

Ag Census Data: Fallow & Idle Acres

September 17, 2020

2012-2017 Ag Census Comparison

Ag Census Crop Categories:

“Cropland in cultivated summer fallow”

“Cropland idle or used for cover crops or soil improvement but not harvested and not pastured or grazed”



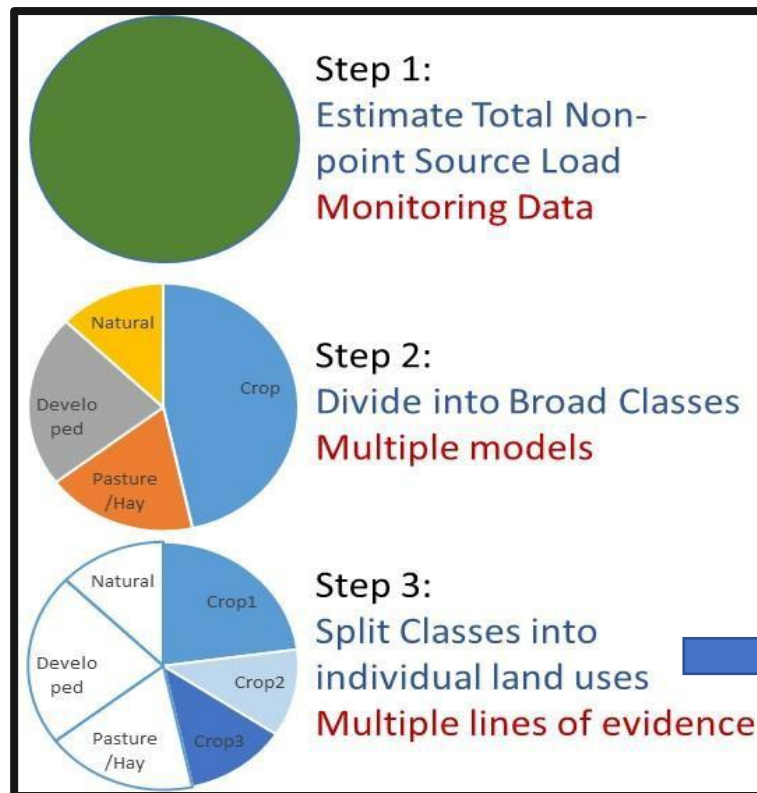
CBP Load Source:

“Other Agronomic Crops”

Includes summer fallow, idle cropland, sod, tobacco, cotton, sweet corn, peanuts and dry edible beans

Are reported increases reflective of on-the-ground change?

- If not, explore mechanisms by which model inputs for CAST 2021 might be adjusted to counter-act and propose options for Partnership consideration.



Adapted from CAST Documentation

Table 2-7: Total nitrogen land use acres, relative rates, and average loading rate

| Land class | Land Use | Acres | Loading Rate Ratio | <u>Average Loading Rate</u> (lbs/ac/yr) |
|------------|---|------------|--------------------|--|
| Cropland | Double Cropped Land | 165,396 | 0.79 | 30.87 |
| | Full Season Soybeans | 282,456 | 0.71 | 27.74 |
| | Grain with Manure | 389,811 | 1.4 | 54.7 |
| | Grain without Manure: Reference land use | 451,318 | 1.00 | 39.07 |
| | Other Agronomic Crops | 417,838 | 0.45 | 17.58 |
| | Small Grains and Grains | 291,677 | 0.84 | 32.82 |
| Natural | True Forest: Reference Land Use | 19,550,675 | 1.00 | 1.68 |
| Pasture | Ag Open Space | 140,316 | 0.43 | 5.07 |
| | Legume Hay | 728,148 | 0.74 | 8.72 |
| | Other Hay | 1,294,306 | 1.04 | 12.26 |
| | Pasture: Reference Land Use | 2,372,549 | 1.00 | 11.78 |

CRITICAL CONCEPT

Land use loading rates are:

- sensitive to changes in atmospheric deposition, fertilizer, manure, uptake, fixation & vegetative cover
- Influenced by composite crop types on a per county basis

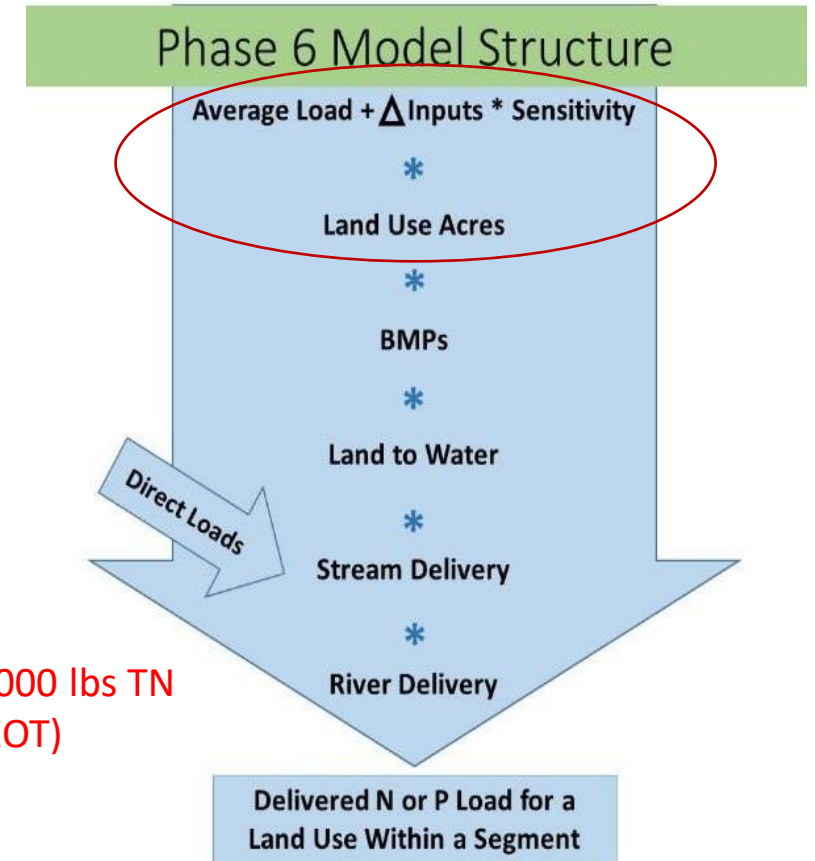
Table 3-32: Uptake or removal per application goal unit

| Crop | Nitrogen uptake per yield unit | Phosphorus uptake per yield unit | Application Yield Unit | Estimated from (U)ptake or (R)emoval |
|---|--------------------------------|----------------------------------|------------------------|--------------------------------------|
| Corn for Grain Harvested Area | 1.1894 | 0.2271 | bushels | R |
| Corn for silage or greenchop Harvested Area | 11.6252 | 3.3966 | tons | U |
| Cropland idle or used for cover crops or soil improvement but not harvested and not pastured or grazed Area | 0 | 0 | acres | R |
| Cropland in cultivated summer fallow Area | 0 | 0 | acres | R |
| Pastureland and rangeland other than cropland and woodland pastured Area | 140.5805 | 22.2666 | acres | R |
| Soybeans for beans Harvested Area | 5.3128 | 0.5442 | bushels | R |
| Wheat for Grain Harvested Area | 1.9299 | 0.3359 | bushels | U |

Crop removal
amount of nutrient removed through harvest

Crop uptake
includes nutrients in the non-harvested portions of the plant (stalks & roots)

| <u>Cropland in cultivated summer fallow</u> | | | | |
|---|------------------|------------------|---------------|-----------------|
| | <u>2012 Area</u> | <u>2017 Area</u> | <u>Change</u> | <u>% Change</u> |
| DE | 575 | 788 | 213 | 37 |
| MD | 5693 | 9432 | 3739 | 66 |
| NY | 24388 | 39419 | 15031 | 62 |
| PA | 29664 | 50571 | 20907 | 70 |
| VA | 11543 | 15878 | 4335 | 38 |
| WV | 431 | 4124 | 3693 | 857 |
| Total | 72294 | 120212 | 47918 | 66 |
| <u>Cropland idle of used for cover crops or soil improvement but not harvested and not pastured or grazed</u> | | | | |
| | <u>2012 Area</u> | <u>2017 Area</u> | <u>Change</u> | <u>% Change</u> |
| DE | 9219 | 8556 | -663 | -7 |
| MD | 85703 | 97210 | 11507 | 13 |
| NY | 115147 | 138155 | 23008 | 20 |
| PA | 298783 | 297370 | -1413 | 0 |
| VA | 73030 | 116541 | 43511 | 60 |
| WV | 9778 | 25172 | 15394 | 157 |
| Total | 591660 | 683004 | 91344 | 15 |



EOT= (Edge of Tide)

NASS Response: Aug 28

2017

c. Cropland in summer fallow (cultivated cropland on which no crops or hay were harvested during the 2017 growing season). 0791

☐

2012

c. Cropland in cultivated summer fallow 0791

☐

Summer Fallow

- ↑20% nationwide
 - 44 states reported increase
 - % of tot. ag land increased: 1.5% → 1.9%
- WV
 - % of tot. ag land increased: 0.0003% → 0.0052%

Review of all WV Land Uses (incl. cropland idle)

- Changes in-line with historical data
- No questionnaire changes
- WV ag land ↑2% from 2012
- Large ↑ for cropland idle & cropland failed
- Large ↓ for woodland pastures & permanent pasture
- No methodology changes since 2012

