

ARMS & Other NASS Datasets



Data Needs for Agri-Environmental Policy Modeling and Analysis Workshop
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Goal

To provide an overview of NASS surveys and Datasets that address conservation programs and practices.

Objectives

- Identify NASS data collection programs;
- Identify surveys collecting data on conservation programs and practices;
- Identify datasets produced from surveys.

Government Program Land

Land in Federal Conservation Programs are included in the farm definition

- Conservation Reserve Program (CRP)
- Wetlands Reserve Program (WRP)
- Farmable Wetlands Program (FWP)
- Conservation Reserve Enhancement Program (CREP)

NASS Data Collection Program

- Environmental & Economic Surveys
 - ARMS
 - Agricultural Labor
- Commodity Surveys
 - Crops/Stocks
 - Livestock
- Other
 - Reimbursable

ARMS

- Coverage

- 48 contiguous States

- **Population** – all establishments which sold or normally would sell \$1,000 of Agricultural products or receive government payments during the previous year

ARMS

- Methods

- Multiple Frame Survey

- ✓ List

- ✓ Area

- Samples selected to assure adequate coverage by State and Region

- ✓ Value of Sales

- ✓ Farm Type

ARMS

- Frequency

Conducted annually usually in three phases:

- Phase I – (May – July) collects general farm data; used to screen or qualify farms of follow-on phases.
- Phase II – (October - December) collects data on agricultural production practices, resource use, and variable cost of inputs for selected crops.
- Phase III – (February – April) collects whole farm finance (expenses and income), operator characteristics, and farm household information.

ARMS Structure

ARMS Phase II

- ✓ Field Characteristics
- ✓ Fertilizer and Nutrient Applications
- ✓ Pesticide Applications
- ✓ Pest Management Practices
- ✓ Field Operations
- ✓ Irrigation
- ✓ Drying
- ✓ Field Level Expenditures

ARMS Phase III

- ✓ Crop and Livestock Production
- ✓ Acreage Owned and Operated
- ✓ Farm and Off-farm Income
- ✓ Farm Expenses
- ✓ Value of Farm Assets and Debt
- ✓ Household Information
- ✓ Research Questions concerning “Management”

What are the Common Conservation Practices?

This question is addressed in the Phase II Field Characteristics Section:

- Terraces
- Grassed Waterways
- Filter Strips
- Strip Cropping
- Rotation

Phase II - Questionnaire Items

22. In 2007 did your land-use practices for this field include--	CODE
a. Structures for soil erosion control?..... YES = 1	1421
[If YES, ask -Enter Code "1" for all that apply.]	
(i) terraces..... YES = 1	1350
(ii) grade stabilization structures..... YES = 1	1359
(iii) critical planting acres..... YES = 1	1422
b. Structures for storm water runoff control/handling?..... YES = 1	1423
[If YES, ask -Enter Code "1" for all that apply.]	
(i) grassed water ways..... YES = 1	1360
(ii) structures for water control..... YES = 1	1424
c. Filter strips or other conservation buffers?..... YES = 1	1425
[If YES, ask -Enter Code "1" for all that apply.]	
(i) Filter strips..... YES = 1	1426
(ii) Field borders..... YES = 1	1427
(iii) Riparian buffers..... YES = 1	1428

Phase II - Questionnaire Items

CODE

Has the Natural Resource Conservation Service (NRCS) classified any part of this field as "Highly Erodible"? YES = 1

1388

Have you been notified by NRCS that this field contains any wetlands? YES = 1

1387

In 2007, did you receive technical assistance for planning, installing, maintaining, or using conservation practices or systems on this field?
(Include grassed waterways and filter strips or riparian buffers, or drainage area, on or adjoining this field. Include assistance from any source whether paid for or free.) YES = 1

1388

Phase II - Questionnaire Items

Is this field included in an existing conservation program contract for which you or the landlord have received (or expect to receive) cost sharing payments, stewardship payments, or incentive payments? [Be sure to consider grassed waterways and filter strips or riparian buffers, or drainage area, on or adjoining this field. Also, be sure to consider payments that are part of this contract but were made before or payments that are anticipated for future years.] YES = 1

CODE
1369

[If item 26 is YES, ask---, else go to item 26b.]

a. Have (or will) you receive cost sharing or incentive payments from---

- (i) Environmental Quality Incentives Program (EQIP)? YES = 1
- (ii) Conservation Security Program (CSP)? YES = 1
- (iii) Conservation Reserve Program (CRP)? YES = 1
- (iv) Other programs? (Specify: _____) YES = 1

CODE
1370
1371
1395
1396

b. Was this field included in an application that was rejected from an existing conservation program and if so, was it rejected from---

- (i) Environmental Quality Incentives Program (EQIP)? YES = 1
- (ii) Conservation Security Program (CSP)? YES = 1
- (iii) Conservation Reserve Program (CRP)? YES = 1
- (iv) Other programs? (Specify: _____) YES = 1

CODE
1397
1398
1399
1400



Phase II - Questionnaire Items

27. During 2007, did any written plan of the following types cover this field and if so, in what year was the plan implemented? <i>(A "written plan" is a plan prepared in accordance with Federal, State, or district standards.)</i>	CODE	YEAR IMPLEMENTED
a. Conservation plan specifying practices to reduce soil erosion? YES = 1	1372	1373 _____
b. Comprehensive nutrient management plan specifying practices for applying both fertilizer and manure? YES = 1	1374	1375 _____
c. Nutrient management plan specifying practices for land application of manure only? YES = 1	1376	1377 _____
d. Pest management plan specifying pesticide use and/or other practices controlling weeds, insects, or plant disease? YES = 1	1378	1379 _____
e. Irrigation water management plan specifying practices for applying or conserving irrigation water? YES = 1	1380	1381 _____

[If items 27a, b, c, d, or e = YES, ask--]

28. Have you ever paid any technical service provider or consultant to develop or write any of these plans for which you or the landowner were reimbursed by the Natural Resource Conservation Service? YES = 1

CODE

1382

a. [If YES, ask--]

What was the reimbursement amount for developing these plans for this field? *(Include landlord's/contractor's share. Exclude cost of construction or materials.)*

DOLLARS & CENTS
PER ACRE

1383

OR

TOTAL DOLLARS

1384

Phase III - Questionnaire Items

Of the Total Acres in this operation (), how many were---

- a. rented from family members?
- b. considered cropland? *(include land in government programs, and land planted to hay. Exclude wild hay and CRP acres planted to trees)*
- c. covered under a Federal crop insurance policy?
- d. enrolled in the Conservation Reserve Program (CRP), Conservation Reserve Enhancement Program (CREP) or Wetland Reserve Program (WRP)?.....

ACRES
0000
0000
0000
0000



Phase III - Questionnaire Items

SECTION E OTHER FARM INCOME

Conservation Reserve Program (CRP) payments? <i>(Exclude CREP payments.)</i> <i>(Verify CRP acres are reported in Section A, item 8.)</i>	0538
Conservation Reserve Enhancement Program (CREP) payments? <i>(Verify CREP acres are reported in Section A, item 8.)</i>	0479
Wetlands Reserve Program (WRP) payments? <i>(Verify WRP acres are reported in Section A, item 8.)</i>	0539
Environmental Quality Incentive Program (EQIP) payments?	0540
Conservation Security Payments (CSP)?	0568
Any other Federal agricultural program payments?	0541

Agricultural Labor Survey

2. **Since June 1, have you or will you** (name on label)--

a. **grow any crops or cut hay?**

[Include grains, rowcrops, oilseeds, fruits, nuts, vegetables (including strawberries and melon crops), nursery and greenhouse, Christmas trees, and other specialty crops.]

YES – [Go to **item 3.**] **NO** – [Continue]

b. **own or raise any livestock or poultry?**

[Include livestock and poultry owned, and any being raised under contract for someone else.]

YES – [Go to **item 3.**] **NO** – [Continue]

c. **sell any agricultural products?**

YES – [Go to **item 3.**] **NO** – [Continue]

d. **receive government agricultural payments?**

[Exclude government payments received as a landlord.]

YES – [Go to **item 3.**] **NO** – [Continue]

e. **have more than 19 acres of idle cropland or more than 99 acres of pastureland?**

YES – [Go to **item 3.**] **NO** – [Go to **page 3, item 6.**]

Agricultural Labor Survey

Of the farm or ranch income reported, which of these categories represents the largest portion of the gross income from the operation?

- 1 – **Grains, Oilseeds, Dry Beans, and Dry Peas** 1
(corn, flaxseed, grain silage and forage, grains and oilseeds, popcorn, rice, small grains, sorghum, soybeans, sunflowers, straw, etc.)
- 2 – **Tobacco** 2
- 3 – **Cotton and Cottonseed** 3
- 4 – **Vegetables, Melons, Potatoes and Sweet Potatoes** 4
(beets, cabbage, cantaloupes, pumpkins, sweet corn, tomatoes, watermelons, vegetable seeds, etc.)
- 5 – **Fruit, Tree Nuts and Berries** 5
(almonds, apples, blueberries, cherries, grapes, hazelnuts, kiwifruit, oranges, pears, pecans, strawberries, walnuts, etc.)
- 6 – **Nursery, Greenhouse, Floriculture and Sod** 6
(bedding plants, bulbs, cut flowers, flower seeds, foliage plants, mushrooms, nursery potted plants, shrubbery, sod, etc.)
- 7 – **Cut Christmas Trees and Short Rotation Woody Crops** 7
- 8 – **Other Crops and Hay, CRP and Pasture** 8
(grass seed, hay and grass silage, hops, maple syrup, mint, peanuts, sugarcane, sugarbeets, CRP, etc.)

Environmental & Economic Surveys

Datasets:

number of farms

land in farms

land values

cash rents

agricultural labor

- number of workers

- hours worked

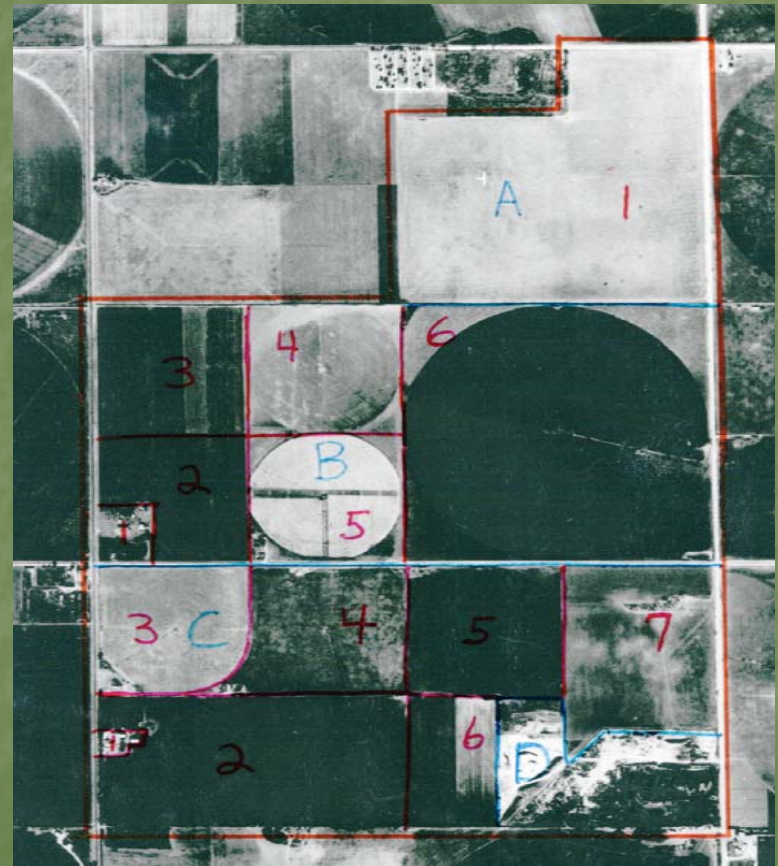
- wages paid

cash receipts

production expenditures

Commodity Surveys

- List Frame
 - Total Cropland
 - Areas of Specific Crops
 - Grain Storage Capacity
- Area Frame
 - Segments of land are surveyed to account for the incompleteness in list sample



Questionnaire Items

SECTION M – LAND VALUES

Tract Acres – Value Per Acre

Now I would like to ask about the market value of the land **inside the blue tract boundary**.
By "market value," I mean the value at which the land could be sold under current market conditions.

[Show photo and refer to fields recorded in Section D.]

- For the **(Section D) acres** reported within this **blue boundary**, I need your best estimate of the market value of these acres by type of land. This value should exclude the value of all dwellings and buildings.

[✓ if reported in Section D.]

- a. Cropland (Include fruit, nut, berry, vineyard and nursery land.).....I
- d. Permanent pasture, grazing or grassland?.....

Dollars per Acre
410
413

- What is the most likely use of this land if it were sold under current market conditions for the value reported above: [Enter code.]

- Agricultural Use Only..... [Enter Code 1.]
- Immediate Development (Residential or Commercial)..... [Enter Code 2.].....
- Expected Future Development (Residential or Commercial)..... [Enter Code 3.]
- Other (Specify:.....)..... [Enter Code 4.]

Code
438

Questionnaire Items

Entire Farm – Total Value of Land and Buildings

The following questions relate to the **total acres** that you **own or operate**. Include all land both inside and outside the blue tract boundary. Include all land, dwellings, barns and other buildings for the (*Section E*) **total acres operated** reported earlier.

	Total Value
3. What is your best estimate of the total market value of all the land and buildings owned ?	432
4. What is your best estimate of the total market value of all the land and buildings rented or leased from others ?	433
5. What is your best estimate of the total market value of all the land and buildings rented or leased to others ?	434
6. Which of the following best describes the change in the total market value of all the land and buildings in your operation since June 1, 2006?	
<input type="checkbox"/> Increase = 1 - [Enter Code 1 and Go to item a.]	
<input type="checkbox"/> Decrease = 2 - [Enter Code 2 and Go to item a.]	Code 518
<input type="checkbox"/> No Change = 3 - [Enter Code 3 and Go to Section N.]	
a. What percent change best describes the increase or decrease in the total market value of all the land and buildings in your operation since June 1, 2006?	Percent 519

Commodity Surveys

Datasets:

Crops/Stocks

grains
hay
oilseeds
cotton
tobacco
potatoes
sugar
other field crops
citrus fruit
non-citrus fruit
nuts
vegetables
floriculture

crop progress

acreage

- prospective plantings
- planted
- harvested

yield & production

- forecasts
- final
- by utilization

stocks

disposition

processing

prices received by farmers

Livestock

cattle
hogs
sheep
goats
equine
poultry
milk & dairy products
aquaculture
bees & honey
mink

inventory

- total
- by class
- births
- deaths
- predator losses

marketings

slaughter

production/disposition

- meat
- other products (milk, dairy products, wool, mohair, eggs, honey, etc.)

prices received by farmers

inventory/production values

Other Data Sources

- **Census of Agriculture (5 years)**
 - **Showcasing demographic and specialty agriculture data**

SECTION 4		CONSERVATION RESERVE PROGRAM AND CROP INSURANCE			
1.	How many acres in this operation were enrolled in the Conservation Reserve Program (CRP), Wetlands Reserve Program (WRP), Farmable Wetlands Program (FWP), or Conservation Reserve Enhancement Program (CREP), on September 30, 2007? 0683	None <input type="checkbox"/>	<table border="1" style="width: 100%;"> <tr><th style="background-color: #f0f0f0;">Number of Acres</th></tr> <tr><td style="height: 20px;"> </td></tr> </table>	Number of Acres	
Number of Acres					
	a. Amount received in 2007 for participation in these programs. 0685	<input type="checkbox"/>	<table border="1" style="width: 100%;"> <tr><th style="background-color: #f0f0f0;">Dollars</th></tr> <tr><td style="text-align: center;">\$.00</td></tr> </table>	Dollars	\$.00
Dollars					
\$.00					
2.	How many acres in this operation were covered under a crop insurance policy in 2007? 1067	<input type="checkbox"/>	<table border="1" style="width: 100%;"> <tr><th style="background-color: #f0f0f0;">Number of Acres</th></tr> <tr><td style="height: 20px;"> </td></tr> </table>	Number of Acres	
Number of Acres					

Other Data Sources

Census of Agriculture (*cont.*)

SECTION 24 FEDERAL AND STATE AGRICULTURAL PROGRAM PAYMENTS

1. Did this operation receive any Federal, State, or local agricultural program payments in 2007? Exclude CCC loan payments. Also exclude CRP, WRP, FWP, and CREP payments reported in SECTION 4.

1036 Yes - Complete this section 3 No - Go to SECTION 25 below

2. Amount received from -

	None	Dollars
a. Direct payments as defined under the 2002 Farm Bill. 1420	<input type="checkbox"/>	\$.00
b. Counter-cyclical payments, loan deficiency payments (LDPs), marketing loan gains, and net value of commodity certificates. Include payments received through cooperatives. 1421	<input type="checkbox"/>	\$.00
c. Other Federal agricultural program payments. Include disaster payments and market loss payments, national dairy market loss payments, non-insured assistance program, EQIP (Environmental Quality Incentives Program), CSP (Conservation Security Program), livestock programs, and any other Federal programs. Exclude any type of insurance payments received. 1422	<input type="checkbox"/>	\$.00
d. State and local government agricultural program payments. 1423	<input type="checkbox"/>	\$.00

NASS Contacts

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To provide timely, accurate, and useful statistics in service to U.S. Agriculture

