



United States Department of Agriculture

Pennsylvania
Natural Resources Conservation Service

PA NRCS Priorities

February 25, 2016

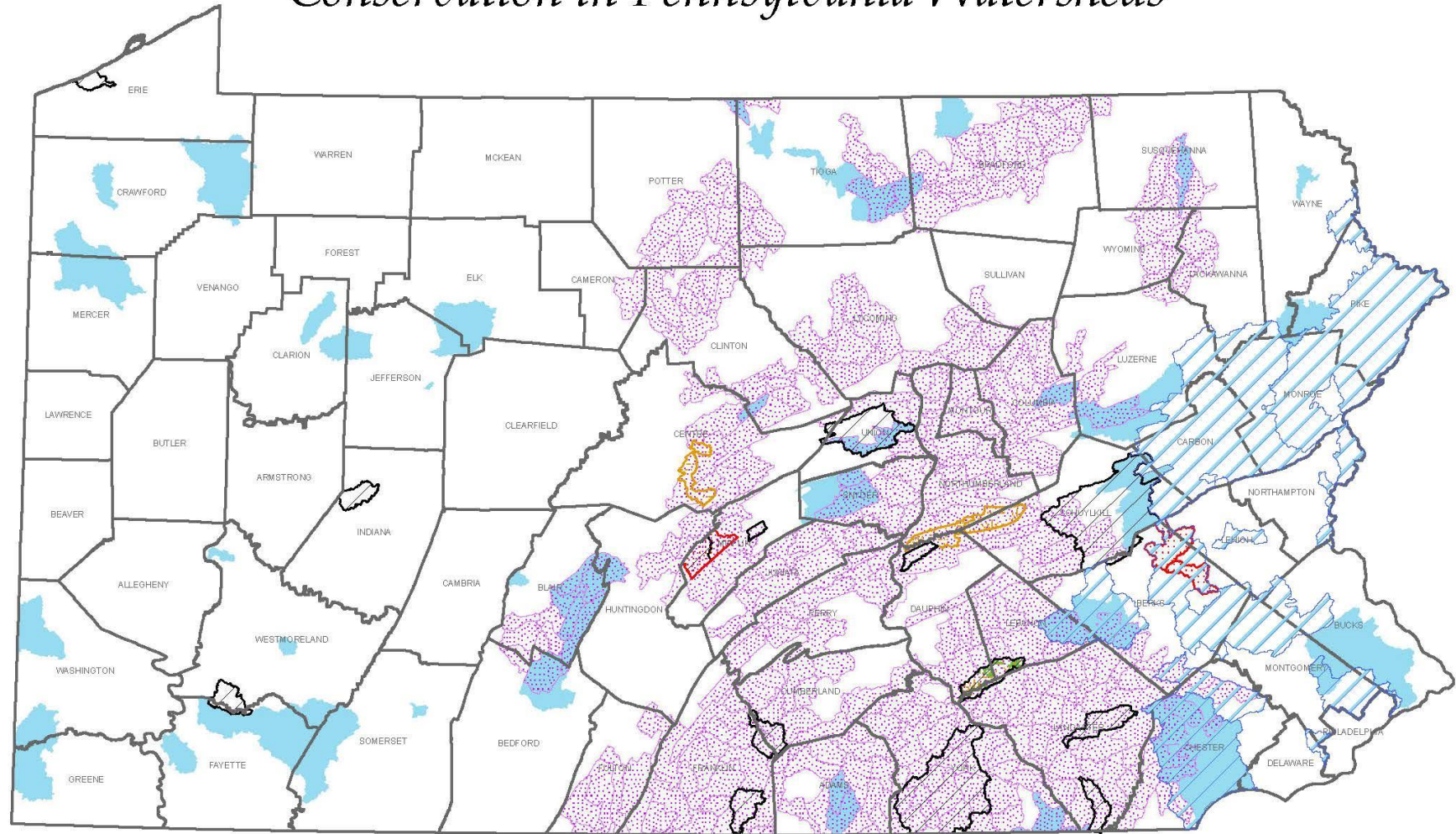
Presentation to
DEP Agricultural Advisory Board



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NRCS gathers information and identifies watersheds and other geographical areas that agencies and organizations, including NRCS, are prioritizing for natural resources improvements.

Conservation in Pennsylvania Watersheds



-  William Penn Watersheds
-  National Water Quality Initiative Watersheds
-  319 Ag Watersheds
-  ARS Watersheds
-  Showcase Watershed - Conewago
-  NFWF Watersheds
-  PL566 Watersheds
-  County Boundary

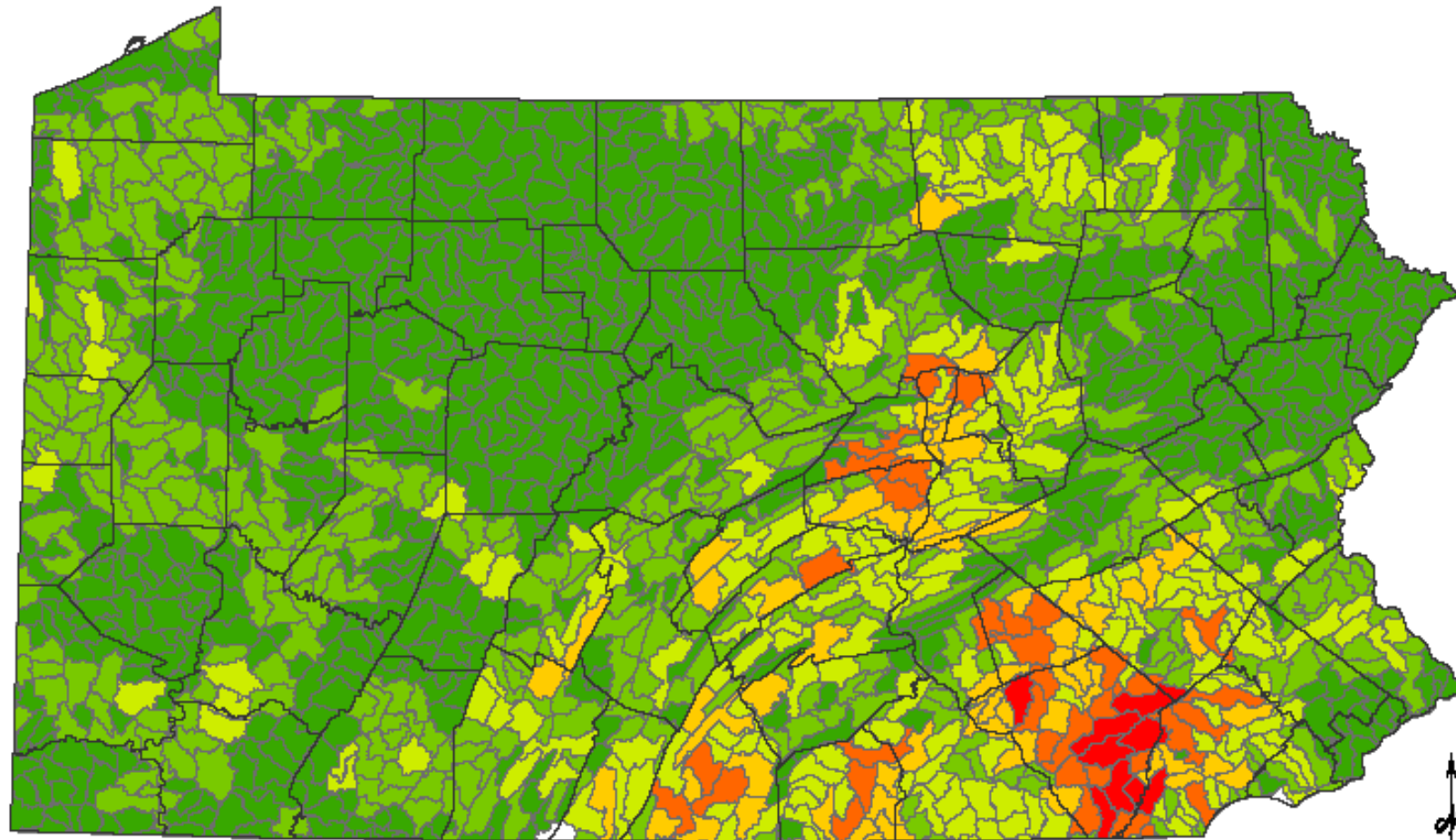




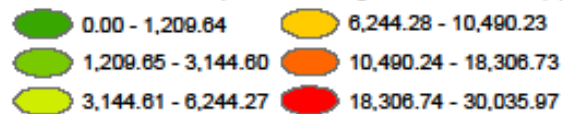
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NRCS reviews maps and other hydrological and geographical information including USGS SPARROW Model results and water impaired by nonpoint source pollution (Section 319 Watersheds).

Local Yields of Total Phosphorus from Agricultural Sources

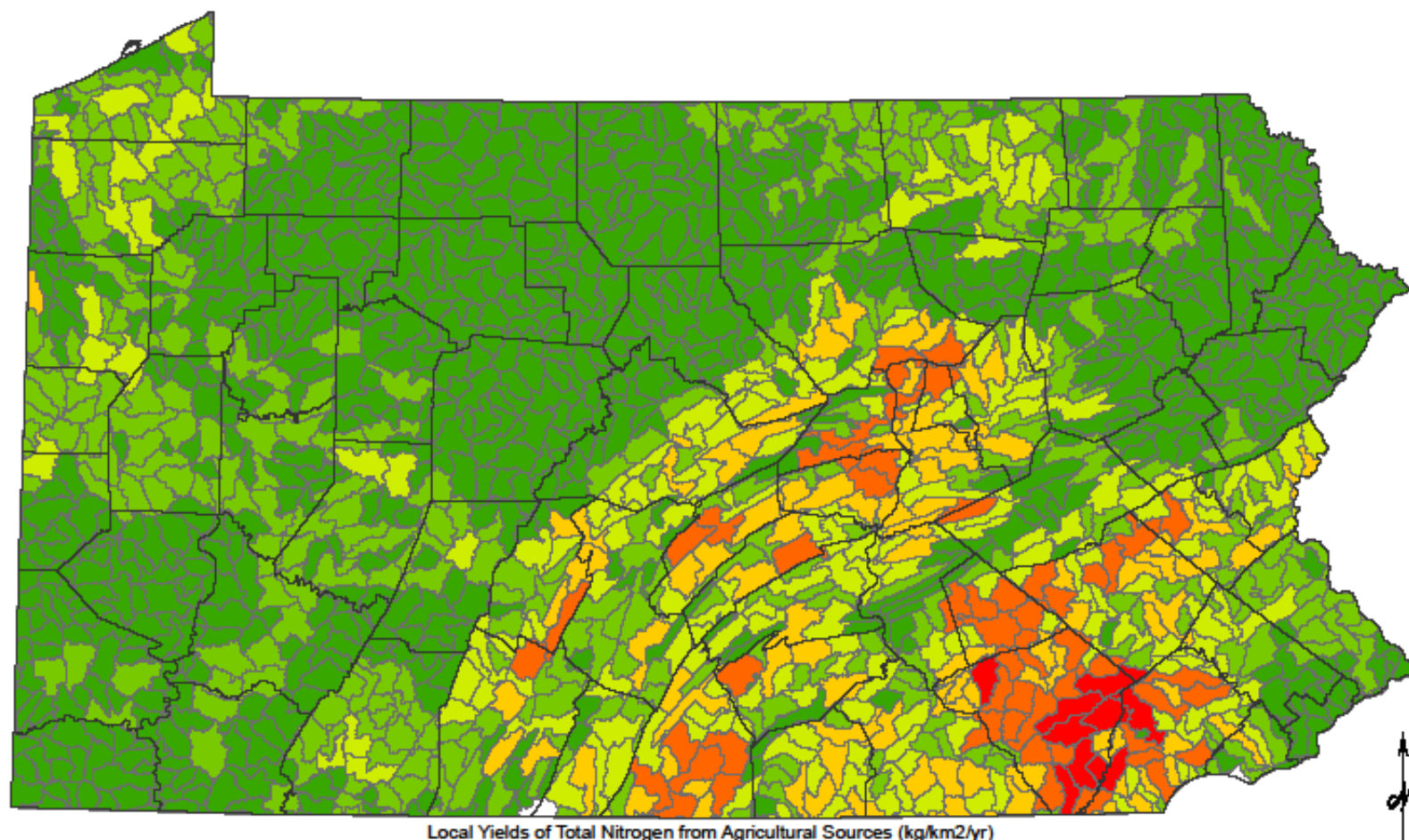


Local Yields of Total Phosphorus from Agricultural Sources (kg/km²/yr)

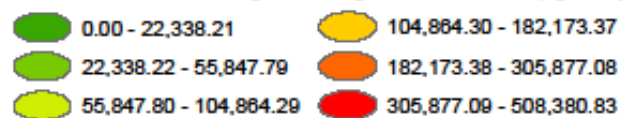


Source: U.S. Geological Survey, 2012. SPARROW
Model Yield Estimates of Nitrogen and Phosphorus
from Agricultural Lands Assigned to the National
Watershed Boundary 12 Digit Hydrologic Units.

Local Yields of Total Nitrogen from Agricultural Sources



Local Yields of Total Nitrogen from Agricultural Sources (kg/km²/yr)



Source: U.S. Geological Survey, 2012. SPARROW Model Yield Estimates of Nitrogen and Phosphorus from Agricultural Lands Assigned to the National Watershed Boundary 12 Digit Hydrologic Units.



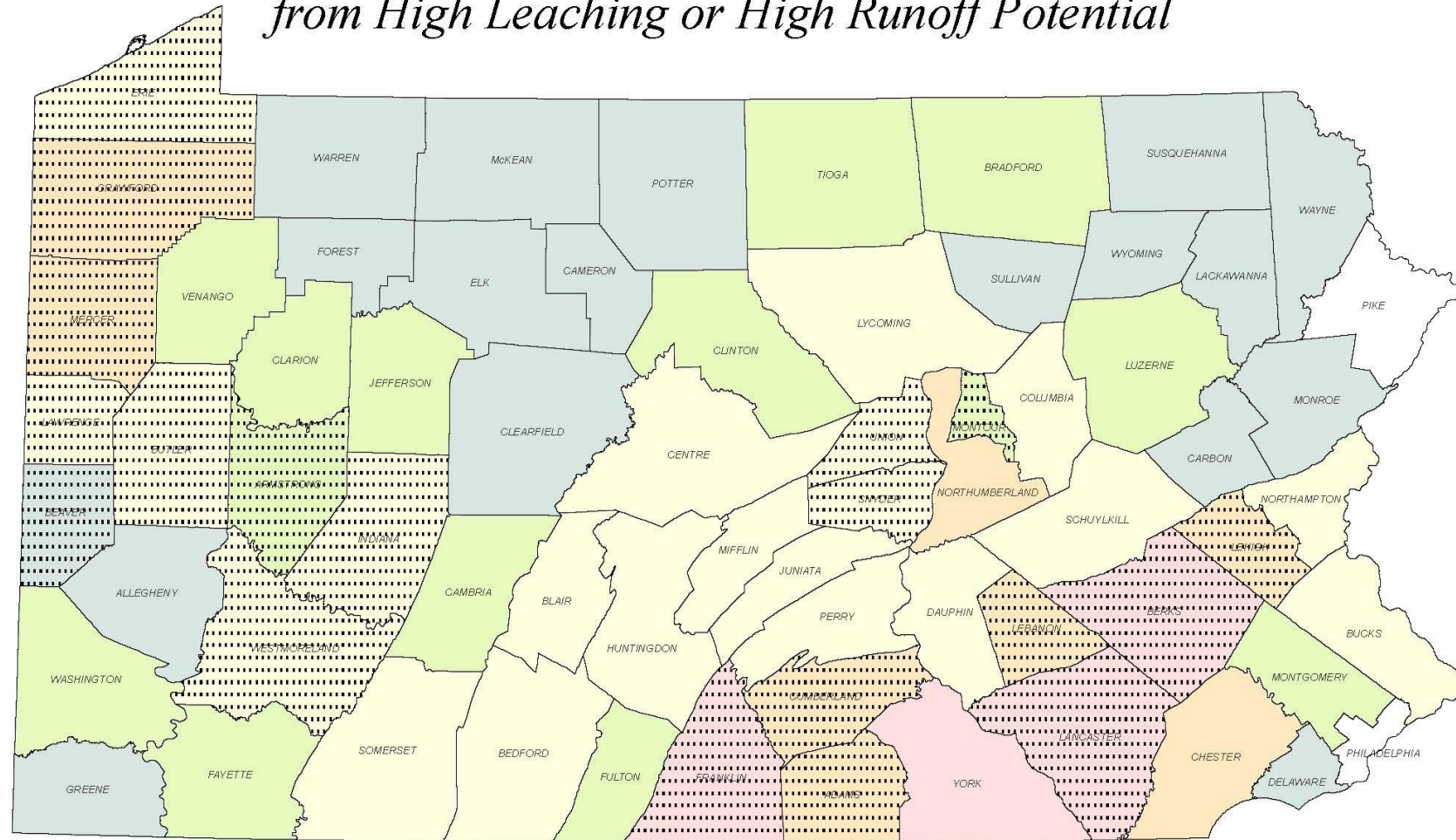
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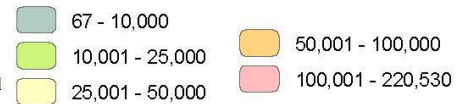
NRCS also reviews NASS Census of Agriculture Data which may be combined with data from other sources. Some examples include:

- Cropland with Soil at Risk of Nutrient Loss from High Leaching or High Runoff;
- Grazing Animal Units and Watersheds with an Agriculturally Impaired Stream; and
- Animal Units by County.

Cropland with Soil at Risk of Nutrient Loss from High Leaching or High Runoff Potential



Total acres of corn grain, soybeans, corn silage, oats, wheat, and barley

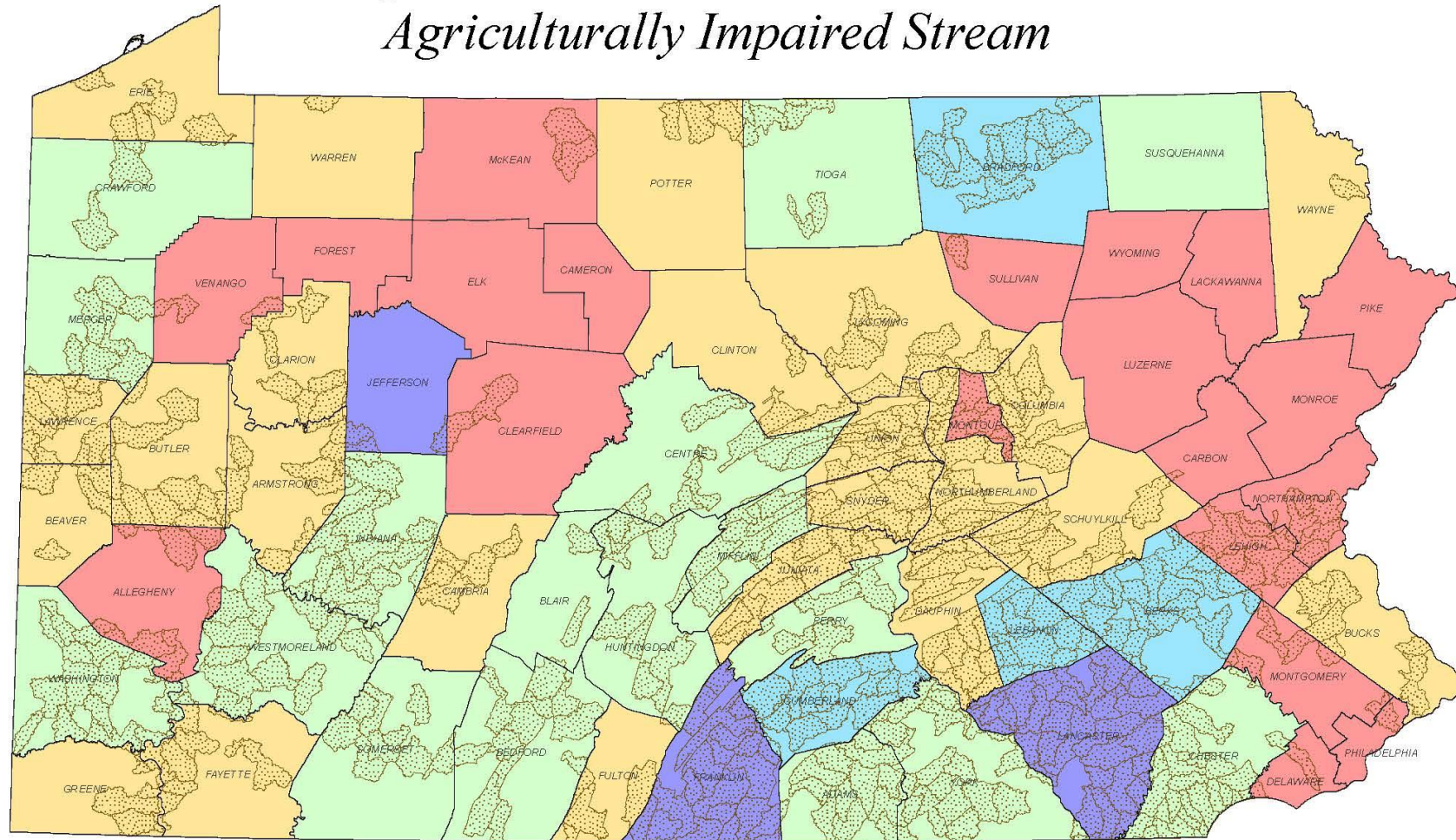


Strategy IIIA2: Convert Vulnerable Cropland to Livestock Grazing Systems

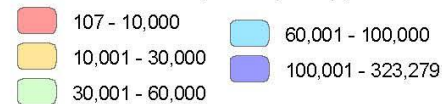
Counties that have greater than 25% of cropland on soils with high leaching soils or soils with a high runoff potential

Source: NASS 2007 Census of Agriculture - acres harvested of corn grain, soybeans, corn silage, oats, wheat, and barley, NRCS SSURGO Soil Survey

Grazing Animal Units and Watersheds with an Agriculturally Impaired Stream



Animal Units of Cattle, Horses, Sheep, Goats



Source: NASS, 2007 Census of Agriculture - total number of cattle, pigs, chickens, turkeys, horses, sheep, and goats converted to animal units, DEP Non-Attaining Streams due to agricultural sources, Watershed Boundary Dataset

Strategy IA2: Reduce the Number of Areas where Livestock have Unrestricted Access to Streams

Animal Units

Animal Units by County

Color	Range
Lightest Yellow	107 - 10,000
Light Yellow	10,001 - 30,000
Orange	30,001 - 60,000
Dark Orange	60,001 - 100,000
Darkest Brown	100,001 - 433,568

Source: NASS 2007 Census of Agriculture - total number of cattle, pigs, chickens, turkeys, horses, sheep, and goats converted to animal units

Strategy IA1: Increase the Number of CNMPs Written and Applied
The strategy includes Mushroom Compost Management Plans in Chester and elsewhere mushroom farms are found.



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High Priority Watersheds:

- USGS SPARROW model data of watersheds that have a high local yield of nitrogen and phosphorus from agricultural sources;
- Watersheds that have more than 10,000 acres of high leaching and high runoff soils (SSURGO Soils); and
- Agriculturally impaired 319 watershed that were surrounded by other high priority watersheds.



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Medium Priority Watersheds:

- USGS SPARROW model data of watersheds that have a high local yield of nitrogen and phosphorus from an agricultural source.
- Areas that have a nitrate violation from PA DEP that were surrounding high or medium watershed if it was not already high or medium priority.

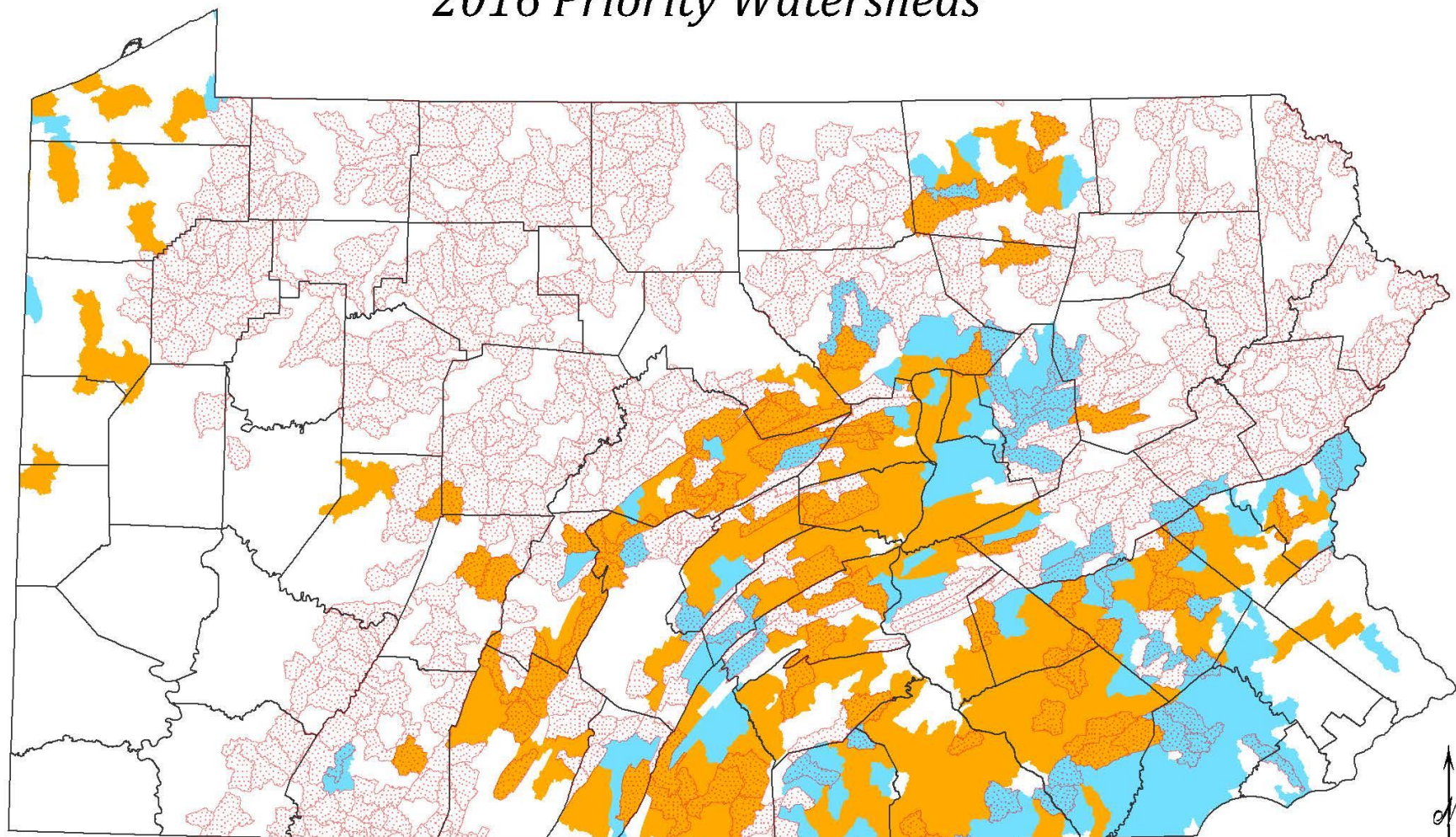


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Brook Trout Greatly Reduced HUC12 Watersheds:

- Watersheds identified by the Eastern Brook Trout Venture where brook trout were greatly reduced.

2016 Priority Watersheds



- High Priority Watershed
- Medium Priority Watersheds
- Brook Trout Greatly Reduced
- County Boundary

Current Programs

Agricultural Conservation Easement Program ACEP

Wetland Reserve Easement WRE

Agricultural Management Assistance AMA

Conservation Stewardship Program CSP

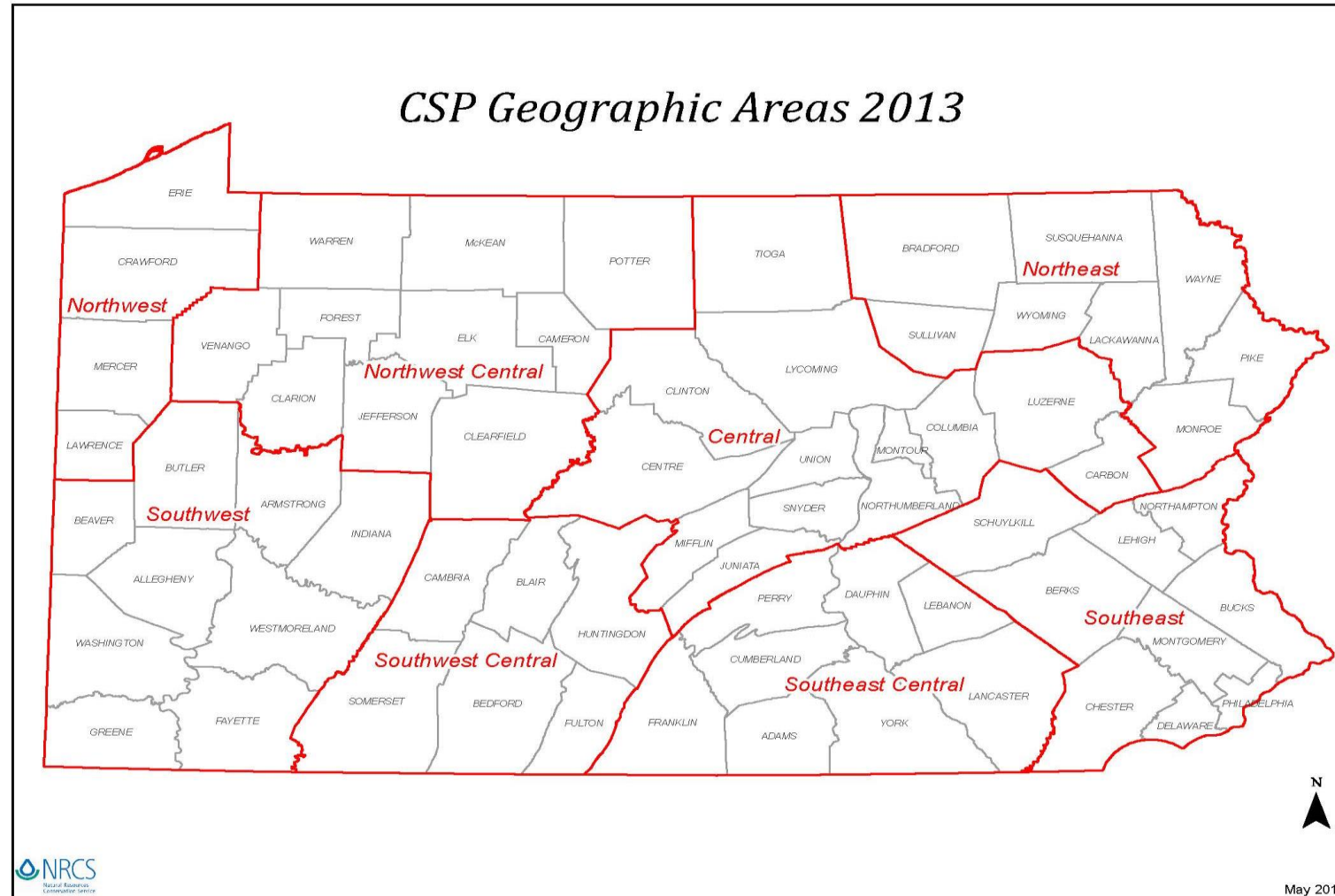
Environmental Quality Incentives Program EQIP

Healthy Forest Reserve Program HFRP

Regional Conservation Partnership Program RCPP

- Primarily EQIP funding
- Some Wetland Reserve Easement WRE funding in NFWF-Delaware project

CSP Geographic Areas



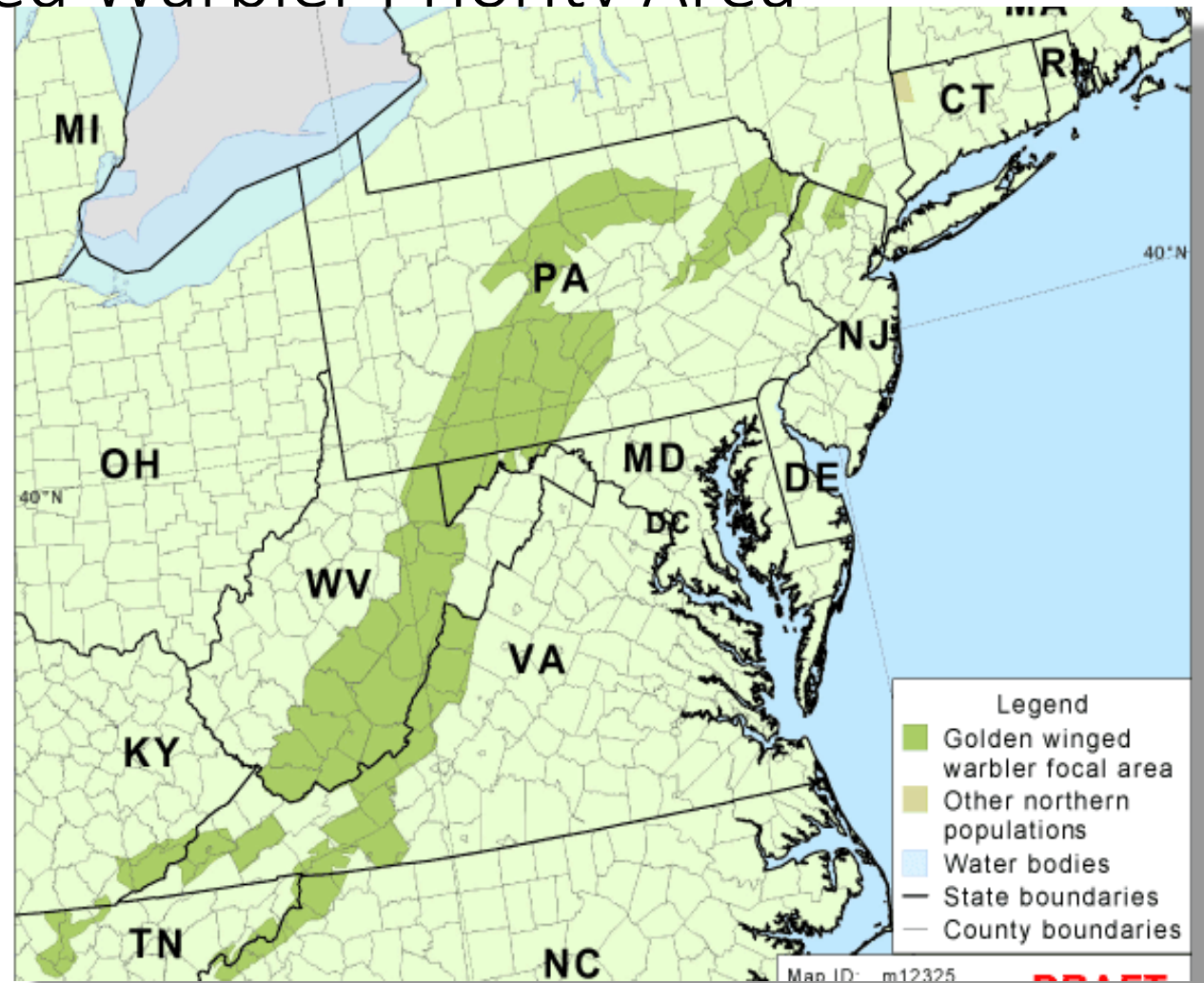
Environmental Quality Incentives Program (EQIP)

- 2014 Farm Bill
- 60% for livestock related practices
- 5% for Beginning Farmers
- 5% for Socially Disadvantaged Farmers
- 5% for wildlife habitat practices
- \$25 million for Air Quality

Targeting with Ranking Questions

8. Is the majority of the offered acreage located in the 12-Digit HUC that Pennsylvania NRCS has identified as a FY 2016 Targeted Priority Watershed? [Use GIS layer (High/Medium Priority watershed) located in F:\geodata\project_data\nrcs\Priority_Resource_Concerns_FY2016.gdb]?	Yes <input type="radio"/> or No <input type="radio"/>
9. Is the applicant applying one or more of the following practices (327, 329, 330, 340, 362, 386, 390, 391, 393, 412, 512, 528, 585, 590, 600) in a land unit that contains poorly, somewhat poorly drained soils [Use GIS layer poor_somewhat_poor_drained_soils) located in F:\geodata\project_data\nrcs\Priority_Resource_Concerns_FY2016.gdb] to reduce surface runoff from these areas?	Yes <input type="radio"/> or No <input type="radio"/>
10. Is the applicant applying one or more of the following practices (327, 340, 386, 390, 391, 393, 512, 528, 561, 590, 595, 635) in a land unit that contains high leaching potential soils [Use GIS layer high_leaching located in F:\geodata\project_data\nrcs\Priority_Resource_Concerns_FY2016.gdb] to reduce nutrient or pesticide movement?	Yes <input type="radio"/> or No <input type="radio"/>
11. Is the majority of the offered acreage located in the 12-Digit HUC that Pennsylvania NRCS has identified as a FY 2016 "Brook Trout - Greatly Reduced" Targeted Priority Watershed? [Use GIS layer (Brook Trout Reduced Watersheds) located in F:\geodata\project_data\nrcs\Priority_Resource_Concerns_FY2016.gdb]?	Yes <input type="radio"/> or No <input type="radio"/>

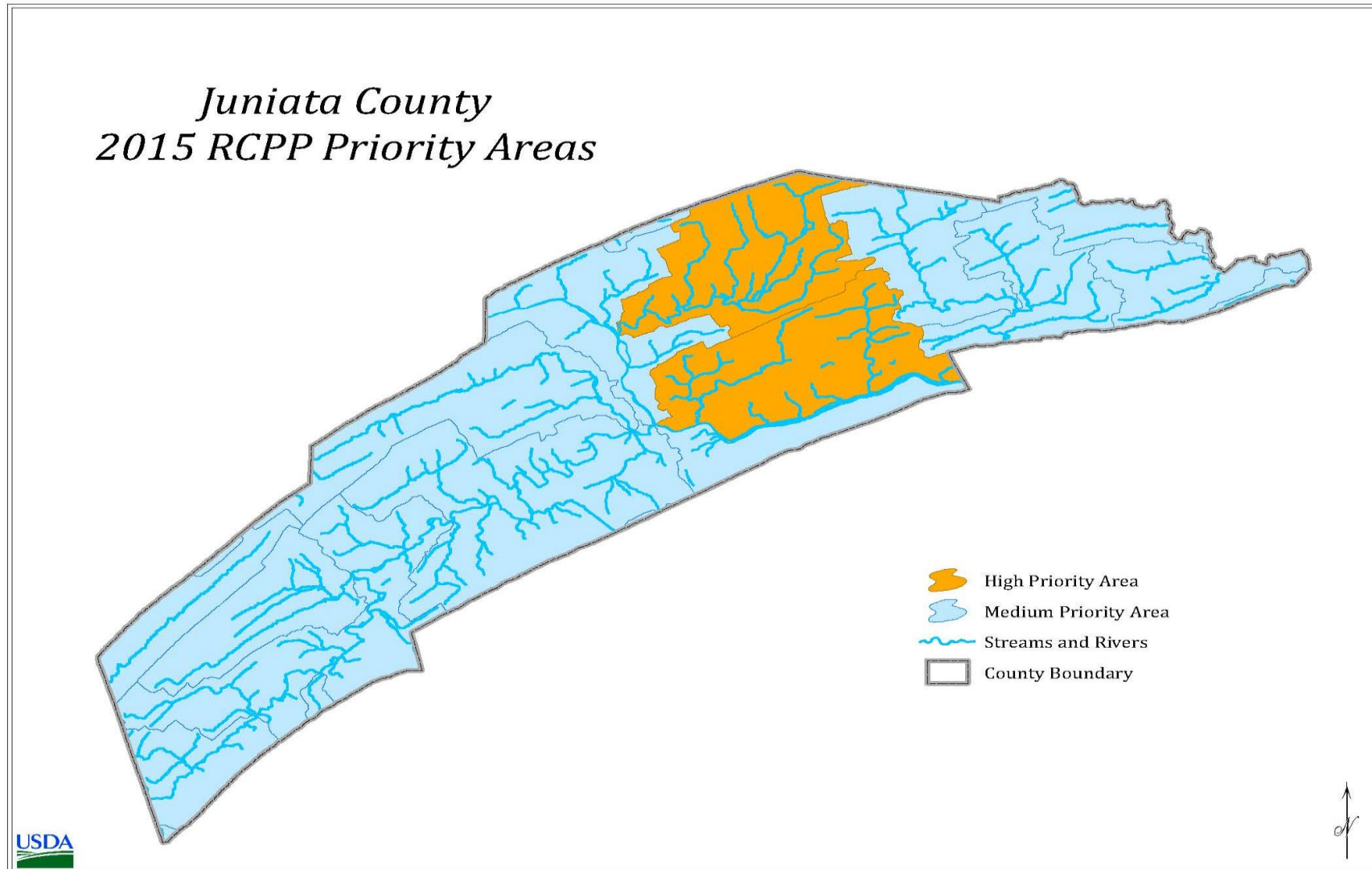
Golden-Winged Warbler Priority Area



Regional Conservation Partnership Program

- Allows non federal partners to propose areas and resource concerns for targeting
- PA has 5 projects approved in 2015

NFWF Chesapeake Project (example county)



ABC Cerulean Warbler Project

