



# 2024 CEAP/ARMS 2 Workshop

Conservation Effects Assessment Project Agricultural Resource Management Survey – Phase 2

# September 17-19, 2024

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# 2024 CEAP/ARMS 2 Workshop

Conservation Effects Assessment Project Agricultural Resource Management Survey – Phase 2

Welcome, Introductions, and Workshop Overview





## Introductions

- Order
  - NASDA
  - NPR Staff
- Please tell us:
  - Name
  - Town or Area of State
  - Years of Service





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





- Restroom locations
- Refreshments during breaks
- Project Code 912 (CEAP) & 906 (ARMS 2)
  - Workshop time, mileage, and M&IE
  - Monday Wednesday: 912
  - Thursday: 906
- Please have the workshop folder readily available
- Turn on iPad and connect to hotel Wi-Fi, if needed
- Presentations & resources are uploaded to NPR website





- Miscellaneous
  - Name Badge
  - Business Cards
  - Enumerator Ids
  - iPad
    - iOS Update 18.0 Optional Update Is Not Approved





- Content Overview
  - Generally Speaking
    - Videos
    - Lectures
    - Activities (Kahoot)
    - Group Breakouts
- Goals
  - Highlight purpose of survey and uses of data
  - Highlight changes, updates, or problematic areas
  - Keep training interactive and engaging
  - Group practice to learn from each other





- Day 1 CEAP
  - Section videos were not ready in time for home study
  - Watch a section video.
  - Present the highlights.
  - Will cover the whole questionnaire.
  - Kahoots and supervisor breakout time
- Day 2 Finish CEAP, talk about ARMS 2
  - Morning: CEAP procedures, due dates, mailings.
  - Afternoon: ARMS 2. Present the highlights No videos.
  - More Kahoot and supervisor breakout time
- Day 3 Wrapping up
  - Administrative Items
  - Supplies & ARMS 2 Assignments.
  - Wrapping up in your group and as a whole





# Resources on the NPR NASDA Website

- CAPI Dashboard: NASDA
- Go to "Regions", then tap on "Northern Plains Region" area.
- Under "CEAP" or "ARMS 2" tap on the document you want to download to Books.
- Tap on the box with the arrow pointed up. 🚹 Located in the upper right corner.
- Tap on "Books" to take you directly into Books.



 Once a document is downloaded to Books (icon on your home screen), it is saved on your iPad & can be accessed without a signal.





# Posted to the NPR NASDA Website

#### • CEAP

- Phase 1 Screener
- Interviewer's Manual
- Respondent Booklet
- CEAP Brochure
- CEAP Bookmarks
- CEAP Evaluation

- Screener questionnaire filled out during Phase 1
- Phase 2 Questionnaire Questionnaire for Phase 2
  - In-depth section and question details
  - Codes for completing the CEAP questionnaire and Fertilizer/Chemical identification information
  - Information on why CEAP is important
  - Helpful links to NRI/NRCS/NASS websites
  - Please complete after this training





# Posted to the NPR NASDA Website

- ARMS 2
  - Self Learning Videos
  - Self Learning Presentation
  - Wheat & Sorghum PPR
  - Respondent Booklets
  - Interviewer's Manual

- Section videos for your reference
- Slides presented in videos
- Questionnaires
- Codes for completing ARMS2
- In-depth section and question details





# Workshop Folder Contents

- Workshop Booklet
  - Agenda, Take Home Points, Group Breakout Checklist, Exercises, Important Dates, Notes
  - Order of the booklet follows the agenda.
- Questionnaires PPR, Wheat and Sorghum
  - PPR Production Practices Report
- Respondent Booklet
- Chem Use Highlights
- "Why Are We Here" handout
- Industry support letter (KS & NE only)
- Screening Supplement
- Consent form





# Next on the agenda... Management Comments

#### USDA NASS CEAP Phase 2 & ARMS 2 Workshop

Kearney, NE & Aberdeen, SD

September 17-19, 2024





#### NRCS Purpose and Uses Video (KS/NE)

#### **Brianna Henry, NRCS**





## Section A & B Video

# 



#### Sections A and B: Field Characteristics & Conservation Plan





# Refresher

- Identifying the selected field
  - Devoted to one crop or land use
  - Includes waterways and other areas not cropped
  - May include adjacent areas in a conservation practice
    - Let producer decide what is in/out
- Correct boundaries if necessary
  - Boundaries should include selected field and the conservation area



# **Section A:**

**Field Characteristics** 



# **Section A Overview**

- Question 1a planted crops (include cover crops, hay)
- Question 1b CRP, CREP, other conservation programs/practices
- Question 1c 1g(idle, greenhouse, pasture, continuous conservation cover, non ag)
- Question 2 sum of acres above
  - Do not double-count



# Overview

- 4 Certified organic in last 3 years
- 5 Tenure for last 3 years
  - Can be different each year



# **Section B:**

#### **Conservation Plan**



# **Overview – Conservation Plan**

- Only applies if they have a <u>written</u> plan
- Written plan something "official" (in accordance with Federal, State, or Conservation District standards)
  - Would probably know if they had one
- 1a plan should detail which practices are included
- 2 money received
  - Cost share: one-time payment
  - Incentive payments: annually for duration of contract



# **Overview – Technical Assistance**

- Technical assistance
  - Help with:
    - Development of plan
    - Implementation of plan
    - Maintaining the practice
- Consider FSA and SCS the same as NRCS for table under 3c
- Plan, payments, and assistance apply only to the selected field



# **Overview – Conservation Practices**

- Remember the skips
  - Example: cropped terraces should also have the question about terraces marked 'yes'
  - Take time to get familiar with the list there are lots of them
- Wildlife habitat
  - Was practice specifically for wildlife?
- If no practices in Section B, code questions 5-7 as N/A



#### **Questions?**











## **Section C Video**

# 



#### Section C: Cropping History





# **Section C: Training Objectives**

- Understand what is meant by a "crop year";
- Understand how to record a crop rotation plan;
- Understand cover crop management alternatives; and
- Define the conservation practices that are included on the NRI CEAP questionnaire.



#### **CROPPING HISTORY & CONSERVATION PRACTICES** — SELECTED FIELD

1. Now I'd like to ask you about the field where the point is located and obtain the cropping and land use history for the past 3 years. (Please include all crops planted for cover crop, double crop, multiple crop, replanting of same crop and if strip cropped, all crops in the strip crop scheme. [Use a separate column for each use of the field in each year.])

		1	2	3
Let's begin with the 2024 crop year. What was/were the:		2024	2024	2024
Crop(s) planted or Land Use?	Crop			
a. Crop(s) code or Land Use Code. [See Respondent. Booklet pgs. 4 - 7 for codes.]	Code	1005	1037	1069
<ul> <li>b. Intended use of Crop(s).</li> <li>[See Respondent Booklet pg. 7 for codes.]</li> </ul>	Code	1006	1038	1070

#### SECTION C, ITEM 1, Line b

Intended Use

С

- 1 Dual (Grain/Grazing)
- 2 Grain
- 3 Grazing Only
- 4 Cover Crop
- 5 Other (Specify)
- 6 Hay
- 7 Human Consumption or Use
- 8 Silage/Haylage
- 9 Seed Only
- 10 Nurse Crop
- 11 Biomass
- 12 Non-Bearing, Idle Land or Summer Fallow
- 13 Wildlife
- 14 Cut for Dry Hay and Silage

#### This is a crucial element:

- Consistency with Field Operations, Fertilizers, Pesticides
  - Those sections may appear incomplete or inconsistent and
  - These Use codes can provide clues
- Consistency with Applied Nutrients and Chemicals
- Especially for cases of:
  - If crop abandoned, replanted, or use changes prior to or at harvest
  - Multiple crops per year (here and in other sections)
  - Different crops on parts of field at same time
- Report the crop in the year it was harvested or terminated
- Strip cropping: can add the acreage for strips planted to the same crop and report as a whole



C.	Acres planted? [Include previous planted crops.]	Acres	1007	·   1	1039 ·	1071
d.	Date planted, transplanted, or established? (MM DD YY)	Date	1008	1	1040	1072
e.	Row Width (for row crops)?	Inches	1011	· 1	1043	1075
f.	Was precision technology used to change seeding rate within the field?	Yes = 1 No = 3	0800	C	0801	0802
g.	Was precision technology used to change crop variety within the field?	Yes = 1 No = 3	0803	C	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	C	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	C	0810	0811

Acres Planted: if all or part of the field is PREVENTED PLANTING, enter the number of acres and make a note those acres were prevented planting or idle.

Previous Planted Crops: if previously planted crop is now growing in field, include its acres and date of planting, e.g., winter wheat, forage crop, or other perennial.



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		1045	1077
١.	Acres harvested?	Acres	1015	·	1047	1079
	(1) Date harvested? (MM DD YY)	Date	1016		1048	1080
m.	ACTUAL yield at harvest/acre?	Number	1017		1049 •	<sup>1081</sup> . <u> </u>
	(1) Unit: [See Respondent Booklet pg. 7 for codes.]	Code	1018		1050	1082
n.	Acres Abandoned or NOT harvested?	Acres	1019	·	1051	1083

- <u>EXPECTED yield vs. ACTUAL</u> <u>yield</u>: helps us understand the amount of nutrients applied. If the actual yield was low but the expected yield was high, this can help explain the higher nutrient application amount.
- Harvest units: correct units are CRUCIAL

#### SECTION C, ITEM 1, Line k1 & m1 Unit Codes for Yield

- 1 Pounds
- 2 Cwt (hundredweight)
- 3 Tons
- 4 Bushels
- 5 Other (Specify)
- 6 Barrels
- 13 Quart
- 23 50-lb bag
- 24 Peck



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 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	2611	2612	

#### SECTION C, ITEM 1, Line q

Livestock
1 - Cattle
2 - Sheep
3 - Goats
4 - Horses
6 - Bison
7 - Llamas
8 - Elk
9 - Chickens
10 - Deer
99 - Other (Specify)



Repeat Section C - Crop History and Conservation Practices for the 2023 and then the 2022 Crop Years.



# **Special Situations – Strip Cropping**

- Specifically determine if the field arrangement is strip cropping.
- If field is not strip cropped, then record only the crop with the LARGEST acreage.
- If field is strip cropped,
  - Record all information for each crop, for example cropping history, operations, and application of fertilizer, manure, and pesticides.
  - If two or more strips are planted in the same crop, add up and record the total acreage in the strips for that crop. For example, a 50 acre field might have two 10 acre strips of corn alternated with two 15 acre strips of hay. Record 20 acres corn in one column, 30 acres hay in another column.
  - Check to see that Section B Question 4(q) is marked "1" for strip cropping.
  - Include a note that the field is strip cropped.



### Multiple Harvests of the Same Crop

- If the crop is harvested more than once (for example, hay and vegetables), record the date of the last harvest on Line I.(1).
- Do not record the date of "gleaning" operations as the final harvest date.
- If the primary crop is a grain, and straw or stubble is also harvested, the date of the grain harvest should be recorded in Section C.
- Record the total expected and actual yield for all harvests. (For example, if 3 cuttings of hay are expected and each cutting is expected to yield 1.5tons/acre, then the expected yield is 4.5 tons/acre)



## **Special Situations – Vegetables**

- If no more than 3 vegetables in any year, fill out Section C same as other crops.
  - If none of the crops are sequential, then follow standard partial field rules, i.e., choose the crop with the most acreage.
- If more than 3 vegetables in 2024, then use Section C Supplement:
  - For 2023 and 2022, don't use the vegetable supplement. If there are more than 3 vegetable crops; list only the first 3 in sequence, and add a note explaining that later crops in the same year are skipped.
  - Use normal Section C for 2023 and 2022, if crops other than vegetables are planted.



## **Special Situations – Vegetables**

- Section C Supplement" has columns for 9 crops. If more than 9 crops are grown in the selected field –
  - Record information for the nine most dominant vegetables, based on acreage.
  - Detailed comments should be made describing the operation.
  - Contact the survey administrators if you have a question.



### **Crop Rotation Plan**

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		1344	1351	1358
ii. 2 <sup>nd</sup> year of rotation		1345	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



### **Cover Crop**

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

#### <sup>1471</sup> 1 Yes — Continue

a.	When was the cover crop		2024	2023	2022
	planted?		1472	1483	1571
		MM DD YY			
b.	What type of cover crop was planted? (Enter code)	1     Wheat     5     Legume       2     Ryegrass     (clover,       3     Rye     cowpeas, etc.).       4     Other small     6       grain /winter     7     Mixed	1473	1491	1572
	What was the primary intended benefit of the cover crop? (Enter code)	1     Soil fertility     5     Carbon       2     Soil quality     sequestration       3     Soil cover     6     Other       4     Controlling     weeds,     insects, &       diseases     diseases     diseases	0836	0837	0838
d.	Did you apply commercial fertilizer for the benefit of the cover crop?	Yes = 1 No = 3	0839	0840	0841
e.	Did you apply manure for the benefit of the cover crop?	Yes = 1 No = 3	0842	0843	0844
f.	Did you apply pesticides for the benefit of the cover crop?	Yes = 1 No = 3	0845	0846	0847
g.	Did you irrigate the cover crop?	Yes = 1 No = 3	0848	0849	0850
h.	Was the cover crop grazed?	Yes = 1 No = 3	0851	0852	0853
i.	When was the cover crop terminated?	MM DD YY	1481	1492	1573
j.	How was the cover crop terminated? (Enter code)	1     Herbicide     5     Rolled/crimped       2     Mowed     6     Harvested for       3     Harvested     grain       for forage     7     Burned (fire)       4     Tilled in     8     Winter kill	1482	1493	1581

3 🗌 No — Go to Item 4.



### Drainage

4.	Is the field adjacent (within 100 feet up slope) to a water body, including a stream, intermittent stream, wetland, drainage ditch, or irrigation canal/ditch?	Yes = 1 No = 3	1327	Code
5.	Are irrigation/drainage ditches lined or vegetated to maintain a stable channel?	Yes = 1 No = 3	1364	Code
6.	Does this field have subsurface (tile) drainage?			Code
	<sup>1</sup> Yes — Continue <sup>3</sup> No — Go to Item 7. <sup>2</sup> Don't Know — Go to Item 7.		1341	
				Code
	a. Are the drainage tiles organized in a pattern?	Yes = 1 No = 3	1781	
	[If Yes — Continue. If No — Go to Item 6c.]		Ļ	
	b. What is the approximate subsurface (tile) drain spacing?		1782	Code
	1 — less than 30 ft. 2 — 30-59 ft. 3 — 60-100 ft. 4 — Greater than 100	ft.	L	
	c. Are the surface inlet pipes connected to the subsurface (tile) drains in this field?	Yes = 1 No = 3	1783	
	d. What depth are the subsurface tile drains installed at?	Inches	0854	
7.	Does this field have surface drainage structures?	Yes = 1 No = 3	1342	



### **Section C Reminders**

- Yes & No
  - ] = Yes
  - 3 = No
- Pay attention to skip instructions
- Fill in 2023, and 2022 as well if operator gives info for 2024 and then says "the same" for 2023 and 2022.
- Check that crop codes for each year carry through the rest of the questionnaire.
- Record small grains planted in the fall for harvesting in the following year in the correct year.
  - Wheat planted in 10/2022 harvested in 7/2023 is crop year 2023.





- Listing Cover Crops in the table but missing data for question 3
- Make sure to use the correct Corn (booklet page 4)
- Alfalfa, seed (102) only if alfalfa is being harvested for SEED
- Pasture that is being hayed needs to be Hay, Other



#### **Questions?**





#### **Section D Video**

# 



#### Section D : Commercial Fertilizer Application





### Section D – Commercial Fertilizers

PREVIEW

- Determine whether commercial fertilizer products were applied to this field to meet crop growth needs.
- Determine the rate fertilizer products were applied on the field.
- Determine **when** fertilizer products were applied on the field.
- Determine **the form** of products applied to the field.
- Determine **how** the fertilizer products were applied to the field.



## Section D - Key Point

#### **4 R's of Nutrient Management**

- Information gathered in this section helps us to determine how nutrients are managed on the field.
- A high level of Nutrient Management follows the 4 R's.
- The **Right Rate**.
- Applied at the **Right Time**.
- Using the **Right Form**.
- Applied in the **Right Way** (also applies to Manures).



### What are Fertilizers?

 Any material organic or inorganic, natural or synthetic, which supplies one or more essential nutrients (N,P,K) for crop growth.

### Why separate Fertilizers and Manures?

Manures are bulkier and stored and applied differently.
These differences affect N & P losses on the field.



#### Qla-c: Were fertilizer applications used?

1. For each of the last 3 years, were commercial fertilizer products applied? (a, b, and c). Exclude manures, these are covered in the next section.

• If none used in any year, go to <u>Question 2</u>.



### Q2 & 3: Specifically apply to Phosphorus

2. Is your **soil phosphorus level elevated** to a point where no additional phosphorus nutrients can be applied to this field for the **2024 crop year**?

3. Were phosphorus nutrients applied to this field as either fertilizer or **manure** prior to **2022** to supply phosphorus for subsequent years of the crop rotation? a. If yes, when were they applied?



### **Q11a-c: Commercial Fertilizer Applications**

#### In this section, you'll use:

- Operator's records
  - These can help jog the memory, speed up completion of the section. Includes Nutrient Management plans.
- Respondent booklet pages 4, 8-9.
- Survey Supplement
  - If more than 15 applications in a crop year.



### **Q11a-c: Commercial Fertilizer Format**

#### Two sheets per crop year:

Sheet 1 table columns 1-6

- Target crop, product used, and rate.
- Sheet 2 table columns 7-12
  - When applied, how applied, form, Nitrogen slow breakdown, and VRT use.



#### Using the Respondent Booklet

- Includes list of common fertilizer products, which will provide the percent active ingredients for input in the survey.
- Key Critical Points for Data Entry:
  - When entering actual pounds of nutrients in sheet 1 column 4, "19" needs to be entered in column 6. Leave column 5 blank.
  - If you are entering only the nutrient analysis (e.g. 32-0-0) in column 4, the total quantity of product applied (per acre) needs to be entered in column 5, and the units applied in column 6 (1, 3, 12, or 13).



#### **Actual Pounds of N Applied**

	1	2	3	4			5		6	
LIN	E Crop Year	Primary crop for which nutrients were intended	Crop Code [Enter crop code from Respondent Booklet pg. 4.]	MATERIALS USED Enter actual pounds of plant nutrients applied per acre and indicate "19" in column 6 (leave column 5 blank). If only fertilizer analysis is known, enter percent analysis in this column, quantity applied per acre in column 5, and the material code in column 6.				What quantity was applied per acre? [Leave the column blank if pounds of actual nutrients were reported in column 4.]	Ent 1 3 12 13 19	er material code. Pounds Tons Gallons Quarts Pounds of actual nutrients
				Nitrogen N	Phosphorus P <sub>2</sub> O <sub>5</sub>	Potassium K₂O	Sulfur S			CODE
01	<sup>28</sup> 22	Corn, grain	188	<sup>31</sup> 150	<sup>32</sup> O	<sup>33</sup> O	<sup>34</sup> O	36	37	19



#### N by Analysis Applied (Ammonium Nitrate)

	1	2	3	4				5		6
LINE	Crop Year	Primary crop for which nutrients were intended	Crop Code [Enter crop code from Respondent Booklet pg. 4.]	Enter actua and indicate only fertilize in this colu a	What quantity was applied per acre? [Leave the column blank if pounds of actual nutrients were reported in column 4.]	Ent 1 12 13 19	er material code. Pounds Tons Gallons Quarts Pounds of actual nutrients			
				[Show Common Fertilizers in Respondent Booklet pgs. 8-9.]						
				Nitrogen N	Phosphorus P <sub>2</sub> O <sub>5</sub>	Potassium <u>K₂O</u>	Sulfur S			CODE
01	<sup>28</sup> 22	Corn, grain	188	<u>31</u> 32	<u>32</u> 0	<sup>33</sup> 0	<sup>34</sup> O	<sup>36</sup> 469	37	1



#### **Example of Sheet 2 Filled In**

Γ		7	8	9	10	11	12	
	L I N E	When was this applied?	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
		MM DD YY		Acres	No = 3			
C	)1	<sup>30</sup> 05 01 22	<sup>39</sup> 2	<sup>40</sup> 100	<sup>29</sup> 3	<sup>26</sup> 1	<sup>27</sup> 1	Ammonium Nitrate applied



#### **Another Key Point**

 Probe to see if any fertilizer applications were made in the fall of the previous year (2021 for crop year 2022). This is common in winter wheat and needs to be recorded.



#### Winter Wheat example

		1	2	3		4			5		6
	INE	Crop Year	Primary crop for which nutrients were intended	Crop Code [Enter crop code from Respondent Booklet pg. 4.]	MATERIALS USED Enter actual pounds of plant nutrients applied per acre and indicate "19" in column 6 (leave column 5 blank). If only fertilizer analysis is known, enter percent analysis in this column, quantity applied per acre in column 5, and the material code in column 6.				What quantity was applied per acre? [Leave the column blank if pounds of actual nutrients were reported in column 4.]	Ent 1 12 13 19	er material code. Pounds Tons Gallons Quarts Pounds of actual nutrients
						[Show Common Fertilizers in Respondent Booklet pgs. 8-9.]					
					Nitrogen N	Phosphorus P <sub>2</sub> O <sub>5</sub>	Potassium K <sub>2</sub> O	<u>Sulfur</u> S			CODE
(	01	<sup>28</sup> 22	Vheat, Winte	r 125	<u><sup>31</sup></u> 75	<u>32</u>	33	34	36	37	19



#### Winter Wheat example sheet 2

	7	8	9	10	11	12	
L I N E	When was this applied?	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 No = 3	Nitrogen slow- breakdown product [Enter code from box above.]	Fertilizer form [Enter code from box above.]	NOTES
	MM DD YY		Acres	NO - 5			
01	<sup>30</sup> 10 01 21	<sup>39</sup> 2	<sup>40</sup> 100	<sup>29</sup> 3	<sup>26</sup> 1	<sup>27</sup> 1	Applied as NH4- NO3.





- Missing fertilizer data- remember this data is turned over to NRCS, who can not call your office
- Percent Analysis vs Actual Pounds
- Including micro-nutrients such as lime and gypsum



## **Section D Review & Section E Preview**

REVIEW

- 4 R's Rate, Timing, Form, Method
- Fertilizers v. Manures
- Q1-10 Testing, Adv. Tech.
- Q11 Details of the 4 R's in order to model the field in the APEX model.

#### PREVIEW

- Similar format as Section D
- Gathering info on 4 R's for manure
- Some info. used for reporting (How many acres receive manure?).
- Some info. used for APEX modeling.



#### **Questions?**





#### **Section E Video**

# 



#### Section E: Manure Applications





### The 4 R's of Nutrient Management

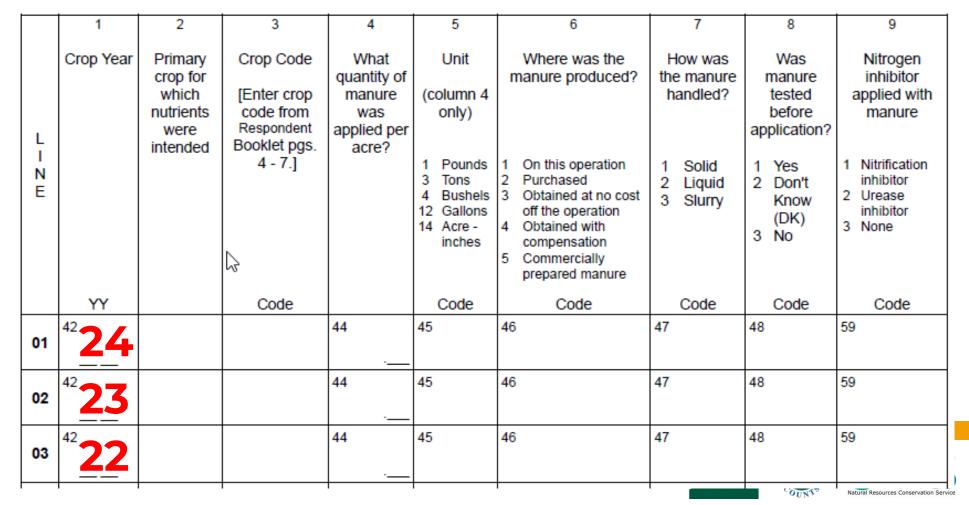
- Determine if manures were applied to this field to meet crop growth needs.
  - <u>R</u>ight rate
  - <u>R</u>ight time
  - <u>R</u>ight form
  - Applied in the <u>r</u>ight way





### **The Manure Tables**

• All crop years reported in the manure tables



Center for CSSSV4044 Survey Statistics and Methodology

### Column 4 – Quantity Applied per Acre

- Partially dry and partially wet
  - Record on two lines
- Operator may not know the answer to the quantity applied
  - Type of livestock
  - Number of livestock
  - <u>Total</u> acreage outside of the field this manure was applied to
- Make sure to verify that this is the quantity applied <u>per acre</u>
  - Total Tons ÷ Acres = Rate per Acre





### **Column 7 – Manure Handling**

- Consistencies include:
  - Solid combination of waste & bedding
  - Liquid added water
  - Slurry thicker than liquid and cannot be stacked or handled like solid





## Column 7 – (Continued)

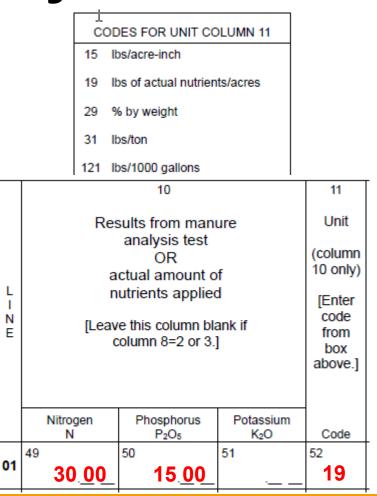
- Different consistencies typically not mixed
- If the producer claims they are, ask:
  - Were there two applications?
    - If so, record these on two separate lines.
    - If not, record the form that makes up the majority and then make a note in the margin.





### Columns 10 & 11 – Manure Analysis

- Column 8 should be marked a "1"
- Pay attention to your units and values
- Record to two decimal places
  - 25 lbs/T >>> 25.00
- Actual nutrients applied to the total acreage
  - Ex: 300 lbs of N, 150 lbs of P to a 10 acre field
    - Weight of nutrients ÷ Total Acres = Nutrients per acre
    - 300/10 = 30.00 lbs N; 150/10 = 15.00 lbs P
- % by weight >>> small and less than one decimal place

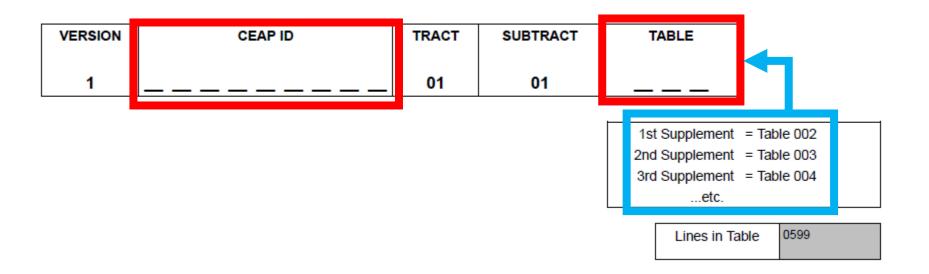






# **Supplement Use**

• Anything more than 10 entries will require a supplement





#### **Questions?**





#### Kahoot Knowledge Check (Sections A-E)





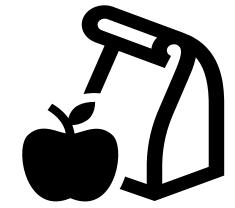
#### **Question and Answer Session**





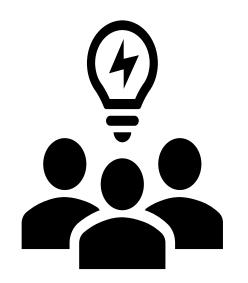
#### **Lunch Break**

 Next agenda item when you return will be Supervisor Breakout Sessions





#### **Supervisor Breakout Session**





#### Section F & G Video

# 



#### Section F-G: Pesticide Applications & Pest Management Practices





# Section F: Pesticide Applications

The purpose of this section is to identify pesticides used to produce crops on the targeted field over the past 3 years



# What is a Pest?

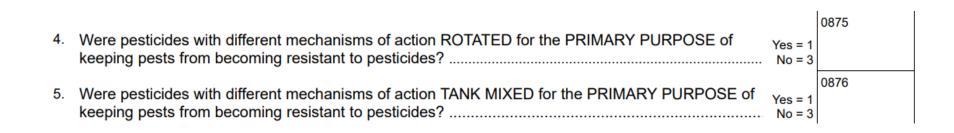
- Q1 Products applied to control weeds, insects, or diseas
  - Include herbicides, insecticides, fungicides, bio-control agents, seed treatments, and other conventional or organic products
- If none used, go to Section G

I	PEST CONTROL APPLICATIONS - SELECTED FIELD F								
1	In which of the following years (2021, 2028, and/or 2022) were any products applied to this field to control weeds, insects, or diseases? [INCLUDE herbicides, insecticides, fungicides, bio-control agents, bio-pesticides, seed treatments, and other conventional or organic products.]	Yes = 1	0315		20XX				
E		Completion Code	0344	0343	0342				



# Mechanisms of Action (MOAs)

- A mechanism of action describes HOW the chemical kills pest
- Q4 <u>Rotation</u>: Two different MOAs applied separately during the season or in separate crop years
- Q5 Tank Mix: Two different MOAs applied simultaneously
- Answer for this crop year and the past two crop years





# **Pest Control Application Factors**

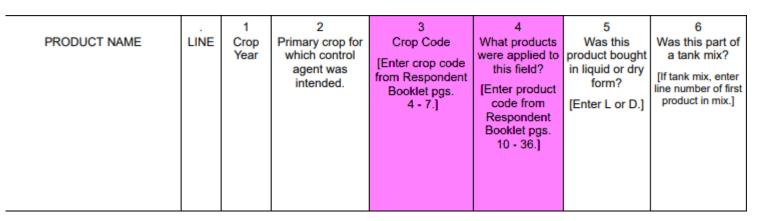
9. Other than cost and product effectiveness, which of the following factors did you consider in determining which pest control product to use in 2024?

Source					
a.	Yes = 1         Potential health risk to applicator or farm worker?         No = 3				
b.	Yes = 1Risk to populations of beneficial organisms (earthworms, bees, ladybugs, etc)?Yes = 1No = 3				
C.	Yes = 1         Risk to natural resources (drinking water, wildlife, fish, etc.)?         No = 3				
d.	Yes = 1         No = 3				
e.	Crop safety?				
f.	Yes = 1 No = 3				
g.	None?       Only answer "None" if all above are "No"       Yes = 1         None?       No = 3				



# **Pesticide Application Table**

- Item 10a/b/c: Details on three years of applications
- Include pesticides in tank mixes with Sec. D fertilizer
- Crop Years pre-printed; hand-write on supplements
- Show the operator the respondent booklet for:
  - Crop Codes Column 3
  - Product Codes Column 4





# **Missing Product Codes**

• Product(s) not listed in the respondent booklet?

• Use the lines at the bottom of page 24, 26, and 28

Line	Pest Control Product Type (Herbicide, Insecticide, Fungicide, etc.)	EPA No. or Tradename and Formulation	Form Purchased (Liquid or Dry)	Where Purchased [Ask only if EPA No. cannot be reported.]
6	Insecticide	Danitol 2.4 EC, EPA # 59639-35	Liquid	
16	Fungicide	Regulator II	Liquid	Midland Chem



			1	2		3		4			5			6
	PRODUCT NAME	LINE	Crop Year	Primary crop fo which control age was intended.	ent	Crop Code [Enter crop code from Respondent Booklet pgs. 4 - 7.]		/hat produ were appli to this fiel Enter prod code fror Responde Booklet p 10 - 36.	ied d? duct m ent gs.	prod in lic	quid o form	ought or dry	of a	as this part a tank mix? I tank mix, enter line mber of first product in mix.]
Pow	verflex	01	60 Y	Wheat		125	61	40071			D		63	
Atra	zine 4L	02	<sup>60</sup> ¥⁄	Corn		188	61	40136	5		L		63	2
Exp	ress	03	60 Y	Corn		188	61	40310	)		D		63	2
	7	8	Yo	<b>R</b> 9		10		11		1	2			13
ш <mark>д</mark> — Г	When was this applied?	How mus applied p per applie	er acre	What was the total amount applied per application in this field?	(C) 1 12 13 14 15 28 30 40	Pints Liquid Ounces Dry Ounces Grams	this a (E)	ow was s product pplied? nter code rom box above.]	a enti a fiel 1 1 2 1 3 1 4 1	as this pplied re field portion d, or a treatm Entire f Spot Th Entire f borders buffers	to th d, to c n of t as a s nent? field field ps and	e only he pot	in thi treat	many acres is field were ed with this roduct?
	MM DD YY 83	65		73	74	Code	76	Code	84	Co	de	-	77	Acres
01	<u>0922YY</u>	2	2.0_0			28		6						1500
02	<sup>83</sup> 0 5 1 1 Y Y	65	·	73 1 <u>00</u>	74	14	76	8	84		1		77	9500.
03	<sup>83</sup> <u>0 5 1 1 Y Y</u>	65	0. <u>1</u> 3	73	74	15	76	8	84		1		77	0500.
														0

# Tank Mixes







# **Application Rates**

- Column 8: Per Acre
- Column 9: Per Application
  - Use for spot treatments or when rates per acre vary
- Record the amount of concentrated product, not spray volume
- Add two zeroes after the decimal point when using whole numbers

8 0	R	9		10
How much was applied per acre per application?	to a	hat was the stal amount applied per lication in this field?	-	nter unit code] ol. 8 or 9 only)
			13 14 15 28	Liquid Ounces Dry Ounces
65 2 <u>0</u> 0	73	·	74	28
65	73	1 <u>00</u>	74	14



# Section G: Pest Management Practices

The purpose of this section is to collect information on the use of IPM (Integrated Pest Management) techniques to control pests in the selected field in the current reference year



# Scouting

- Q1: Scouting Methods
  - Making general observations while performing routine tasks
  - Deliberately going out to the field specifically for scouting activities
  - The field was not scouted for pests
- Q3: Why was scouting done in the field?
  - Pre-determined schedule or calendar
  - Pest development model based on degree days, maximum or minimum temperature, or wetness
  - Pest advisory warning



# Q5: What Was the Field Scouted Fo

1	2	3	4
	Yes = 1 No = 3	If Column 2 = Yes, Ask— Who did the majority of the scouting for Column 1 — Operator, partner or family member An employee Farm supply or chemical dealer Independent crop consultant or commercial scout	If Column 2 = Yes, Ask— Based on the scouting report and compared to published threshold level, rate the pest pressure as — 1 Low 2 Medium 3 High
	Code	Code	Code
a. weeds?	1705	1709	1774
b. insects or mites?	1706	1710	1775
c. diseases?	1707	1711	1776
d. other (specify)	1708	1712	1777
0881			



# **Pest Management Practices**

10. Did you conduct any of the following activities for the crops grown in 2024 SPECIFICALLY for the purpose of managing pasts or reducing the aproad of pasts						
ule	e purpose of managing pests or reducing the spread of pests —		Code			
a.	remove, plow down, or burn any crop or crop residue?	Yes = 1 No = 3				
b.	alter crop rotation?	Yes = 1 No = 3	I I			
С.	maintain ground covers, mulches, or other physical barriers?	Yes = 1 No = 3				
d.	use no-till or reduced till?	Yes = 1 No = 3				
e.	adjust spacing or plant density?	Yes = 1 No = 3	I I			
f.	chop, spray, mow, plow, or burn field edges, lanes, ditches, roadways, or fence lines?	Yes = 1 No = 3				
g.	clean equipment and field implements after completing field work?	Yes = 1 No = 3				
h.	cultivate for weed control during the growing season?	Yes = 1 No = 3				
i.	choose not to plant a crop in certain areas of the field to avoid a specific pest?	Yes = 1 No = 3	1779			
j.	adjust planting or harvesting dates?	Yes = 1 No = 3	1730			

#### **Questions?**





#### **Section H Video**

# 



#### Section H: Irrigation





# **Section H Preview**

- Understand the basic types of irrigation systems used on crop fields
- Understand the difference between "gravity" and "pressure" system
- A simple example will be presented
- Regardless, when in doubt, write NOTES



#### Irrigated Land by State (2022 Census of Agriculture)

- Kansas: 2.34 million acres (6<sup>th</sup> largest state)
- Nebraska: 7.97 million acres (2<sup>nd</sup> largest state)
- North Dakota: 248 thousand acres
- South Dakota: 411 thousand acres



# Irrigation Efficiency & Environmental Impacts

#### **Evaporation losses**

- From transport structures within field (ditches, lined or not)
- From application method
  - Small drop or mist from high pressure sprinkler
  - Surface evaporation from flooding/ponding or furrow irrigation

#### **Percolation losses**

- Required to fully fill soil profile across length of field
- Some occurs before soil is full across the field
- Transports nutrients and chemicals down through soil profile

#### **Runoff losses**

- Unavoidable with most gravity type systems
- Erode soil, nutrients, and chemicals



#### **Gravity vs. Pressure Systems**





Gravity irrigation systems use gravity to distribute water in the field.

Pressure systems use pressure to distributer water in the field.



### Irrigation System Type Codes

Section H, Item 1a

IRRIGATION SYSTEM TYPE CODES

<u> </u>							
	Pressure Systems		Gravity Systems				
1	Hand-move	10	Siphon-Tube System from unlined ditches				
2	Solid or Permanent Set	11	Siphon-Tube System from lined ditches				
3	Side Roll or Wheel Line	12	2 Portal System from unlined ditches				
4	Center Pivot or Linear Move with impact sprinklers	13	B Portal System from lined ditches				
5	Center Pivot or Linear Move low pressure spray nozzles below the tower and suspended above ground level	14	Any Poly-Pipe System				
6	Center Pivot or Linear Move with spray or bubbler nozzles discharging on or near the ground		Gated-Pipe (not poly-pipe)				
7	Big Gun	16	Improved Gated Pipe (surge flow or cablegation, not poly-pipe				
8	Low-Flow Irrigation (drip, trickle, or micro spray)	17	7 Sub irrigation				
9	Other (Specify:)	18	Open discharge from well, pump, border large scale turned structures or large alfalfa valves				
	· · · · · · · · · · · · · · · · · · ·	19	Other (Specify:)				

Irrigation system type codes found in the Respondent Booklet on page 38 to complete Section H Question 1



#### **Common Pressure Systems**



Center Pivot with low pressure nozzles

Big Gun

Center Pivot with Impact Sprinklers



#### **Common Gravity Systems**



#### Poly Pipe



#### Improved Gated Pipe



#### Gated Pipe



#### **Type of Irrigation System Used**

Eunumerator Action: Confirm if Irrigation was utilized on the selected field, Section C. Cropping History and Conservation Practices, Item j = Yes on pages 7,8,9. If no Irrigation was reported for any crop years in SECTION C, Go to SECTION I.

- 1. Now, I have some questions about the irrigation of this field for the [years of irrigation] crops(s).
  - a. What type of irrigation system(s) were used to irrigate this field? [Show System Type Codes in RESPONDENT BOOKLET og .38. If more than 1.1]

[Show System Type Codes in RESPONDENT BOOKLET pg. 38. If more than 1 system was used, enter System Type Code for the system most-used during the irrigation season as the Primary System and the next most-used system during the season as the Secondary System. If only 1 type of system was used, report under the Primary System and then skip to 1b.]

		2024 SYSTEM TYPE	2023 SYSTEM TYPE	2022 SYSTEM TYPE
	i. Primary Irrigation System Code	1505	1506	1507
	ii. Secondary Irrigation System Code	1511	1513	1515
b.	Were any major changes made to the way the field was irrigated during to from 2022 to 2024 (INCLUDE irrigation system type, source of water, and changes to scheduling or monitoring)?	d major	Yes = 1 No = 3	1593

Enumerator Action: If an irrigation system reported in 1a for any year is a gravity system (code 10 - 19) then continue; else , Go to Item 4.



# If the Irrigation System was a Gravity System

- What gravity irrigation system source was used? .....
- 1 furrow 2 border
- 3 basin
- 4 contour levee
- 5 meadow or wild flood

	2024	2023	2022
Primary System Code	1508	1509	1510
Secondary System Code	1517	1518	1519



Furrow

Border

Basin



# If the Irrigation System was a Gravity System

What gravity irrigation system source was used? .....

2	border
3	basin
4	contour levee
5	meadow or wild flood

	2024	2023	2022
Primary System Code	1508	1509	1510
Secondary System Code	1517	1518	1519



Contour Levee

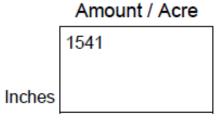


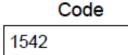
#### Wild Flood



- 7. If there is a limit on water availability or supply for this field, what is the maximum annual application amount? [If no maximum annual application amount, enter 99.] .....
- Has the irrigation water supply been tested for either nitrogen content or salinity? [If Yes — Continue. If No — Go to Question 9.] .....

	Please provide the following information for the last test performed on this field:	Salinity	Unit	Nitrate-Nitrogen (NO <sub>3</sub> - N)	Unit
		Test Value	1 ppm 2 mg/L 3 microseimens/cm	Test Value	1 ppm 2 mg/L
a.	Surface water	1543	1544	1547	1548
b.	Ground water	1545	1546	1549	1550







Yes = 1

No = 3

#### **Completion Codes**

Completion Code for Irrigation							
1 = Inaccessible/Refusal 3 = Valid Zero	2024	2023	2022				
	1504	1503	1502				



#### **Brief Example**

Eunumerator Action:	Confirm if Irrigation was utilized on the selected field, Section C. Cropping History and Conservation Practices, Item j = Yes on pages 7,8,9. If no Irrigation was reported for any crop years in SECTION C, Go to SECTION I.
a. What type of [Show Syster Code for the	e questions about the irrigation of this field for the [years of irrigation] crops(s). irrigation system(s) were used to irrigate this field? m Type Codes in RESPONDENT BOOKLET pg. 38. If more than 1 system was used, enter System Type system most-used during the irrigation season as the Primary System and the next most-used system ason as the Secondary System. If only 1 type of system was used, report under the Primary System and b.]

		2024 SYSTEM TYPE	2023 SYSTEM TYPE	2022 SYSTEM TYPE
	i. Primary Irrigation System Code	<sup>1505</sup> 4	<sup>1506</sup> <b>4</b>	<sup>1507</sup> <b>4</b>
	ii. Secondary Irrigation System Code	1511	1513	1515
b.	. Were any major changes made to the way the field was irrigated during the period from 2022 to 2024 (INCLUDE irrigation system type, source of water, and major changes to scheduling or monitoring)?		<sup>1593</sup> <b>3</b>	

Enumerator Action: If an irrigation system reported in 1a for any year is a gravity system (code 10 - 19) then continue; else , Go to Item 4.



#### **Brief Example**

4. In 2024, 2023, and 2022 which of these water management approaches best describes the irrigation water management of the selected field? ......

	0891	0892	0893
Code	4	4	4

- 1 Permanent flooding
- 2 Pinpoint flooding
- 3 Delayed flooding
- 4 None of the above
- 6. If the amount of water applied is known, what was the total amount of water applied?

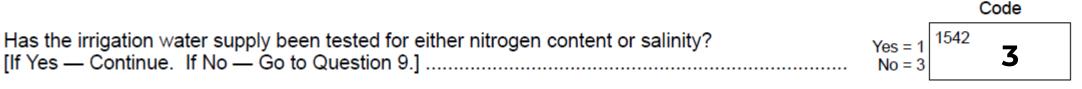
2024	2023	2022
<sup>6</sup> 5	<sup>1537</sup> <b>5</b>	<sup>1538</sup> <b>5</b>
(	<sup>ີ</sup> 5	<sup>6</sup> 5 <sup>1537</sup> 5

	20	)24	. 20	023	. 2	022
Inches er Acre	3407	7	3408	9	3409	6



#### Amount / Acre

15 application amount? [If no maximum annual application amount, enter 99.] ..... Inches



1541

1551 3

Code

1552 Yes = 1No = 3Yes = 1 1553 3 No = 3Yes = 1 1554 3 No = 3

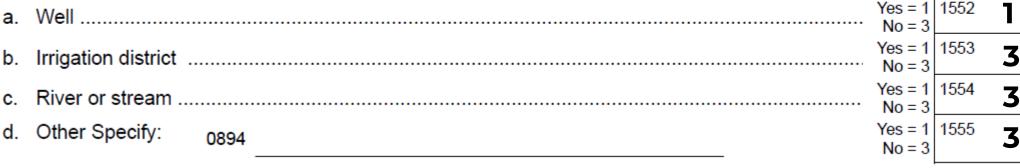
[If Item 10b = 1, Continue, Else — Go to Item 12.]

- Did you take steps to evaluate or improve the uniformity of water application of your pressure Yes = 1 system? No = 3
- 10. Which of the following are sources of your irrigation water? (Select all that apply)

7. If there is a limit on water availability or supply for this field, what is the maximum annual

8. Has the irrigation water supply been tested for either nitrogen content or salinity?

9.



Code

### **Don't Forget!**

- Fill out item code boxes where needed (YES = 1, NO = 3)
- Probe for additional information to clarify, if needed
- Leave notes





#### **Questions?**





## **Section I Video**

# 



#### **Section I: Field Operations**





## **Section I Field Operations**

- Record operations in order of occurrence
- Record operations related to:
  - Hand work
  - Machine work
  - Livestock grazing
- Do not record operations related to:
  - Fertilizer applications
  - Manure applications
  - Pesticide applications
- Exception to the above rule are <u>some</u> applications with incorporation



## **Section I Field Operations**

- Planted in fall and harvested in spring?
  - Record the crop year as the year harvested
- Operations <u>after harvest</u> will have the crop code of <u>next</u> year's crop



## What happened?

- Corn planted 4/10/23
- Corn cultivated: 5/15/23
- Corn harvested: 9/15/23
- Stubble disked under: 11/1/23
- Field cultivator: 5/30/24
- Soybeans planted: 6/1/24
- Soybeans harvested: 10/15/24



## **2023 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> 23	87 1	Corn	188	planter	<sup>88</sup> 114	99 3	$\frac{96}{0}$ <u>4</u> <u>1</u> <u>0</u> <u>2</u> <u>3</u>	<sup>97</sup> 2 <u>0</u>
02	<sup>86</sup> 23	<sup>87</sup> 2	Corn	188	cultivator	<sup>88</sup> 24	99 3	<sup>96</sup> 553	<sup>97</sup> 1 <u>5</u>
03	<sup>86</sup> 23	<sup>87</sup> 3	Corn	188	combine	<sup>88</sup> 123	99 3		97
1			I		l				I I



## 2024 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	<sup>87</sup> 1	Soybeans	188	tandem disk	<sup>88</sup> 15	99 3	96 <u>110123</u>	97 3 <u>0</u>
02	<sup>86</sup> 24	<sup>87</sup> 2	Soybeans	188	field cult	<sup>88</sup> 21	99 3	96 _0_5_3_0_2_4_	97 3 <u>5</u>
03	<sup>86</sup> 24	87 3	Soybeans	188	planter	<sup>88</sup> 114	<sup>99</sup> 3	96 0 6 0 1 2 4	97 1 <u>5</u>
04	<sup>86</sup> 24	87 4	Soybeans	188	combine	<sup>88</sup> 123	99 3	96 _1_0_1_5_2_4	97







## **Tandem Operations**

This occurs when machinery is hooked up together, "share" a sequence number

	1	2	3	4	5	6	7	8	9
LINE	Crop Year	Sequence Number	What crop was associated	Crop Code [Record	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
			with this operation?	from Respondent Booklet pgs. 4 - 7.]	was used on this field?	[Record from Respondent Booklet pgs. 39 - 41.]	incorporate a fertilizer or manure application? Yes = 1		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	Soybeans	188	tandem disk	<sup>88</sup> 15	99 3	96 <u>1 1 0 1 2 3</u>	97 3 <u>0</u>
02	<sup>86</sup> 24	8 2	Soybeans	188	field cult	<sup>88</sup> 21	99 3	96 0 5 3 0 2 4	97 3 <u>5</u>
03	<sup>86</sup> 24	17 2	Soybeans	188	harrow	<sup>88</sup> 33	99 3	96 0 <u>5 3 0 2 4</u>	97 6. <u>0</u>
04	<sup>86</sup> 24	<sup>87</sup> 3	Soybeans	188	planter	<sup>88</sup> 114	99 3	96 <u>0 6 0 1 2 4</u>	97 1 <u>5</u>
05	<sup>86</sup> 24	<sup>87</sup> 4	Soybeans	188	combine	<sup>88</sup> 123	<sup>99</sup> 3	96 <u>1 0 1 5 2 4</u>	97





## **Crop Failure**

1	2	3	4	5	6	7	8
Crop Year	Sequence Number	Crop Name	What crop was associated with this operation?	What operation or equipment was used on this field?	Machine Code [Record machine code from Responden t Booklet.]	What was the timing of the field operation?	the depth of tillage
YEAR	Number		CODE		CODE	MMDDYY	INCHES
2023	1	cotton	108	chisel plow	1	022123	5
2023	2	cotton	108	field cultivator	21	032923	1
2023	2	cotton	108	flex-tine tooth harrow	33	032923	0.5
2023	3	cotton	108	conventional planter	114	040123	1
2023	4	soybean	120	light disk	11	070123	3
2023	4	soybean	120	planter	114	070123	1.5
2023	5	soybean	120	harvester	123	101123	-
						COUNTS	Natural Resources Conservation





## **Cover Crops**

	•	· · · · · · · · · · · · · · · · · · ·							
	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>8</sup> 7_ 1	Wheat	125	drill	<sup>88</sup> 104	99 3	<sup>96</sup> 1 <u>5</u> 23	<sup>97</sup> 2 <u>.0</u>
02	<sup>86</sup> 24	<sup>87</sup> 2	Wheat	125	till	<sup>88</sup> 61	99 3	96 0 <u>30124</u>	97 2. <u>0</u>





## **Multiple Harvests**

	1	2	3	4	5	6	7	8	9
LINE	Crop Year	Sequence Number	What crop was	Crop Code	What operation or	Machine Code	Was this operation	What was the timing of the field	What was the depth of tillage
			associated with this operation?	[Record from Respondent Booklet pgs. 4 - 7.]	equipment was used on		used to incorporate a fertilizer or manure application? Yes = 1 No = 3	operation?	for tillage/planting operations?
	Year	Number	Crop Name	Code		Code	Code	MM DD YY	Inches
01	<sup>86</sup> 24	<sup>87</sup> 1	hay	119	mow	<sup>88</sup> 152	99 3	<sup>9</sup> <sup>6</sup> 4 2 9 2 4	97
02	<sup>86</sup> 24	<sup>87</sup> 2	hay	119	rake	<sup>88</sup> 157	99 3	0 4 <u>3 0 2 4</u>	97
03	<sup>86</sup> 24	87 3	hay	119	bale	<sup>88</sup> 147	99 3	96 04_3_0_2_4	97 4
04	<sup>86</sup> 24	<sup>87</sup> 4	hay	119	haul	<sup>88</sup> 195	<sup>99</sup> 3	<u>050124</u>	97
05	<sup>86</sup> 24	<sup>87</sup> 5	hay	119	mow	<sup>88</sup> 152	<sup>99</sup> 3	<u> </u>	97
06	<sup>86</sup> 24	<sup>87</sup> 6	hay	119	rake	<sup>88</sup> 157	<sup>99</sup> 3	053024	97
07	<sup>86</sup> 24	<sup>87</sup> 7	hay	119	bale	<sup>88</sup> 147	99 3	<u>060124</u>	97
08	<sup>86</sup> 24	87 8	hay	119	haul	<sup>88</sup> 195	99 3	<u>0 6 0 1 24</u>	97 `C
	<b>AA</b>	67				00	~~	COUNT	Natural Resources Conservation Service



## **Grazing Stocks**

		_			-	-	-		
	1	2	3	4	5	6	7	8	9
LINE	Crop	Sequence	What crop	Crop Code	What	Machine	Was this	What was the	What was the
	Year	Number	was		operation or	Code	operation	timing of the field	depth of tillage
			associated	[Record	equipment		used to	operation?	for
			with this	from	was used on	[Record from	incorporate		tillage/planting
			operation?	Respondent	this field?	Respondent	a fertilizer or		operations?
				Booklet		Booklet pgs.	manure		
				pgs. 4 - 7.]		39 - 41.]	application?		
							Yes = 1		
			<b>a b</b>				No = 3		
	Year	Number	Crop Name	Code		Code	Code	MM DD YY	Inches
	<sup>86</sup> 24	87 1	Corn	188	No-Till	88	99	<sup>96</sup> 04 15 24	97
01	24	I		100	Planter	113	3		2 <u>0</u>
	<sup>86</sup> 24	87	0.010	100	Bed	88	99	96 00 45 04	97
02	24	ຳ 2	Corn	188	Former	42	3	<u>06 15 24</u>	·
	86	87		400	Self Prop	88	99	96 40 00 04	97
03	<sup>80</sup> 24	°′3	Corn	188 .	wd Combine	100	3	<sup>30</sup> 10 20 24	
	86	87 🖌			Start	88	99		97
04	<sup>86</sup> 24	<sup>8</sup> ′ 4	Corn	188	Grazing	<sup>°°</sup> 409	3	<sup>96</sup> 10 22 24	51
					Stop				·
05	<sup>86</sup> 24	<sup>87</sup> 5	Corn	188		88	99	<sup>96</sup> 01 05 25	97
					Grazing	410	3		·
1		· ·		1	1				· /



#### **Questions?**





## Section J, K, & Conclusion Videos



#### Section J & K: Whole Farm & Operator and Operation Characteristics





## Section J: Whole Farm

The purpose of this section is to gather information about the TOTAL acreage involved in the operation during the 2024 crop year



## **Total Acres In The Operating Arrangement**

- Focuses on land operated during 2024 season
- Remember to answer all acres in the nearest tenth acre

J WHOLE FARM — SELECTED FIELD	J
TOTAL ACRES IN THIS OPERATING ARRANGEMENT	
Now I'm going to ask you a few general questions about your entire operation. (INCLUDE the farmstead, all cropland, pastureland, wasteland, woodland, wetland, and government program land. INCLUDE land in other states.)	
1. During the 2024 crop year, how many total acres did this operation:	Acres
a. Own?	+ 1901
b. Rent FROM others? (EXCLUDE land used on an AUM (Animal Unit Month) basis.)	+ 1902
<ul> <li>Rent TO others? (INCLUDE privately owned/rented land administered by a public agency through exchange-of-use.)</li> </ul>	- 1903
<ol> <li>Then the TOTAL acres in this operation including the farmstead, all cropland, pastureland, wasteland, wetland, woodland and government program land is: (Total of 1a + 1b - 1c)</li> </ol>	=
a. Have I accounted for the farmstead, all cropland, pastureland, wasteland, wetland, woodland and government program land in this operation?	d
<sup>1</sup> Yes — Continue <sup>3</sup> No — Make corrections, then continue.	Acres
3. Of the total (Item 2) acres operated, how many acres are considered cropland, including land in and cropland in government programs?	hay 1905
4. Of the total (Item 2) acres operated, how many acres are considered pastureland?	1906



## Total Acres on the Entire Farming Operation During 2024

- Include: all cropland, woodlands, wasteland, wetlands, pasture, idle land, and government program lands regardless of location when the operator made the dayto-day decisions
- If an operator living in one state made the day-to-day decisions for land across state lines, that and should be included in this section (owned, rented, or leased)
- Question 3: Remember that hay meadows are considered cropland and not pasture



## Section K: Operator & Operation Characteristics

The purpose of this section is to gather demographic information about CEAP respondents



## Total Acres on the Entire Farming Operation During 2024

- Reminder: data in this section refers to the entire farming operation, not just the selected field like previous sections
- Item 9: Asks the operator to identify a range of their gross value of sales
  - Gross Value of Sales = Total amount of sales without any deductions (expenses, taxes, etc)
- Item 10: Asks the operator to identify only <u>one</u> category where the largest portion of gross income on the operation originates



## Phase 2 Conclusion

The purpose of this section is to gather information on records used for the interview, track supplement forms, and record the time and date of the interview



### **Record usage vs supplements used**

- One of the most common mistakes in this section is marking supplements as actual operation records
  - Questions 2: Supplement forms are only used for tables that have applications, operations, or other data that needs additional data lines
  - These are not records but additional supplement sheets where additional information is recorded for the respective sections
- Question 1 refers to if an operator completed the questionnaire with operation records and if so, which areas of the operation
- Question 3: Leave comments and information in this section but remember, no PII anywhere on the questionnaire

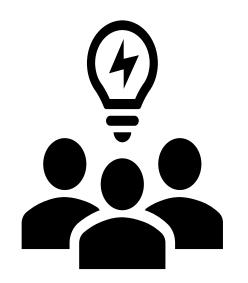


#### **Question and Answer Session**





### **Supervisor Breakout Session**





## **Conclusion of CEAP Day 1 Training**





## **Day 2 Question and Answer Session**





### **NRCS Purpose Video**



#### NRCS Purpose and Uses Video (SD/ND)

#### **Brianna Henry, NRCS**





## SELLING SURVEYS

#### Getting Your Foot In The Door Is Just The Beginning





# A nice part about being an enumerator is you're not selling anything.

May have heard this when you were first being hired.
 Well.....technically true, however.....



## **NASS Surveys are Voluntary**

Respondents need to see the value in filling out the survey...

...and it's your job to help them find that value.



## **Be Prepared to Overcome the Negatives**

- Surveys take time.
- Surveys ask personal and private information.
- Farmers and Ranchers are bombarded with surveys from a variety of sources.
- There is (lots of) misinformation about how data from NASS reports are used.



## **Survey Work is Similar to Sales**

- > Have your sales pitch ready.
- Know your product.
- ➢ Be organized.
- > Be ready to give you pitch anywhere and anytime.
- > Be prepared to deal with reluctant/skeptical customers.
- $\succ$  Gotta be willing to put the time (miles) in.



#### > Believe in yourself and what you're doing.

• Why should anyone buy anything from you if you don't even believe in it? Confident salespeople are more successful.

#### > Overcome your customer's preconceived notions.

- Be ready to counter any misconceptions or misinformation with facts and counter arguments.
- You can have the best sales pitch ever created, but if your customer doesn't believe it, you're not going to get anywhere.



#### Show up (and show up on time).

- Many sales are lost because the salesperson either failed to show or failed to show up on time.
- Respect their time/schedule.

#### > Steal (good ideas) from others.

#### Be honest.

• Don't overpromise and under deliver.



#### > Know your customer.

- Many customers are repeat customers.
- Make it a point to learn something personal and/or professional about them.
- Look for items that are of common interest to you both. Making connections on a level outside of the business relationship can help create long term success.



#### > Understand the basics of a sales call.

- Always layout the agenda for a sales call
  - How long will this call take?
    - Be honest. Respect their time.
  - What is the reason for the call?
    - How do they benefit by investing their time/energy?
  - How does this call relate to any previous or future calls?
    - By connecting the current call to a previous (positive) interaction gives the customer the comfort in knowing what to expect.
    - Lay the groundwork for future calls.



#### > Take notes.

 Give yourself a roadmap for the next call or the next time you call on that customer.

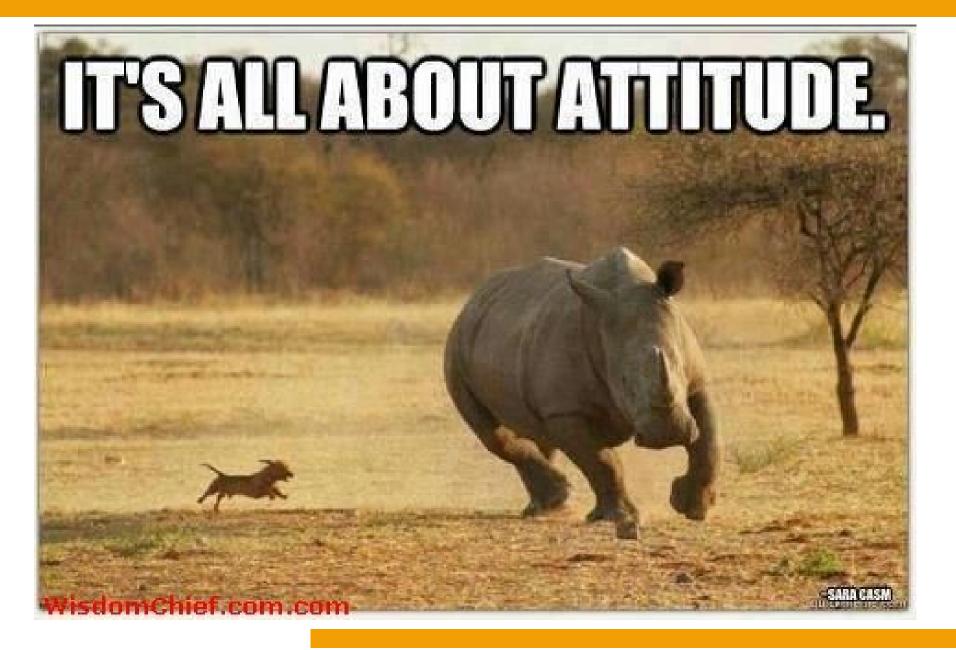
#### > Learn from each call.

• Feedback, both positive and negative, can help make you better.

#### > Attitude isn't everything, but it's a lot.

- Smile when you're on the phone. People can hear smiles.
- Taking a positive approach on each and every call can be difficult, but customers are more likely to buy from someone who likes what they do.







## If you remember nothing else...

...remember the golden rule.

## TREAT OTHERS AS YOU WOULD LIKE TO BE TREATED



#### **Questions?**





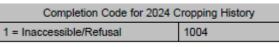
#### COMPLETION CODES LINES IN A TABLE SUPPLEMENTS





#### **Section C: Cropping History**

- Page 7, Item Code 1004
  - 2024 Cropping History



- Page 8, Item Code 1003
  - 2023 Cropping History

Completion Code for 2023 Cropping History 1 = Inaccessible/Refusal 3 = Valid Zero 1003

- Page 9, Item Code 1002
  - 2022 Cropping History

Completion Code for 2022 Cropping Table = Incomplete/Refusal 3 = Valid Zero 1002

#### <u>Completion Code Boxes</u>

- Blank = Data is present
- 1 = Data incomplete or refused
- 3 = Valid zero data for this crop year
- 2024 can't be a valid zero
- Box has to be coded a "3" if the respondent didn't make day to day decisions for 2023 or 2022.



#### **Section D: Commercial Fertilizer Application**

- Page 12, item code 0234
  - 2024 crop year
- Page 12, item code 0233
  - 2023 crop year
- Page 12, item code 0232
  - 2022 crop year

- <u>Completion Code Boxes</u>
  - Blank = Data present for section
  - 1 = Data incomplete or refused
  - 3 = Valid zero data for this crop year
  - Box has to be coded a "3" if the respondent didn't make day to day decisions for 2023 or 2022.

- 1. Were commercial FERTILIZERS applied to the field for:
  - a. The 2024 crop? .....
  - b. The 2023 crop? .....
  - c. The 2022 crop? .....

	Code	Completion Code
Yes = 1 No = 3	0221	0234
Yes = 1 No = 3	0235	0233
Yes = 1 No = 3	0237	0232



## **Section D: Commercial Fertilizer Application**

#### LINES IN TABLE

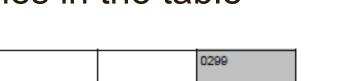
- 3 tables, 2024, 2023, 2022
- Count number of lines in each of the tables
- Page 14, table 100 = 2024, Item code 299, lines in the table
- Max is 14 lines
- Exceed 14 lines need to get a fertilizer supplement

		0299
Lines in Table	Table 100	
	-	~



### **Section D: Commercial Fertilizer Application**

- Page 16, table 200 = 2023, Item code 299, lines in the table
- Max is 14 lines
- Exceed 14 lines need to get a supplement
- Page 18, table 300 = 2022, Item code 299, lines in the table
- Max is 14 lines
- Exceed 14 lines need to get a supplement



Lines in Tabl

0299



### **Section E: Manure Application**

#### LINES IN TABLE

- Page 20, table 001 = 2024-2022, Item code 0599, lines in the table
- Max is 10 lines
- Exceed 10 lines need to get a manure supplement
- All 3 years go into one table

Lines in Table	Table 001	0599
----------------	-----------	------



## **Section E: Manure Application**

- Page 21
  - Item Code 0454 = 2024
  - Item Code 0453 = 2023
  - Item Code 0452 = 2022

Manure Table Completion Codes				
1 = Inaccessible/Refusal 3 = Valid Zero				
2024 2023 2022				
0454	0453	0452		

- <u>Completion Code Boxes</u>
  - Blank = Data present for section
  - 1 = Data incomplete or refused
  - 3 = Valid zero data for this crop year
  - Box has to be coded a "3" if the respondent didn't make day to day decisions for 2023 or 2022.



## **Section F: Pest Control Applications**

#### Page 23

11 M M

- Item Code 0344 = 2024
- Item Code 0343 = 2023
- Item Code 0342 = 2022

blied	2024	2023	2022
Yes = 1 No = 3	0315	0345	0346
Completion Code	0344	0343	0342

#### **Completion Code Boxes**

- Blank = Data present for section
- 1 = Data incomplete or refused
- 3 = Valid zero data for this crop year
- Box has to be coded a "3" if the respondent didn't make day to day decisions for 2023 or 2022.



## **Section F: Pest Control Applications**

#### LINES IN TABLE

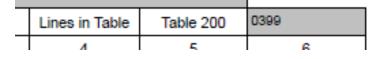
- 3 tables, 2024, 2023, 2022
- Count number of lines in each of the tables
- Page 24, table 100 = 2024, Item code 0399, lines in the table
- Max is 15 lines
- Exceed 15 lines need to get a pest control supplement

EXCLUDE: fertilizers and adjuvants, (e.g. wetting agents, stickers, spreaders, etc.).			
-	Lines in Table	Table 100	0399

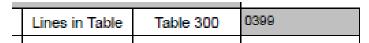


#### **Section F: Pest Control Applications**

- Page 26, table 200 = 2023, Item code 0399, lines in the table
- Max is 15 lines
- Exceed 15 lines need to get a pest control supplement



- Page 28, table 300 = 2022, Item code 0399, lines in the table
- Max is 15 lines
- Exceed 15 lines need to get a pest control supplement





## **Section G: Pest Management Practices**

#### Completion Code Box

- Page 31, item code = 1700
  - Blank = Data is present for this section
  - 1 = Data is incomplete or refused
  - Valid zero is not valid for this box

Completion Code for Pest Management Data		
1 = Incomplete/Refusal	1700	



## **Section H: Irrigation**

#### Completion Code Box

- Page 35
  - Item code 1504 = 2024
  - Item code 1503 = 2023
  - Item code 1502 = 2022
  - Blank = Data is present for this section
  - 1 = Data is incomplete or refused
  - 3 = Valid zero data for this crop year
  - Box has to be coded a "3" if the respondent has no irrigation
  - Reference page 32 for 3 columns for the past 3 years.

Completion Code for Irrigation			
1 = Inaccessible/Refusal	2024	2023	2022
3 = Valid Zero	1504	1503	1502



## **Section I: Field Operations**

- Lines in Table
  - Page 36, Table 100 = 2024, item code = 0499
  - Max is 15 lines
  - Exceed 15 lines need to get a field operations supplement

#### Completion Code box

- 2024 Field Operations
- Blank = data is present
- 1 = data is incomplete or refused
- 3 = valid zero for crop year

Completion Code 2024 Field Operations 1 = Inaccessible/Refusal 3 = Valid Zero 3004



## Lines in Table Table 100 0499

## **Section I: Field Operations**

- Lines in Table
  - Page 37, Table 200 = 2023, item code =0499
  - Max is 15 lines
  - Exceed 15 lines need to get a field operations supplement

#### Completion Code box

- 2023 Field Operations
- Blank = data is present
- 1 = data is incomplete or refused
- 3 = valid zero for crop year
- Box has to be coded a "3" if the respondent didn't make day to day decisions for 2023 or 2022.

	<u> </u>	
Completion Code 2023 Field Operations		
1 = Inaccessible/Refusal 3 = Valid Zero	3003	



Lines in Table TABLE 200 0499

## **Section I: Field Operations**

- Lines in Table
  - Page 38, Table 300 = 2022, item code =0499
  - Max is 15 lines
  - Exceed 15 lines need to get a field operations supplement

#### Completion Code box

- 2022 Field Operations
- Blank = data is present
- 1 = data is incomplete or refused
- 3 = valid zero for crop year
- Box has to be coded a "3" if the respondent didn't make day to day decisions for 2023 or 2022.

		-
Completion Code 2022 Field Operations		
1 = Inac	cessible/Refusal 3 = Valid Zero	3002

TABLE 300

0499

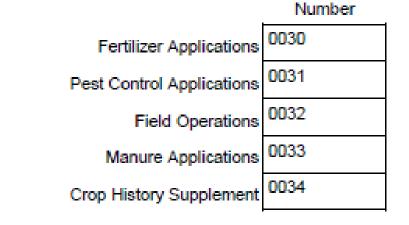
Lines in Table



#### Conclusion

- Number of Supplements Used
- Page 42
- Count the number of supplements used for Sections listed below

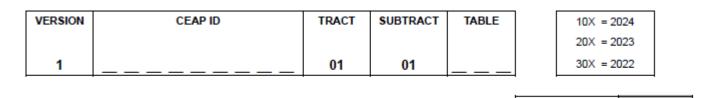
Supplements Used:





### **Supplements**

- Please make sure to fill out supplements correctly
- CEAP ID = 9 digit POID
- Table
  - 101 = 2024
  - 201 = 2023
  - **301 = 2002**



- Begin numbering the supplements with table 101, 201 or 301 because table 100, 200, 300 appears in the questionnaire.
- Number of lines in the table in the supplement needs to be filled out too
- Place supplements in the back of the questionnaire prior to shipping
- Don't ship blank supplements



Lines in Table

0499

#### **Questions?**





### **Respondent Booklet Scavenger Hunt**





#### **Supervisor Breakout Session**





## **Group Break**





### Reminders, Tips & Tricks Video



## CEAP Basic Principles & Review





## **Section A: Field Characteristics**

- Defines and confirms boundaries of the selected field and associated conservation areas
- Conservation Area: any area of land adjoining or adjacent to the selected field, such as field borders, buffers, or other land areas in conservation practices that the operator associates with the selected field or provides benefits to the selected field.
- Accurate identification is essential for data collection
- Adjust field boundaries in this section



## Section B: Conservation Plan

- Documents any conservation plan/s associated with the selected field
- Prepared under Federal, State, and conservation district standards
- Assistance to implement these plans can come from many entities



## Section C: Cropping History & Conservation Practices

- Records cropping history over three crop years
- Emphasis on practices such as:
  - Crop rotations
  - Cover crops
  - Tillage practices
- Important to understand cropping systems and their impact on soil and conservation



## Section D: Commercial Fertilizer Applications

- Records info on fertilizers and nutrients applications
- Helps understand issues related to water quality and agricultural productivity
- Table for each crop year
- Exclude:
  - Micronutrients
  - Commercially prepared manure
  - Unprocessed manure
  - Lime
  - Gypsum



## **Section E: Manure Applications**

- Records info on manure applications
- Helps understand nutrient management and its impact on soil and water
- Only one table for all crop years



## **Section F: Pest Control Applications**

- Detailed info on types of pesticides (herbicides, insecticides, fungicides)
- Track trends and amounts of pesticides used
- Goes with Section G: Pest Management Practices
- Only record pesticides
- Spot treatments: do not enter a rate per acre
  - <u>Only</u> complete column 9
  - Do <u>not</u> complete column 8



## **Section G: Pest Management Practices**

- Records pest management practices
- Includes both chemical and non-chemical management
- Main focus on scouting practices
- A pest refers to:
  - Weeds
  - Insects
  - Plant diseases



## **Section H: Irrigation**

- Collects data on the use of irrigation
- Combined with data from other sections to estimate:
  - Soil erosion
  - Nutrient losses
  - Pesticide losses



## **Section I: Field Operations Section**

- Records data on all field operations
- Data used to understand:
  - Rates of soil erosion based on crop type and production practices
  - Nutrient and pesticide losses
  - Soil health
- Tillage/planting depth very important
- Pay Attention!!! Field Ops supplements are year specific



## Section I: Field Operations Section (continued)

- Harvest activities include crop stubble harvest/grazing
- Exclude:
  - Pesticide, manure, and fertilizer applications
    - UNLESS separate tillage equipment is used to incorporate
  - Hauling of the crop from the field edge
  - Work done outside of the field



## Section J: Whole Farm

- Entire operations owned, rented, and leased acres
- Determines the total acres operated
- Help track conservation practices across different size farms
- Land in other states should be included



## Section K: Operator and Operation Characteristics

- Demographic data on the operation
- Provides patterns of conservation practices in relation to:
  - Number of years on the farm
  - Education
  - Gross value of sales
  - Full vs. part time
- "Supplements used" =/= number operation records used
  - This is how many supplements were used to collect data



## **Before the Interview**

- Inform the respondent they will need their records of:
  - Fertilizer applications
  - Pest control applications
  - Manure applications
  - Livestock grazing
  - Written conservation plans



## PERSONALLY IDENTIFIABLE INFORMATION (PII)

- NO PII ANYWHERE ON THE QUESTIONNAIRE!!!!
  - Names first, last, and nicknames
  - Phone numbers
  - Addresses or directions to the field/operator
- No, not even in the comments section.



## PERSONALLY IDENTIFIABLE INFORMATION (PII)

<u>Comments for the</u> <u>Questionnaire</u>

- Unusual data situations
  - Crop failures, droughts, etc.
- Unusual fertilizer, pesticide, or manure applications

#### Comments for CAPI

- Operating arrangements
- Driving directions to the location
- Phone or address updates

• NO PII!!!



## **Appropriate Questionnaire Comments**

- Good: Operator applies manure from a neighboring 400 head dairy to this field and other fields, a total of 1000 acres, but is unsure how much manure is applied.
- Bad: Mr. Smith applies manure from a neighboring 400 head dairy to this field and other fields, but is not sure how much manure is applied.



## **Appropriate Questionnaire Comments**

- RIGHT: Operator applies manure from a neighboring 400 head dairy to this field and other fields, a total of 1000 acres, but is unsure how much manure is applied
- WRONG: Mr. Smith applies manure from a neighboring 400 head dairy to this field and other fields,but is not sure how much manure is applied.





## **Appropriate CAPI Comments**

• Jimmy Cricket, Timmy, and Joe Schmo all operate this field as a 1/3, 1/3, 1/3 partnership. You will want to contact Timmy at (555) 555-5555 to collect any and all data associated with this operation.



### **Questions?**





### **CEAP Phase 1 Benchmarks**

### CEAP Phase 1

 Tuesday, September 24: CEAP Phase 1 Data Collection Ends (100% submitted both in CAPI and NRI)

 Refusal, inaccessible, and ineligible operations during this Phase cannot be attempted again during Phase 2

Shortly after this training, NASS will determine who screened through and create new assignment listings for Phase 2

- You will receive a mailing bulk bundle with supplements, door hangers, UPS poly bags, UPS labels, and new assignment listings (paper and CAPI)
- Forms that are not going to Phase 2 can be destroyed



### **CEAP Phase 2 Benchmarks**

#### CEAP Phase 2 Data Collection

- Starts: Friday, November 1, 2024
- Ends: Friday, February 28, 2025 (Last Day To Mail)
  - \*\*Data Collection strategy subject to change based on budget\*\*

### CEAP Phase 2 Benchmarks

- Friday, November 29<sup>th</sup> -25% mailed to Saint Louis, MO
- Friday, December 27<sup>th</sup> -50% mailed to Saint Louis, MO
- Friday, January 24 75% mailed to Saint Louis, MO
- Friday, February 28 100% mailed to Saint Louis, MO



### **CEAP Phase 2 Office Hours**

NPR will run two separate CEAP Phase 2 Office Hours

- Office led discussion on survey updates on data collection progress
- Answer questions
- Address editing trends or concerns the office may be seeing from mailed questionnaires
- Scheduled Office Hours (45-60 mins)
  - Wednesday, November 20<sup>th</sup> at 9AM
  - Wednesday, January 8<sup>th</sup> at 9AM



- After completing your first two complete questionnaires, schedule time with your supervisors to review your work
  - After this meeting, your supervisor will determine if you can mail questionnaires directly to Saint Louis or if additional review is needed
- Please use the Completion Code Edit Checklist prior to mailing questionnaires
  - Catching these potential edit errors will help the office out immensely
- Mail completed questionnaires in a timely manner
  - No CAPI data entry and all questionnaires will be keyed by hand at the NOD
  - Still need to mark survey status in CAPI (just like Phase 1)



- Mail only 3 questionnaires at a time in their original assignment envelope
  - Use the provided Blue UPS labeled envelops (will be mailed after the school)
- Mail the bar code labeled Phase 2 questionnaire inside of the original assignment envelope when mailing to Saint Louis, MO



Phase 1 Refusal and Inaccessible Assignment Envelopes:

- Phase 1 Assignment Envelopes that did not screen into Phase 2 will be field destroyed
- Phase 2 Refusal and Inaccessible Questionnaires
  - Mail return barcoded questionnaires original envelope using Blue UPS label
    - Basically, the same process as mailing completed Phase 2 questionnaires to Saint Louis
    - Field destroy maps, FSA listing, respondent booklet, etc.







### **CEAP Phase 2 Personally Identifiable Information Reminder**

- Absolutely no PII anywhere on the Phase 2 Questionnaire
- Use broad terms to describe unique situations
  - They, operator, operation, the target, manager, etc.
- No first names, nicknames, or specific references to medical conditions



### **Conclusion of CEAP Day 2 Training**



Thank you for your help and attention! Good luck!







# **ARMS 2 Training**

September 2024 Project Code – 906





- Training videos on each section were watched independently
- Questionnaires, Respondent Booklets, and Interviewer's Manual reviewed
- Home Study Quiz was completed





- Work through questionnaire
- Complete workshop booklet exercises
- Mock interviews
- Discuss the Home Study Quiz
- Discuss how to gain cooperation/plan of attack
- Explore ARMS 2 CAPI instrument





### Production Practices Report (PPR)

- Only the PPR this year
  - No cost questions
- 2 Versions
  - Wheat
  - Sorghum
- 8 pages
  - Section A Field selection
  - Section C Fertilizer Applications
  - Section D Pesticide Applications
  - Section E Pest Management Practices

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

Kansas	Nebraska	North Dakota	South Dakota
Winter Wheat	Winter Wheat	Durum Wheat	Winter Wheat
Sorghum	Sorghum	Spring Wheat	Spring Wheat
			Sorghum



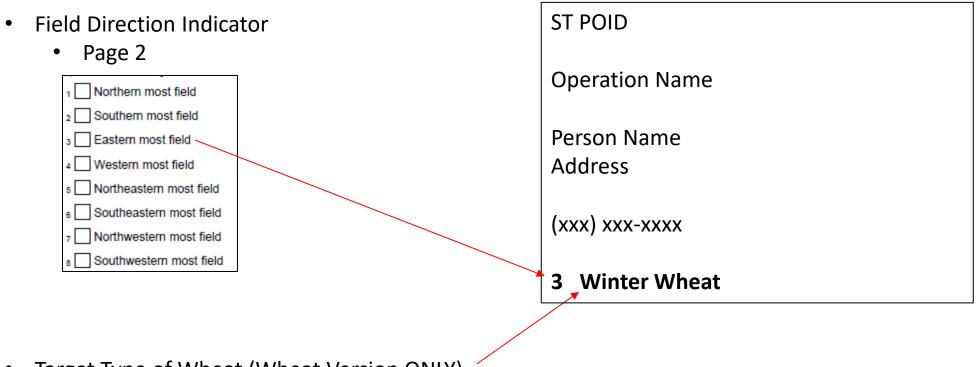


## Face Page, Inserts & Section A



### Face Page-Label





- Target Type of Wheat (Wheat Version ONLY)
  - Winter, Spring, or Durum





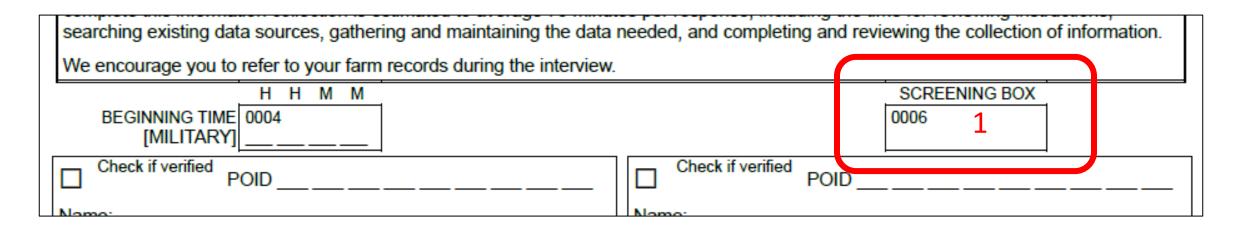


- Verify the name and address of the operator and any partners.
  - Partner names are in CAPI only
- Record the starting time of the interview using military time.
  - Example: 2:30 p.m. = 1430



### Face Page-Screening





- There should be a 1 in the screening box but some may have been missed
- Screening form will be inserted in questionnaire if screening needs to be done
- Enumerator Note in CAPI & Acreage Insert "Screening Supplement Required"







- Verify if operator is still in business
  - Including CRP & Pasture
- Out of Business or Landlord only
  - Conclude interview
- Collect data for addition individual ops or partnerships
- Take good notes



### Screening



	Comments icon					
Please write the following information in CAPI	comments:					
1. Another Farm/Ranch name: Y(name)/N						
5. If out of business who is operating the land:						
7. One Individual, <u>Hired</u> manager, partners (how many)?						
8. Target name make any day-to-day decisions for another farm or ranch? If so, how many?						

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



- Field Direction
- Type of Wheat (Wheat Version only)
- Previous Land
- Previous Acres Planted of Target Crop
- Comments

10/01/24 WHEAT F	RODUCTION PI	RACTICES	REPORT		Label 1 - 5 & Othe	er Field
SEQ: AR DRACTOR	1 1 AS=0	OD= 0	SUPER:		1	
		21) 018-5200 (	C ENUM:		Spring	
AND AND IN A D. LUNCO THE INFAULT	( (25	му алы 2000. )	DCMS: 420 CAP	Y		
PARTNERS:	já <sub>te</sub> -		IFARMTYP: 1 RMS1 RESPONSE Reporting Unit: Response:	E CODES	ACRES OPERA	TED:
			Respondent: Mode:	0 0	Total Land: Total Cropland:	2710 2710
CROP	VALUE		Begin data collec End data collec		10/01/24	2710
orghum Planted:	0					
Vheat, Winter Planted:	600					
Vheat, Spring Planted:	1400					
Vheat, Durum Planted:	0					
		-ENUMERAT	OR NOTES			
PERSONCOMMENTS		OP	ERCOMMENTS			
1. 小师的名称"你们的",我们就会让了。 我们就会让	<1010187 5801 &1 14 DOM:01	10.000				

n streffend (konstle dit sath) tidat milat (konstli) The line (dog figerood a milit operate (mpy "Duated") (konstl





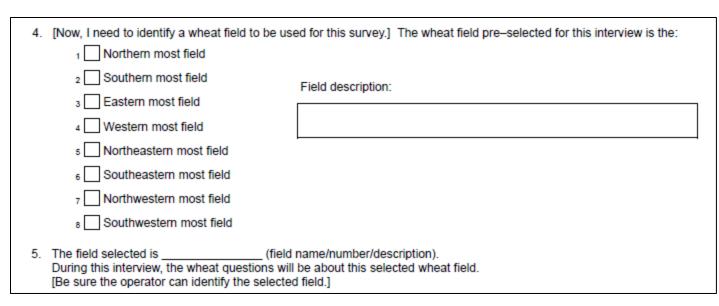
- Wheat Version, Q1 get Wheat type from label or acreage insert
  - Target type of wheat is printed on the label, acreage insert, assignment listings and in CAPI under "Operator Information"
  - The questionnaire only refers to that particular type of wheat as the target crop, and not all wheat.
- Total Acres Planted of target crop
  - Only planted acres of the specific type of wheat
  - Compare to Acreage Insert Sheet comment on large differences
  - Include acres even if they were abandoned or not for grain
- Total number of fields planted to the targeted crop





#### Cardinal & Inter-Cardinal Directions

- Direction indicator is a 1-8 on the face page Label, Acreage insert, Assignment listing & in CAPI
- For each operation, the field has already been randomly pre-selected using the eight cardinal and inter-cardinal directions
- Field selection is irrespective of the location of the homestead on the operation





### Section A – Field Selection



#### Where can I find the field direction indicator?

- Face Page Label
- Acreage insert
- Assignment listings
- CAPI under "Operator Information"

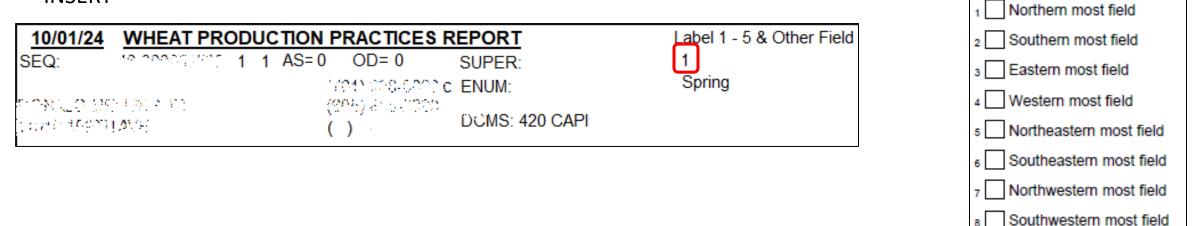
ST POID	
Operation Name	
Person Name Address	
(xxx) xxx-xxxx	
3 Winter Wheat	



### Field Selection Direction

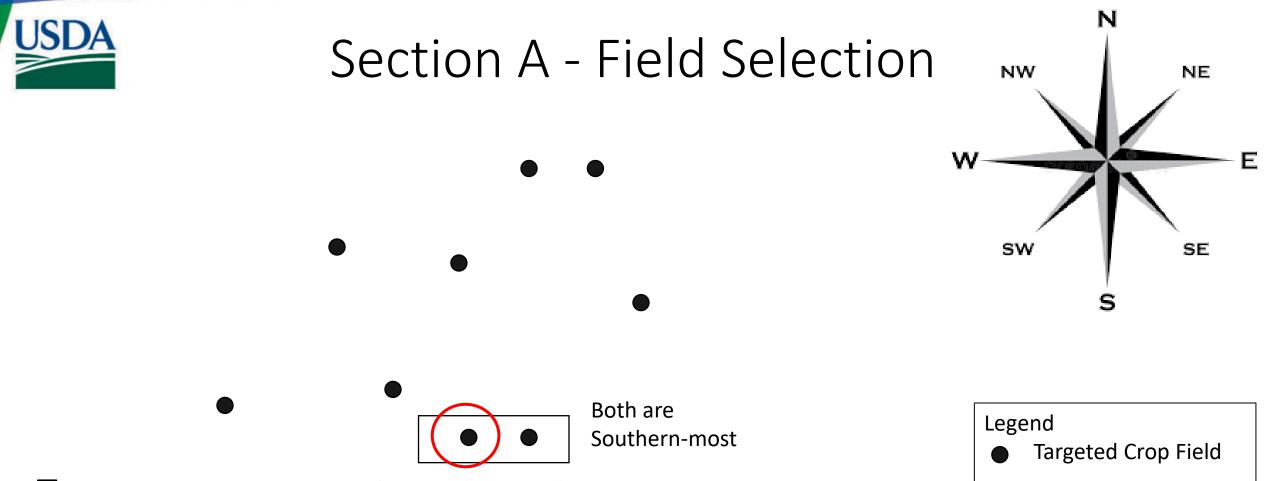


#### INSERT



#### ASSIGNMENT LISTINGS

Seq #	State Id	Target POID	POID Tract- Subtract	Op Dom Status	Matches	Name and Address Oper Address	Phone/Other/ Oper
CMT	46	Or County DCMS=420 County Iden 15 Den 15 Op County Iden 05 Protectory	1992, 993 (C) 19 9-1	0	1 Spring	COMMUNICATION AND AND AND AND AND AND AND AND AND AN	() -



- To determine which of those two fields to select, rotate clockwise around the compass rose
  - South-western field is selected







# • If a producer did not plant the targeted crop do we do the survey with them?

	Total Planted Acres
	0050
<ol><li>How many acres of the selected type of wheat did this operation plant for the 2024 crop year?</li></ol>	·
[If no acres planted, review Screening Information Form, make notes, then go to back page.]	



#### Section A: Field Selection









### Section C:

# Nutrient or Fertilizer Applications







### Section C Purpose

- Identify nutrients or fertilizer used to produce the 2024 Wheat/Sorghum crop on the selected field
- Fertilizer application data is used to analyze water quality and agricultural productivity issues and policies
- Get Actual application rates





# Fertilizer is made up of 2 things:

- Actual Nutrients
  - N: Nitrogen
  - P: Phosphorus
  - K: Potassium
  - S: Sulfur
  - And many others
- Carrier Material
  - Filler other stuff





### 2 Ways to Record Nutrient or Fertilizer Applications:

- **<u>Percent Analysis</u>** (most common & preferred)
  - A complete product
    - Urea 46-0-0
    - 10-34-0
    - MAP 11-52-0
    - DAP 18-46-0

#### • Pounds of Actual Nutrients

- Individual ingredients of a complete product
  - Nitrogen
  - Phosphorus
  - Potassium
  - Sulfur





#### Common Fertilizers & Percent Analysis

**Common Fertilizers and Their Percent Analysis** 

Section C, item 3, Column 2

#### From Respondent Booklet

[Enumerator Note: If Respondent cannot report the formulation for Section C	), item 3 us	e the formulatio	ns below.]		
		F	Percent Active Ing	gredients	
Name	Form	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	S
Ammonia	D/L	80			-
Ammoniated superphosphate.	D	12-17	22-35		
Ammonium metaphosphate.	D	12	51		
Ammonium nitrate.	D	32-34			
Ammonium phosphate.	D	11-18	46-48		
Ammonium phosphate nitrate.	D	27-30	10-15		
Ammonium phosphate sulfate (APS).	D	13-16	20		15
Ammonium polyphosphate (APP).	L	10-10	34-37		
Ammonium polyphosphate (Arr):	L	20-21			24
Ammonium sulfate nitrate.	D	20-30			5
Ammonium thiosulfate solution.	L	12			26
Anhydrous ammonia.	L/G	82			20
Annydrous ammonia. Aqua ammonia (Ammonium Hydroxide).	L	16-25			
	D	0-2	10-20		
Bone meal. Calcium ammonium nitrate.	D		10-20		
	D	15-16 15-16	39-41		
Diammonium phosphate sulfur.	-				
Diammonium phosphate (DAP).	D	16-21	46-53		50.400
Elemental sulfur.	D				52-100
Greensand.	D		1	6	
Magnesium sulfate.	D				13
Monoammonium phosphate (MAP).	D	11-13	48-62		
Natralene	D/L	40			
Nitrogen solutions.	L	7-58			
Nitric phosphate.	D	12-17	22-35		
Phosphate rock.	D		2-35		
Phosphoric acid.	L		2-76		
Potassium carbonate.	D			34-48	
Potassium chloride (Muriate of potash).	D			60-62	
Potassium magnesium sulfate	D			22	23
Potassium metaphosphate.	D		55-57	37-38	
Potassium nitrate.	D	13		44	
Potassium orthophosphate.	D		30-60	30-50	
Potassium polyphosphate.	L		40-60	22-48	
Potassium sodium nitrate.	D	15		14-15	
Potassium solutions.	L			13-15	
Potassium sulfate.	D			50-53	16
Sodium nitrate (Nitrate of Soda).	D	15-16			
Sulfuric acid.	L				20-26
Super phosphate (22% & under).	D		16-22		11
Super phosphate (over 22%).	D		23-39		11
Triple super phosphate.	D		40-54		11
Urea.	D	45-46			
Urea, sulfur coated	D	36-38			13-16
Urea ammonium phosphate.	D	25-58	28-35		10-10
Urea ammonium nitrate (UAN).	L	23-38	28-30		
	D	17	44		
Urea phosphate.	U	17	44		





### Fertilizer - Percent Analysis

#### Written with numbers and dashes

• 26 - 5 - 10

N - P - K

- First number is Nitrogen, second is Phosphorus, third is Potassium
- If a Fourth number is present: 26 5 10 7 that is Sulfur

#### Numbers represent the percentage of that nutrient in the fertilizer

- 26-5-10
- For any given quantity of this fertilizer,
  - 26% of it will be Nitrogen
  - 5% of it will be Phosphorus
  - 10% of it will be Potassium
  - The remaining 59% will be carrier material





### Fertilizer Percent Analysis

- 10-34-0 11-52-0 18-46-0 46-0-0 82-0-0
- No fertilizer reported by analysis will have total N-P-K greater than 85
  - If you add the 3 #'s together, it will not be greater than 85
  - If Sulfur is included in the mix then this does not hold true.





### Fertilizer Table - Percent Analysis

 Farmer applied <u>5gal of 10-34-0</u>, & <u>120lbs of 0-0-60</u> per acre to the target field

		Nitrogen C	odes for Col	umn 2				
			magnesiur calcium ni	n nitrate, m nitrate, and trate ogen fertilizer	]			
			2		3	4		
L	[Enter p	ercentage a	laterials Us nalysis or a ts applied p	ds of plant	What quantity was applied per acre?	[Enter material code]		
N E		ommon Nutr nitrogen list	Booklet]	blank if actual nutrients were reported]	1 Pounds 12 Gallons 13 Quarts 19 Pounds of			
	N Nitrogen	P₂O₅ Phosphate	K₂O Potash	S Sulfur	Type of N Used		actual nutrients	
01	<sup>31</sup> <b>10</b>	<sup>32</sup> <b>34</b>	33	34	<sup>35</sup> <b>4</b>	<sup>36</sup> 5	<sup>37</sup> <b>12</b>	
02	31	32	<sup>33</sup> 60	34	35	<sup>36</sup> <b>120</b>	<sup>37</sup> <b>1</b>	
03	31	32	33	34	35	36	37	

- Column 2 nutrients
- Column 3 Quantity applied
- Column 4 = 1, 12 or 13





# Fertilizer Table - Pounds of Actual Nutrients

- Reported in "Units" or "Pounds"
- Farmer applied 60lbs Nitrogen, 35lbs Phosphorus, 40lbs Potassium, & 35lbs Sulfur per acre to target field

			2			3	4	
L I N		ercentage a	s applied p		What quantity was applied per acre? [Leave this column blank if actual nutrients were	code]		
E	[Refer to	nitrogen list	above for t	gen used.]	reported]			
	N Nitrogen	P₂O₅ Phosphate	K₂O Potash	S Sulfur	Type of N Used		actual nutrients	
01	<sup>31</sup> 60 <sup>32</sup> 35		<sup>33</sup> <b>40</b>	<sup>34</sup> <b>35</b>	<sup>35</sup> 4	36	<sup>37</sup> <b>19</b>	
02	31	32	33	34	35	36	37	
<mark>0</mark> 3	31	32	33	36	37			

- Pounds of Actual Nutrients
  - Column 3 is BLANK
  - Column 4 = 19

٠







• 100 units of Anhydrous

• 100 units of Nitrogen using Anhydrous

• Are these the same?





# Answer: NOT THE SAME

NO

- Anhydrous 82-0-0
- 100 lbs of Anhydrous
  - 100 x .82 = 82 pounds of N
- 100 lbs of Nitrogen using Anhydrous
  - 100 / .82 = 122 lbs of Anhydrous







- Did you put out 100 units of Anhydrous
- Did you put out 100 units of Nitrogen using Anhydrous
- These are not the same

When talking about putting out units that usually means pounds of actual nutrients. Need to clarify.



### 1) Find the Mistake



			2			3	4	5	6	7
L N E	[Show Co	ercentage a	s applied p ients or Fer Booklet]	ctual pound er acre.] tilizers in R	Respondent	reported]	code]	When was this applied? 1 In the fall before seeding 2 In the spring before seeding	How was this applied? [Refer to code list above]	How many acres in the selected field were treated in this application?
	N Nitrogen	P₂O₅ Phosphate	K₂O Potash	S Sulfur	Type of N Used		actual nutrients	3 At seeding 4 After seeding		Acres
01	<sup>31</sup> 125	<sup>32</sup> <b>40</b>	33	34	<sup>35</sup> 4	36 200	<sup>37</sup> <b>19</b>	<sup>38</sup> XX	<sup>39</sup> XX	40 XX. <u>x</u>
02	31	32	33	34	35	36	37	38	39	40
03	31	32	33	34	35	36	37	38	39	40
04	31	32	33	34	35	36	37	38	39	40

#### Quantity per acre should be blank.



#### 2) Find the Mistake



			2			3	4	5	6	7
L N E	Materials Used         [Enter percentage analysis or actual pounds of plant nutrients applied per acre.]         [Show Common Nutrients or Fertilizers in Respondent Booklet]         [Refer to nitrogen list above for type of nitrogen used.]         N       P <sub>2</sub> O <sub>5</sub> K <sub>2</sub> O       S       Type of					What quantity was applied per acre? [Leave this column blank if actual nutrients were reported]	[Enter material code] 1 Pounds 12 Gallons 13 Quarts 19 Pounds of actual	When was this applied? 1 In the fall before seeding 2 In the spring before seeding 3 At seeding	IRefer to	How many acres in the selected field were treated in this application?
		Phosphate		Sulfur	N Used		nutrients	4 After seeding		Acres
01	<sup>31</sup> <b>85</b>	<sup>32</sup> <b>25</b>	<sup>33</sup> 20	<sup>34</sup> 10	<sup>35</sup> 4	36	37 🔀 19	<sup>38</sup> XX	<sup>39</sup> XX	40 XX <u>x</u>
02	31	32	33	34	35	36	37	38	39	40
03	31	32	33	34	35	36	37	38	39	40
04	31	32	33	34	35	36	37	38	39	40

Codes 1 and 19 are both pounds:

- Code 1 is Percent analysis, but sum of parts is greater than 100%.

United States Department of Agriculture - Code 19 is for actual nutrients.

**National Agricultural Statistics Service** 



#### 3) Find the Mistake



			2			3	4	5	6	7
L <mark>–</mark> N E	Materials Used         [Enter percentage analysis or actual pounds of plant nutrients applied per acre.]         [Show Common Nutrients or Fertilizers in Respondent Booklet]         [Refer to nitrogen list above for type of nitrogen used.]         N       P2O5       K2O       S       Type of					applied per acre? [Leave this column blank if actual nutrients were reported] 1 Po 12 Ga 13 Qu 19 Po	code] applie 1 Pounds 1 In the fall 12 Gallons seeding 13 Quarts 2 In the sp 19 Pounds of before se	2 In the spring before seeding	applied? applied? the fall before eeding the spring fore seeding	How many acres in the selected field were treated in this application?
	N Nitrogen	P <sub>2</sub> O₅ Phosphate	K₂O Potash	S Sulfur	Type of N Used		actual nutrients	3 At seeding 4 After seeding		Acres
01	<sup>31</sup> <b>40</b>	<sup>32</sup> <b>10</b>	<sup>33</sup> 10	34	<sup>35</sup> 4	36	<sup>37</sup> 1	<sup>38</sup> XX	<sup>39</sup> XX	40 XX . <u>x</u>
02	31	32	33	34	35	36	37	38	39	40
03	31	32	33	34	35	36	37	38	39	40
04	31	32	33	34	35	36	37	38	39	40

Appears to be reported as Percent of a solution, but Quantity Applied Per Acre is missing



### Section C: Nutrient or Fertilizer









#### Section D:

### **Biocontrol or Pesticide Applications**





- Collects information on Biocontrols or Pesticides used on the selected field for the 2024 Wheat/Sorghum crop.
- Chemical mixes are described and application practices are enumerated
- Use Operator Records
- Both you and the respondent should use a Respondent Booklet.



# Section D - Data Collection



#### • Include all pesticides applied for the 2024 crop on the selected field.

• Herbicides, insecticides, fungicides, defoliants, and other pesticides

#### • Exclude:

- Chemical applications to fence rows, ponds, canals and ditch banks.
  - This land should not be considered part of the survey acres of interest.
- Fertilizer Applications
- Seed Treatments
- Adjuvants/Surfactants



# Section D – Data Collection



- Respondent Booklet
  - Products are categorized as:
    - Dry (D)
    - Liquid (L)
  - Type or class of each product:

CHEMICALS and PESTICIDES for WHEAT F = Fungicide, H = Herbicide, I = Insecticide, M = Misc. Other, MD = Defoliant/Dessicant, MG = Growth Regulator, AS = Aqueous Suspension, D = Dry, DF = Dry Flowable, DG = Water-Dispersible Granules, E or EC = Emulsifiable Concentrate, ES = Emulsifiable Solution, F = Flowable, G or GR = Granular, L = Liquid, LV = Low Volatility M or ME = Microencapsulated, P = Pellets, S = Solution, S = Solution, SC = Soluble Concentrate, SL - Slurry, SP - Soluble Powder, W or WP - Wettable Powder, WDG or WG = Water-Dispersible Granules, WSP = Water-Soluable Packets

- Be sure to record the correct trade name & proper formulation of the chemical
  - Some chemicals have multiple listings in the respondent booklet (Ex. Round up)

L	Н	40942	ROUNDUP HERBICIDE	524-445
L	Н	41007	ROUNDUP ORIGINAL 2K HERBICIDE	524-539
L	Н	41162	ROUNDUP ORIGINAL II HERBICIDE	524-454
L	н	40653	ROUNDUP PRO CONCENTRATE	524-529
L	н	41096	ROUNDUP PROMAX	524-579
L	н	40905	ROUNDUP READY-TO-USE WEED & GRASS KILLER	71995-8
D	Н	40841	ROUNDUP ULTRA DRY	524-504
L	Н	41159	ROUNDUP ULTRA HERBICIDE	524-475





- If product is not in the respondent booklet or can't find it
  - Write the product name
  - Record it in item #2 at bottom of page

		2	3	4	5	6 OI	R 7	8
Chemical Product Name	L I N E	What products were applied to the selected field? [Show product codes from Respondent Booklet.]	Was this product bought in liquid or dry form? [Enter L or D]	If this was part of a tank mix, enter line number of first product in mix.	When was this applied? 1 Before planting 3 At planting 4 After planting 5 Defoliation prior to harvest	How much was applied per acre per application?	What was the total amount applied per application in the selected field?	[Enter unit code] 1 Pounds 12 Gallons 13 Quarts 14 Pints 15 Liquid Ounces 28 Dry Ounces 30 Grams
Bison Herbicide	01	61	62 L	63	64	65 •	73	74
	02	61	62	63	64	65 •	73	74

2.	For biocontrols or pesticides not listed in the Respondent Booklet, specify—											
	Line	Pesticide Type (Herbicide, Insecticide, Fungicide, etc.)	EPA No. or Trade Name and Formulation	Form Purchased (Liquid or Dry)	Where Purchased (Ask only if EPA No. cannot be reported)							
	1	Herbicide	Bison (EPA 9779-347)	Liquid	Midland Chem Supply							





- Tank Mixes
  - 2 or more products are mixed and applied at the same time
  - Record each product on its own line in the table
  - Enter the line number of the first product in the mix for all products in the mix

		2	3	4	5	6 OI	R 7	8	
Chemical Product Name	L I N E	What products were applied to the selected field? [Show product codes from Respondent Booklet.]	Was this product bought in liquid or dry form? [Enter L or D]	If this was part of a tank mix, enter line number of first product in mix.	When was this applied? 1 Before planting 3 At planting 4 After planting 5 Defoliation prior to harvest	How much was applied per acre per application?	What was the total amount applied per application in the selected field?	[Enter unit code] 1 Pounds 12 Gallons 13 Quarts 14 Pints 15 Liquid Ounces 28 Dry Ounces 30 Grams	
	01	61	62	63	64	65 •	73	74	
	02	61	62	63	64	65 •	73	74	





#### Tank Mix Example

										Applications Codes for Column 9				
										v	<ul> <li>6 Chiseled/injected or</li> <li>7 Banded in or over ro</li> <li>8 Foliar or directed sp</li> <li>9 Spot treatments</li> </ul>	r row		
ı			1	1					,	9	10	11	12	
,	1 '	2	3	4	5	6 OR	1 I	8	1 '	How was this	How many acres in the selected field were	How many times was it applied?	Were these applications	
ļ	( )	What products were applied to the selected field?		part of a	When was this applied?	How much was applied per acre per application?	total amount applied per	[Enter unit code] 1 Pounds 12 Gallons		product applied? [Enter code from above.]	treated with this	Was it applied?	made by	
1	L	[Show product codes from Respondent	liquid or dry form?	number of	3 At planting	application	application in the selected field?	III 13 Quarte		1	,	1 Operator, partner, or		
Chemical Product Name	I N E	Respondent Booklet.]	[Enter L or D]	in mix	4 After planting 5 Defoliation prior to harvest		Tiela?	15 Liquid Ounces 28 Dry Ounces 30 Grams	I N E		Acres	Number	family member? 2 Custom applicator? 3 Employee/Other?	
Bison	01	<sup>61</sup> 40012	<sup>62</sup>	<sup>63</sup> 1	<sup>64</sup> 1	<sup>65</sup> 12 <u>22</u>	73	<sup>74</sup> 15	01	<sup>76</sup> 1	<sup>77</sup> 100 . <u>0</u>	<sup>79</sup> 1	<sup>80</sup> 2	
Wolverine	02	<sup>61</sup> 40070	<sup>62</sup>	<sup>63</sup> 1	<sup>64</sup> 1	<sup>65</sup> 13 . <u>03</u>	73	<sup>74</sup> 15	02	<sup>76</sup> 1	<sup>77</sup> 100 . <u>0</u>	<sup>79</sup> <b>1</b>	80 2	
Stinger	03	<sup>61</sup> 40425	62	<sup>63</sup> 1	<sup>64</sup> 1	<sup>65</sup> 14 . <u>00</u>	73	<sup>74</sup> 15	03	<sup>76</sup> 1	<sup>77</sup> 100 . <u>0</u>	<sup>79</sup> <b>1</b>	<sup>80</sup> 2	
Spartan Herb.	04	<sup>61</sup> 41040	<sup>62</sup> D	63	<sup>64</sup> <b>4</b>	<sup>65</sup> 3. <u>00</u>	73	_ <sup>74</sup> 28	04	<sup>76</sup> 1	<sup>77</sup> 30 . <u>0</u>	<sup>79</sup> 1	<sup>80</sup> 2	
Quilt Fungicide	e 05	<sup>61</sup> 70525	<sup>62</sup>	<sup>63</sup> 1	<sup>64</sup> 1	<sup>65</sup> 11. <u>00</u>	73	<sup>74</sup> 15	05	1	<sup>77</sup> 100 . <u>0</u>	<sup>79</sup> 1	80 2	
 	06	61 ;	62	63	64	65 •	73	- 74	06			79	80	



#### Section D: Pesticides









# Section E: Pest Management Practices

- Purpose is to provide data about pest management practices that growers use on their crops.
  - Alternative to pesticides
  - Practices which improve the effectiveness of pesticides
- Pests refers to Weeds, Insects & Diseases
  - Pest management is the prevention, avoidance, monitoring or suppression
- Mainly yes/no questions



# Section E Things to Remember



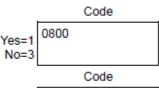
- Be familiar with Skip Codes
- If pesticides reported in Section D,
  - Questions 1-3 are asking if weather data, biological, and different mechanisms of action were used on the selected field

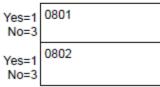
Now I have some questions about your pest management decisions and practices used on the selected field for the 2024 wheat crop. By pests, we mean weeds, insects, and diseases.

[Enumerator Action: Were pesticide applications reported in Section D?]

□ Yes – Continue □ No – Go to item 6

- 1. Were weather data used to assist in determining either the need or when to make pesticide applications?
- 3. Were pesticides with different mechanisms of action rotated or tank mixed for the primary purpose of keeping pests from becoming resistant to pesticides?.....









• [ENUMERATOR ACTION: Were HERBICIDE (pesticide product codes 40000-49000 application reported in Section D, item 1, column 2?]

NO - [Go to item 6]

YES – [Continue]



- Questions 6 and 7 are asking about record keeping for the selected field and was information used to make management decisions
- Questions 8 11 are asking about the scouting processes used on the selected field
- Question 12 asks about using field mapping of previous weed problems in managing pests in the selected field
- Question 13 asks for the other practices used to manage or reduce the spread of pests





- Questions 14 and 15 are asking about beneficial organisms and other biological controls used on the selected field
- Questions 16 18 are asking about other pest management decisions



#### Conclusion



- Ending time
- Use of records
- Supplements used

[Enumerator Note: Thank the respondent, then review this quest	tionnair	e.]					
	Office Use Only						
	Ending Time (Military)				Total	Total Hours	
	Hou	urs I	Minutes		Hours	Minutes	
1. Ending time				0008			
2. Records Use						-	
[Did respondent use farm/ranch records to report-]							
Yes=1 0011 [fertilizer data] No=3 [pesticide data]	Yes=1 No=3	Code 0012	]				
3. Supplements Used							
[Record the total number of each type of supplement used to con	nplete t	his intervie	w.]				
Number	_	Number	_				
0041		0042					
Fertilizer Supplement Pesticide Supplement							

#### CONCLUSION

8



### Breakout Time



- Work through questionnaire
- Complete workshop booklet exercises
- Mock interviews
- Discuss the Home Study Quiz
- Discuss how to gain cooperation/plan of attack
- Explore ARMS 2 CAPI instrument

Data Collection Materials & Extra Supplies



#### • Handing out Assignments tomorrow

- Assignment listing
- Labeled questionnaires
  - Acreage insert sheet
  - Respondent booklets
  - Consent form
  - Chemical use highlights
  - Screening form \*if required
  - State specific industry support letter \*if available

- Blank Questionnaires
  - 2 Wheat
  - 2 Sorghum (KS, NE, SD)
  - 2 Respondent booklets (1 of each)
- 3 Extra Screening supplements
- Telephone Quality Control worksheets
  - Supervisors only

2022 Wheat Chemical Use Highlights



#### NASS Highlights

May 2023 • No. 2023-2

#### 2022 AGRICULTURAL CHEMICAL USE SURVEY Wheat

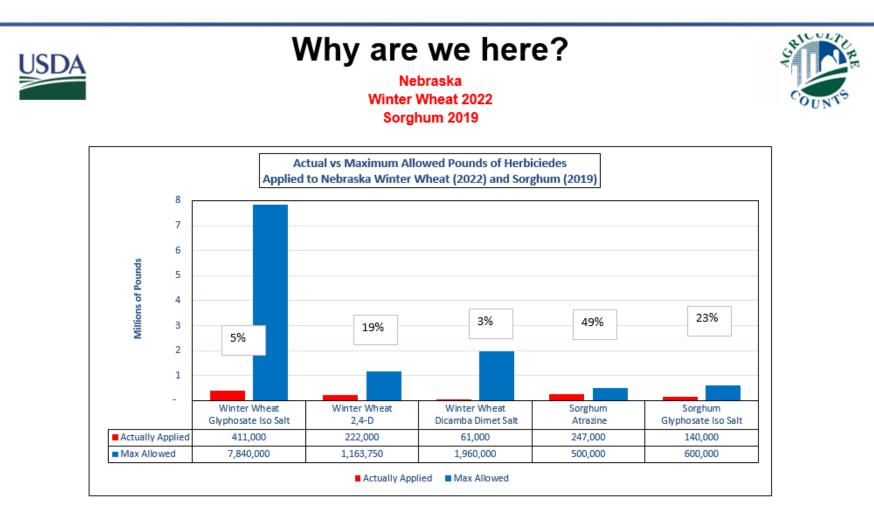
#### Twenty-two states ...

... accounted for 93% of the 45.7 million U.S. acres planted to wheat in 2022. The 2022 Agricultural Chemical Use Survey of wheat producers collected data about fertilizer and pesticide use as well as pest management practices in growing wheat. NASS conducted the survey in 22 states that together accounted for more than 93% of the 45.7 million acres planted to wheat in the United States

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#### Without the ARMS survey, the general public would be allowed to assume MAXIMUM label rates are being applied on ALL crop acreage.

The result could be the cancellation of pesticides farmers rely on. Our survey provides reliable, accurate pesticide use information to the general public and ensures the availability of chemicals farmers need.





#### • September 18 - Postcard was mailed out to respondents

#### YOUR PARTICIPATION IN THIS SURVEY IS IMPORTANT!

To make the interview quicker, please have your application records available.

Thank you for your participation! By responding, you represent and give voice to thousands of farmers like you across the nation.

For more information call 888-424-7828 or visit www.nass.usda.gov/go/arms/

OMB# 0535-0218

USDA-NASS NATIONAL OPERATIONS CENTER 9700 PAGE AVENUE SUITE 400 ST LOUIS MO 63132-1547

ADDRESS SERVICE REQUESTED

FIRST-CLASS MAIL PRESORTED U.S. POSTAGE PAID USDA PERMIT NO. G-38

#### **Agricultural Resource Management Survey**



• A representative from USDA will call you to help complete the survey in person between Oct. 1, and Dec. 6, 2024.

• Our interviewer will ask you detailed questions about the types of pesticides you use on your crops.



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



## Data Collection Plan



- Wed, Sep. 18
- Tues, Oct. 1
- Tues, Oct. 15
- Wed, Oct. 16
- Wed, Oct. 30
- Wed, Nov. 6
- Wed, Nov. 13
- Wed, Nov. 27
- Fri, Dec. 6
- Mon, Jan. 13
- Mon, May 12

**Postcard mailed to respondents ARMS 2 Data Collection 1** Report submitted in CAPI Office Hours 9 am CT 25% submitted in CAPI Office Hours 9 am CT 50% submitted in CAPI 75% submitted in CAPI Last day to submit ARMS 2 in CAPI **Destroy labeled questionnaires** Data published in Ag Chem Usage release





#### • Questionnaire handling

- Supervisor review: After you have completed your first 1 or 2 interviews, save for review in CAPI and let your supervisor know so they can go over those questionnaires in CAPI.
- CAPI: All questionnaires will be entered in CAPI.
- Phone number lookup: The office can try to help find a new phone number for a respondent.
- Questionnaires: After data collection is over, destroy ARMS 2 materials





- Office hours will be offered to ask questions
- Reach out with questions before if you can't attend
- Zoom Meeting
  - October 16 at 9 am CT
  - November 6 at 9 am CT



## Questions





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#### Kahoot!



• Go to <u>https://kahoot.it</u>

Kahoot !	
Game PIN	
Enter	

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## NASDA Administrative Items





Recent Response Rates Coming Soon™





iPad



# iPad Troubleshooting



- iPad will prompt you to set up a new passcode every 90 days.
- Enter passcode wrong too many times?
  - You will need to re-set up your iPad Contact your NASDA Coordinator
- Forgot passcode?
  - Call NASDA Coordinator before you enter the wrong too many times. (10 attempts)
  - IT will need to send an unlock code
    - May take up to 48 hours to get iPad reset or unlocked.
- Log onto iPad and CAPI at least 2 days prior to data collection.
- Use your iPad at least once every 30 days so you don't get locked out.

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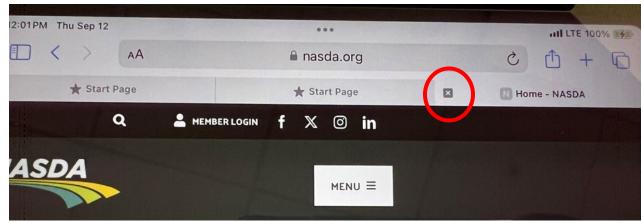
### iPad Troubleshooting



• At the end of the day, make sure to logout of CAPI.



- Close all windows not being used.
  - Tap on Safari and close all tabs not in use by clicking on the "x"
  - Double click the home button to show all open windows.
  - Swipe up with finger to the top of the screen and let go.





#### iPad Troubleshooting



- When using CAPI, please make sure you are logged out of iSolved (and close the window).
- When using iSolved, please make sure you are logged out of CAPI (and close the window).





#### **CAPI** Dashboard





#### CAPI Dashboard



Welcome to the CAPI Dashboard! Your one stop shop to access all announcements, training materials, and other information needed. Be sure to check here on a regular basis for any important news!

CAPI "Flash" News 9/12/24: Apple will release iOS 18.0 as an optional update on 9/16/24. This update is not approved to run on your iPad device. Do NOT run this up NASDA iSolved NASS Training Prod System Status:

If you experience repeated issues logging into the CAPI Application on your iPad, please contact your RFO first to help diagnose your issue. Then please try the troubleshooting steps below. If that fails then completely close the application, swipe closed, then try the below URLS for access.



**CAPI** Troubleshooting



## **CAPI URLS**

CAPI PRODUCTION: https://www.agcounts.usda.gov/static/capi/index.html

#### CAPI TRAINING: https://capitraining.nass.usda.gov/static/capi/index.html

Please try these general troubleshooting steps before contacting your CAPI (Point of Contact) POC:

1. Clear Preferences on the CAPI log in screen.

2. Clear History and Website Data under the Settings/SAFARI

3. Perform a hard reboot \*\*

**\*\*** Hard reboot instructions for iPads with and without the Home button

- For iPads with Home Buttons: hold the power and home button simultaneously until a white apple shows on the screen.
- For iPads without Home Buttons: Quickly press volume down, then quickly press volume up, then press and hold the hold the power until
   a white apple shows on the screen



#### NASDA NPR website



Welcome to the CAPI Dashboard! Your one stop shop to access all announcements, training materials, and other information needed. Be sure to check here on a regular basis for any important news!

CAPI "Flash" News 9/12/24: Apple will release iOS 18.0 as an optional update on 9/16/24. This update is not approved to run on your iPad device. Do NOT run this up



If you experience repeated issues logging into the CAPI Application on your iPad, please contact your RFO first to help diagnose your issue. Then please try the troubleshooting steps below. If that fails then completely close the application, swipe closed, then try the below URLS for access.





CAPI



#### **CAPI** Assignment Listing



		INF	СМТ	MAP	ST	1	стү	1t	POID	17	Tra ↓†	Sub ↓†	OP DOM↓↑	SEQ. NUM 🎼	DCMS↓↑	Name
	AGRI	CULTURA	L RESOUR	CE MANAG	GEMENT	SUR	VEY - C	òosts	and Returns Rep	oort -	Version 1 2	021-12-31 (9	904)			
		2		•	38		029		300034600	)	1	1	0		220	DOE FARMS INC JOHN DOE
		2		•	38		029		300046650	)	1	1	0		220	DOE FARMS INC JOHN DOE
Tap on icon in the CMT		2		•	38		047		300171060	)	1	1	0		220	DOE FARMS INC JOHN DOE
column to read				•	38		029		791074820	)	1	1	0		260	DOE FARMS INC JOHN DOE
Enumerator Notes.		8	-	•	38		029		957000070	)	1	1	0		260	DOE FARMS INC JOHN DOE
		0		•	38		029		957014200	)	1	1	0		260	DOE FARMS INC JOHN DOE



#### CAPI Assignment Listing



#### Close Comments Elmo Comments: CROPS CE 12/21: Operator reported via CAPI he quit farming and operation was turned over to someone else. 2022 FSA lists target as operator. Left active. EEP/FMG. Close



#### CAPI Assignment Listing



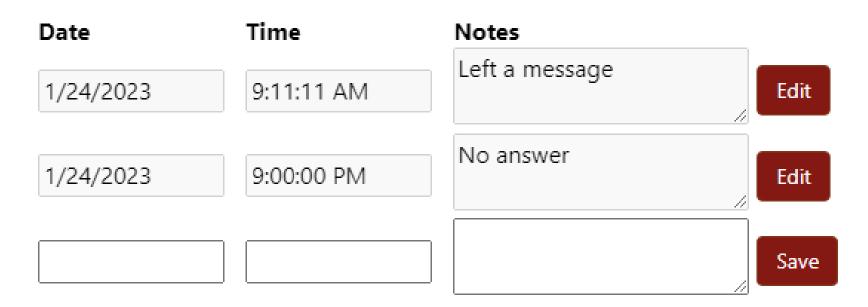
		1	INF	CMT	МАР	ST	1t	стү	1t	POID	17	Tra ↓†	Sub ↓↑	OP DOM↓↑	SEQ. NUM 🎼	DCMS↓↑	Name
	A	AGRICULTURAL RESOURCE MANAGEMENT SURVEY - Costs and Returns Report - Version 1 2021-12-31 (904)															
			2		•	38		029		300034600	D	1	1	0		220	DOE FARMS INC JOHN DOE
			2		•	38		029		30004665(	D	1	1	0		220	DOE FARMS INC JOHN DOE
Tap on icon in the INF column to			2		•	38		047		30017106	D	1	1	0		220	DOE FARMS INC JOHN DOE
record your call			0		•	38		029		791074820	D	1	1	0		260	DOE FARMS INC JOHN DOE
attempts.			6		•	38		029		957000070	D	1	1	0		260	DOE FARMS INC JOHN DOE
			0		•	38		029		957014200	D	1	1	0		260	DOE FARMS INC JOHN DOE



#### CAPI Assignment Listing



#### Attempted Contacts







- NASDA NPR Website -> News & Events -> Lookup Request
- Fill out your
  - Name
  - Email Address
  - State
  - Poid
  - What info you need?
    - Phone # or Address?

News & Events

Enumerator Calendar

Agriculture Stress Handouts

**OY Equipment Requests** 

Lookup Request





#### iSolved



## iSolved Tips



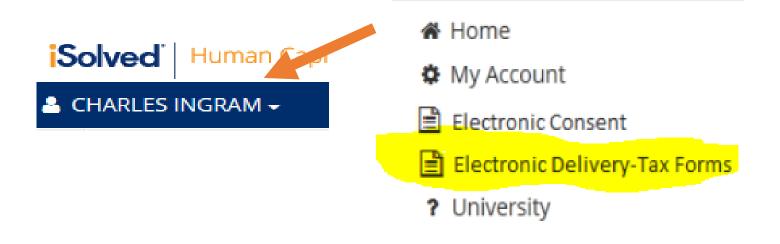
- Enter time and verify daily (or days that you work)
- Complete timesheets accurately
  - Project Codes, Hours, Miles, Expenses
- Verify timesheets in the proper order
  - 1<sup>st</sup>-Enumerator; 2<sup>nd</sup>-Supervisor; 3<sup>rd</sup>-NASDA Coordinator
- You may continue to claim cell phone expense every pay period you work and use your cell phone for work.



W-2



- W-2s will not be mailed if you consented to electronic delivery.
  - Employee Self-Service > W2/ACA/1099 Forms
  - Will be mailed if you did not consent to electronic delivery
  - If you are new this year, or had to request a mailing this year, check in iSolved.



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### Expense Reimbursement



- Submit in iSolved
- Receipts are needed for reimbursable expenses.
- Write on the receipt:
  - Name and Enumerator Id
  - Project Code (recorded in iSolved)
  - Description of Expense



# Expense Reimbursement



- Receipts need to be sent to your NASDA Coordinator by either option:
  - Email/text an image of the receipt
  - Mail in receipt
- Send in a timely manner
  - For example: expenses occurred September 8 September 21; make sure the receipts are in the office by September 23.





- CEAP material has been sent out for Phase 1
- We will send out material for Phase 2 in October.
  - After Phase 2 eligible points are determined
- Do not destroy ANY CEAP information until after Phase 2 assignments are sent out
- ARMS 2 Assignments will be passed out during your breakout.
  - Assignment listings & Labeled questionnaires
  - Extra supplies







- (3) Screening Supplements
- (2) Blank Wheat and Sorghum Questionnaires
- (2) Blank Wheat and Sorghum Respondent Booklets





## Extra Supplies – Supervisors

- Quality Control Forms (2 per enumerator)
- Practice Interviews
- Exercise Answers
- Quiz Answers
- Supervisor Breakout Expectations



# Travel and Training Time



- Code Monday to Wednesday hours, mileage, and M&IE to CEAP Project Code 912.
- Code Thursday hours, mileage, and M&IE to ARMS 2 Project Code 906.
- M & IE
  - Monday, September 16: \$44.25
  - Tuesday, September 17: \$59.00
  - Wednesday, September 18: \$59.00
  - Thursday, September 19: \$44.25

## Looking Ahead...



#### • 2024 Quarterly Zoom Meetings

- November 21
- Offered at 9:00 am and 7:00 pm (CT)
  - Plan for 90 minutes
- ARMS 2 Office Hours
  - Wednesday, October 16 @ 9:00 am (CT)
  - Wednesday, November 6 @ 9:00 am (CT)
    - Optional, bring your questions
- CEAP Office Hours
  - Wednesday, November 20 @ 9:00 am (CT)
  - Wednesday, January 8 @ 9:00 am (CT)
    - Optional, bring your questions

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#### Looking Ahead...



- ARMS 3 workshop:
  - TBD.
  - Will be in person.
  - We will send out information as soon as possible.
- NASDA will take the lead on planning during pilot area.



## ARMS 2 Reminders



- October 1 ARMS 2 Data Collection Begins
- October 15 1 record Submitted in CAPI
- October 30 25% submitted in CAPI
- November 13 50% submitted in CAPI
- November 27 75% submitted in CAPI
- December 6 Last Day to submit ARMS 2 in CAPI.
- Plan your contacts around local operator availability.
  - When will they be most busy with harvest? What crop are they selected for?
  - If October is too early in your area, should you set up an appointment for November or just save time now and set aside time to try them later?



#### **CEAP** Reminders



- November 1 CEAP Data Collection Begins
- November 29 25% mailed to St. Louis
- December 27 50% mailed to St. Louis
- January 24 75% mailed to St. Louis
- February 28 100% mailed to St. Louis



## **CEAP** Reminders



- Assignment listings, mailing supplies, and any other supplies will be mailed in October.
- Additional mailing instructions will be included with assignment listings.
- Questionnaires will be shipped to St. Louis.
- No PII on Phase 2 questionnaires.
- Mail early and often.
  - If you have 3 questionnaires, mail them!
  - If you don't think you'll have another one complete soon, mail what you have!
  - If you need more labels reach out to your NC.
- Do not destroy any CEAP material yet.



### CEAP Reminders – Phase 1



- CEAP Phase 1 due: Tuesday, September 24.
- Plan to finish THIS weekend.
- Each point should be completed on nrisurvey.org/ceap.
  - Only eligible points will be in CEAP Phase 2.
- Each poid should be completed on CAPI.
  - Enter any contact information changes & comments in CAPI.
  - NO PII in the NRI website.



#### CEAP Reminders – Phase 1



- CEAP Phase 1 due: Tuesday, September 24.
- Plan to finish THIS weekend.
- Phase 1 Progress (as of 9/13)
- ND: 57% entered on NRI
- SD: 54% entered on NRI
- NE: 41% entered on NRI
- KS: 44% entered on NRI



# Friendly Reminders



- Start Early!
  - ARMS 2 October 1
  - CEAP November 1
- Keep your supervisor updated with progress and issues.
- Review work before submitting data.
  - "Save for Review" until supervisor instructs you otherwise.
  - Work with your Supervisor on reviewing CEAP questionnaires.
- Don't forget to mail CEAP questionnaires in



# Friendly Reminders



- Enter your time daily in iSolved.
  - CEAP: Project Code 912.
  - ARMS 2: Project Code 906.
- Please take a moment to complete the workshop evaluation:
  - NPR NASDA Website -> 'ARMS 2' OR 'CEAP' -> CEAP Phase 2 / ARMS 2 Training Evaluation



#### Questions



- Call Your Supervisor
- Call Other Enumerators
- Call Your NASDA Coordinator

