3	What was the timing of the field operation?	What was the depth of tillage for tillage/planting operations?
	Year	Number	Crop Name	Code		Code	Code	MM DD YY	Inches
01	<sup>86</sup> 23	<sup>87</sup> 1	corn-s	189	chisel	<sup>88</sup> 9	<sup>99</sup> 1	<sup>®</sup> 041523	<sup>97</sup> 6 <u>,0</u>
02	<sup>86</sup> 23	87 2	corn-s	189	cult	** 21	<mark>з</mark>	<sup>®</sup> 041723	<sup>97</sup> 3. <u>0</u>
03	<sup>86</sup> 23	<sup>87</sup> 3	corn-s	189	plant	<sup>®</sup> 115	<sup>89</sup> 1	<sup>∞</sup> <u>042023</u>	<sup>97</sup> 1. <u>5</u>
04	<sup>86</sup> 23	<sup>87</sup> 4	corn-s	189	chop	** 204	<sup>99</sup> 3	<sup>®</sup> <u>102023</u>	97
05	<sup>86</sup> 23	<sup>87</sup> 4	corn-s	189	haul	<sup>88</sup> 227	<sup>99</sup> 3	<sup>96</sup> 102023	97





b	. Now le	t's continu	e with the 2023	crop year.		<u> </u>		
	•		h the first field	•	the 2023 cr	op (after	Lines in Tabl	e TABLE 200
		harvestin	g of 2022 crop.	)				
					CHECK L	IST		·
	INCLUE	)E all field wo	rk done by hand or	rusing machines	s for	EXCLU	DE all field work d	lone by hand or using m
Land	d Forming		Planting	Hauling within	n field	🗆 Lir	ne & Gypsum app	lications
] Tilla	ge		Harvesting	Residue Man	agement	🗆 Fe	rtilizers, Manure 8	& Pesticides application
] Prep	aring for Ir	rigation befor	re seeding			🗌 Ha	uling from field ea	dge to storage
Cust	tom Opera	tions 🗌	Pruning, hedging,	topping				
	1	2	3	4	5	6	7	8
INE	Crop Year	Sequence Number	What crop was associated	Crop Code	What operation	Machine Code	Was this operation	What was the timing of the field

Is Manufathe a setimum with the 2022 are







0499

5

### Practice Exercise # 3

### Corn for Grain in 2022

In the fall of 2021, (November 5, 2021) a disk chisel plow was used with a depth of 6inches. In the Spring of 2022, (April 15, 2022) a field cultivator was used with a depth of 3 inches. Corn was planted on April 18, 2022. On November 15, 2022, corn was harvested using a self propelled 2wd combine was used. A grain cart with auger was also used. On November 18, 2022, a stalk shedder ran through the field. A large PTO baler ran through the field to bale the stalks on November 19, 2022. On November 20, 2022, those bales were picked up using a large bale mover.





	1	2	3	4	5	6	7	8	9
LINE	Crop Year	Sequence Number	What crop was associated with this operation?	Crop Code	What operation or equipment	Machine Code	Was this operation used to	What was the timing of the field operation?	What was the depth of tillage for
				from Respondent	was used on this field?	[Record from	incorporate a fertilizer or	•	tillage/planting operations?
				Booklet pgs.	unis nera:	Respondent	manure		operations:
				4 - 7.]		Booklet pgs. 39 - 41.]	application? Yes = 1		
							No = 3		
	Year	Number	Crop Name	Code		Code	Code	MM DD YY	Inches
01	<sup>86</sup> 22	<sup>87</sup> 1	corn-g	188	chisel	** 9	<sup>99</sup> 3	<u>110521</u>	97 6 <u>.0</u>
02	<sup>86</sup> 22	<sup>87</sup> 2	corn-g	188	cult	** 21	<sup>99</sup> 1	<sup>∞</sup> <u>041522</u>	<sup>97</sup> 3. <u>0</u>
03	<sup>86</sup> 22	<sup>87</sup> 3	corn-g	188	plant	<sup>™</sup> 115	<sup>99</sup> 1	<sup>∞</sup> <u>041822</u>	<sup>97</sup> 1. <u>5</u>
04	<sup>86</sup> 22	<sup>87</sup> 4	corn-g	188	combine	** 122	°° 3	<u>111522 ***</u>	97
05	<sup>86</sup> 22	<sup>87</sup> 5	corn-g	188	grn cart	** 209	<sup>99</sup> 3	<u><sup>∞</sup> 111522</u>	97
06	<sup>86</sup> 22	<sup>87</sup> 6	corn-g	188	shred	<sup>®</sup> 205	<sup>99</sup> 3	<u><sup>™</sup> 111822</u>	97
07	<sup>86</sup> 22	87 7	corn-g	188	bale	<sup>≋</sup> 146	<sup>99</sup> 3	<sup>∞</sup> <u>111922</u>	97
08	<sup>86</sup> 22	<sup>87</sup> 8	corn-g	188	bale move	<sup>∞</sup> 161	°° 3	<u><sup>∞</sup> 112022</u>	97





- c. Now let's continue with the 2022 crop year.
  - Begin with the first field operation for the 2022 crop (after harvesting of 2021 crop.)

						ľ	Lines in Tab	vle TABLE 300	0499 8
🗌 Tilla	d Forming ge	ı C	ork done by hand o ] Planting ] Harvesting ore seeding	or using machine Hauling with	in field	EXCLU Lir Fe	me & Gypsum ap	& Pesticides applicatio	
Cus	tom Opera	ations [	Pruning, hedging	, topping 4	5	6	7	8	9
LINE	Crop Year	Sequence Number	What crop was associated with this operation?	Crop Code [Record from Respondent Booklet pgs. 4 - 7.]	What operation or equipment was used on this field?	Machine Code [Record from Respondent Booklet pgs. 39 - 41.]		What was the timing of the field operation?	What was the depth of tillage for tillage/planting operations?
	Year	Number	Crop Name	Code		Code	Code	MM DD YY	Inches

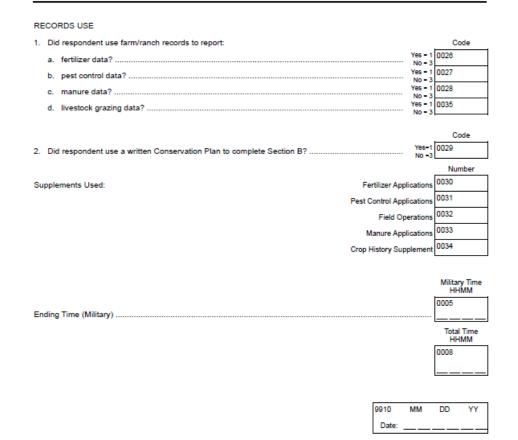








#### CONCLUSION



Livestock grazing data can be used for Sections C and I and Question 20 of Section H

**Supplements Used References** 

- Fertilizer Section D
- Pest Control Section F
- Manure Section E
- Field Operations Section I
- Crop History Section C







### Reminder: Military time is from 0:00 to 23:59





3.	Com	ments related to the information you reported:									
	0931										

Comments:

- Unusual situations
- Any sections that the respondent couldn't or refused to answer





Response		Respondent		Mode		Enum.	Eval. (	Change	Office Use for POID			
1-Comp 2-R 3-Inac 4-Office Hold 5-R – Est	9901 t	1-Op/Mgr 9902 2-Sp 3-Acct/Bkpr 4-Partner 9-Oth	9902	1-PASI (Mall) 2-PATI (Tel) 3-PAPI (Face-to- Face) 6-Email 7-Fax	9903	9998	9900 R. Unit	9985	9989			
5-Inac – Est 7-Off Hold – Est			19-Other			9921		9907	9908	9906	9916	





## Administrative Items and Dates





### Survey Overview

- Questionnaire Guide Page 2
- CEAP is conducted in phases
  - Phase 1 Screening Phase
    - August September (completed)
    - Determined the point's scope and eligibility for Phase 2
  - Phase 2 Data Collection Phase
    - November 2024 February 2025
    - Operators with a field found eligible in Phase 1 are being contacted for detailed field information





### Survey Process

- Operators were not mailed a questionnaire
  - Not available to be completed via mail nor online by operator
- In person data collection
- The FSA map for the eligible field will be used during Phase 2
- Long data collection period
  - Attempt to contact operator at different times
- Read all comments and notes before contacting the operator
- Review your CAPI assignment listing
- Make operator phone and address in CAPI





### Data Collection Process

- Questionnaire Guide Page 3
- "Completed"
  - Complete the labeled questionnaire
  - Ship via UPS only the questionnaires to your supervisor for review
  - Once notified by supervisor, then ship via UPS directly to the IA Office
  - Ship questionnaires often... do not hold
  - All completed questionnaires must be shipped by February 27, 2025





### Data Collection Process

- "Refusal" or "Inaccessible"
  - Ship via UPS questionnaires to the IA Office
  - Questionnaires must be shipped by February 27, 2025
- <u>All</u> PII should be submitted through CAPI
  - No PII on the labeled questionnaire
- Contact supervisor or NC when you need a record reactivated





### Data Collection Process

- Data Collection Begins
  - Immediately after training
- Data Collections Ends
  - On February 27, 2025
  - All complete questionnaires must be shipped to the IA Office
  - All refusals and inaccessibles must be shipped to the IA Office
  - PII (Address, phone, etc changes) submitted via CAPI





### Assignment Bundles

- Assignment Listing
- Labeled Manila Envelope (one per NRI point)
  - Labeled Phase 2 Questionnaire
  - Respondent Booklet
  - Materials from Phase 1 FSA Listing and Aerial Photo
- Supervisor Listings (Supervisors Only)





### CEAP Extra Supplies

- Blank Questionnaires
- Respondent Booklets
- Door Hangers
- UPS Labels to Supervisor
- UPS Labels to IA Office
- UPS Shipping Envelopes
- Security Envelopes for Double Wrapping
- If you need additional supplies, please contact your NASDA Coordinator



