Projected Changes in Agricultural Production from 2016 through 2025

Water Quality GIT 11/27/2017

Matt Johnston
University of Maryland – CBPO

All data presented are available on http://cast.chesapeakebay.net.

Projection Methodology for Crop Groups and Animals

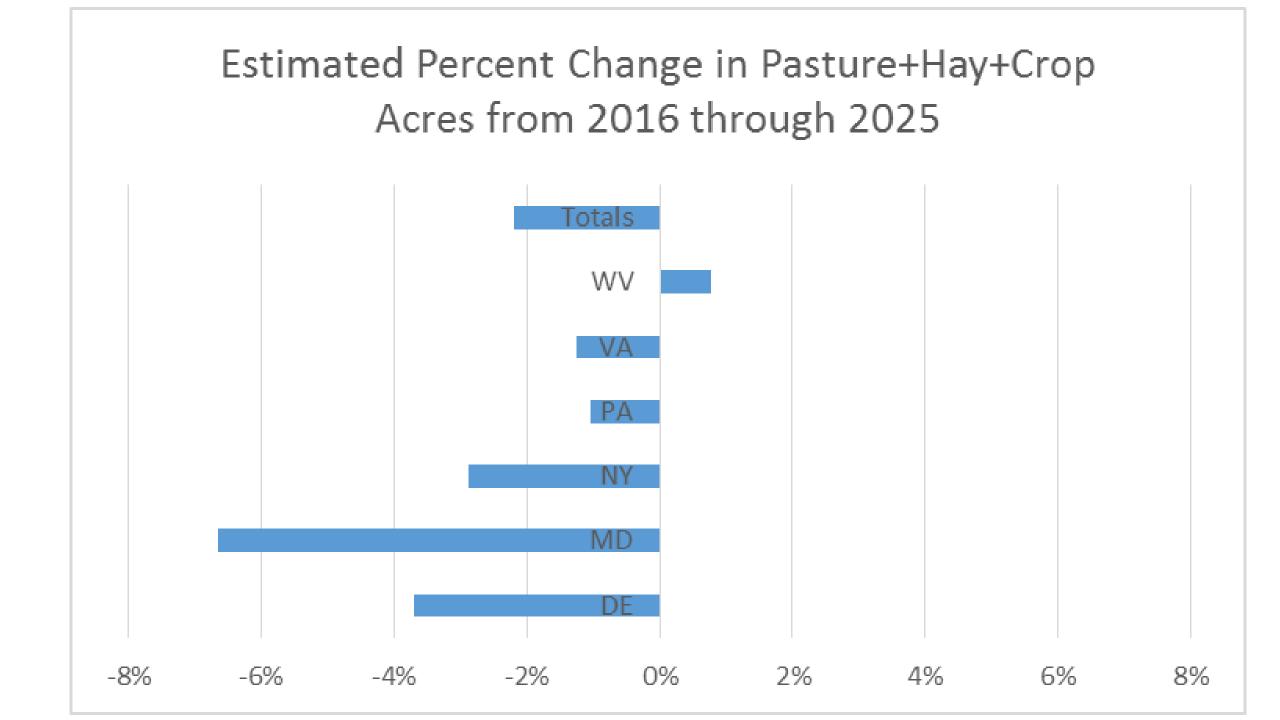
- Estimate the future based upon:
 - The most recent two-period trend in population (e.g., 2007 and 2012) and
 - A historic trend in population over all periods (e.g., 1982, 1987, 1992...)
- Trends are weighted and combined to produce projected future values.
 - Trends are weighted based upon their ability to predict 2012 values per STAC recommendation. (e.g., 0.8 for short-term and 0.2 for long-term best predicted 2012 value)

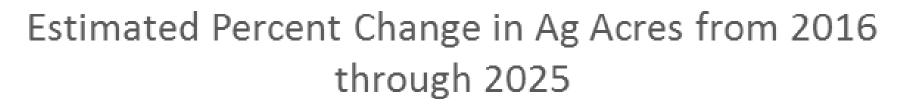
Land Use Data Sources

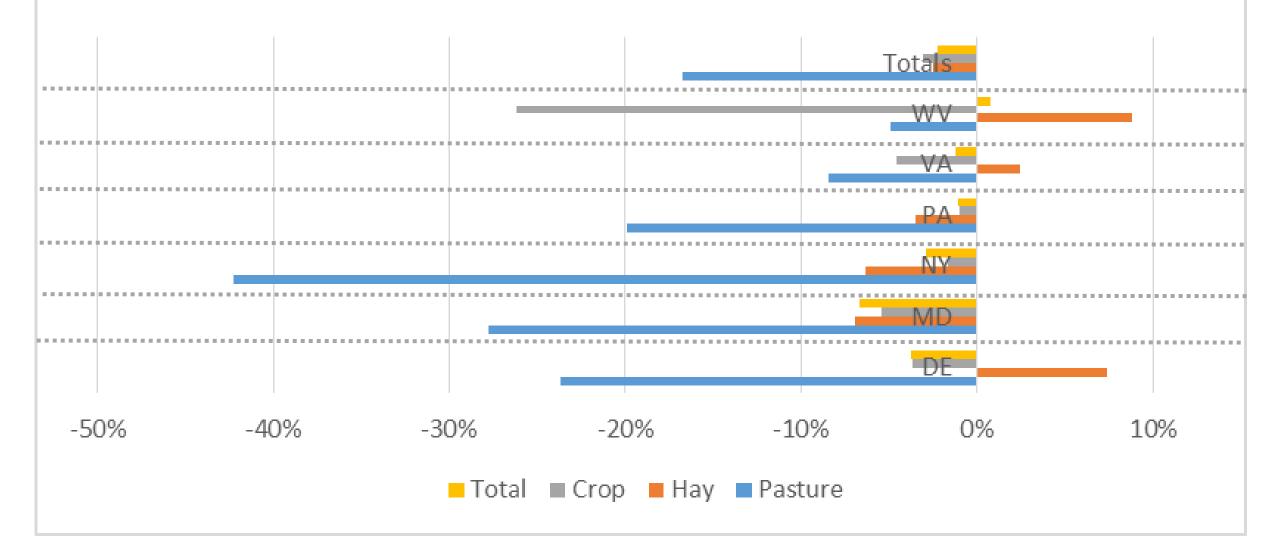
- Census of Agriculture provides all crop, hay and pasture acreage data.
- Acreage data are combined with USGS land use projections rather than used directly.
- Land uses will be updated in 2019 for use in 2021 Milestones.
 Hopefully, the 2017 Census of Agriculture will be available at that time.

Overall Trends

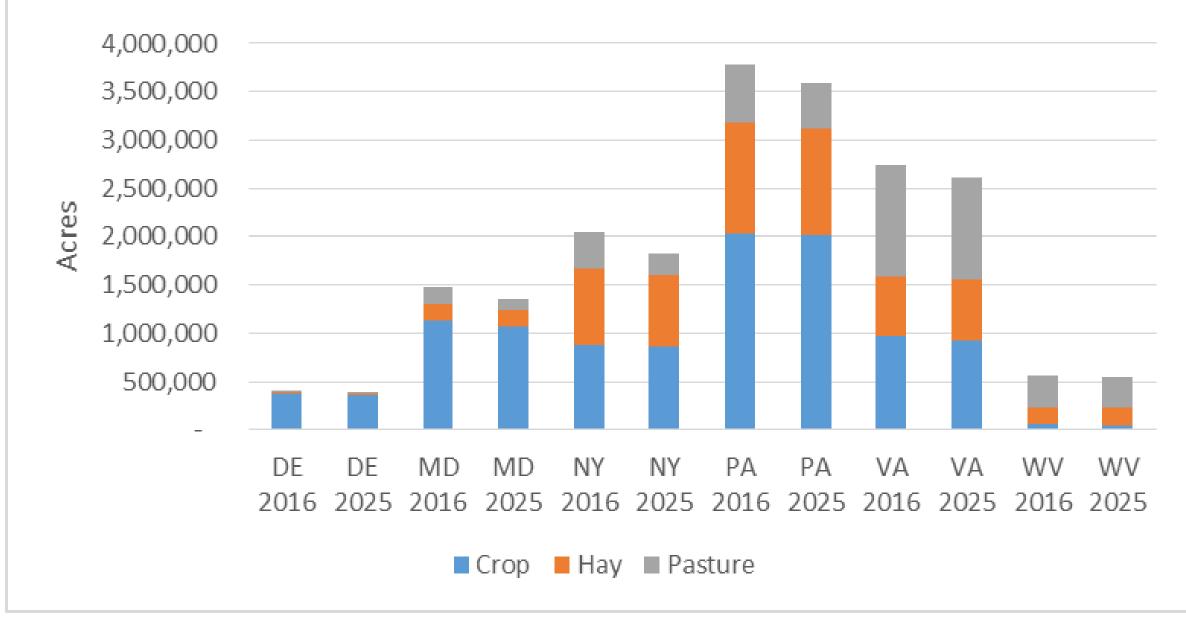
- Overall decrease in ag acres across the watershed and most states
- Significant decrease in pasture across all states
- Decreases in crops across all states











Animal Population Data Sources

Data Sources:

- Annual NASS Data Available each April; updates to be made every two years to match Milestones schedule with the next update in 2019 for the 2021 Milestones
 - Used for turkeys and broilers
- USDA Census of Agriculture Available every five years; updates to be made with the next release, hopefully in 2019, and in time for the 2021 Milestones
 - Used for cattle, swine and all other livestock aside from horses.
 - Census of Agriculture does not capture all horses, so Phase 5 data were used.
- States Agriculture Workgroup is discussing updating 2021 Milestones with state-derived data, but no methods or recommendations have been made to date.

Overall Trends

- Overall increase in animal units out to 2025 across the watershed
- Increases in poultry everywhere
- Decreases in cattle and other livestock almost everywhere
- Decreases in swine for many states

