

Working with Farmers to Improve Water Quality

Jeb Musser

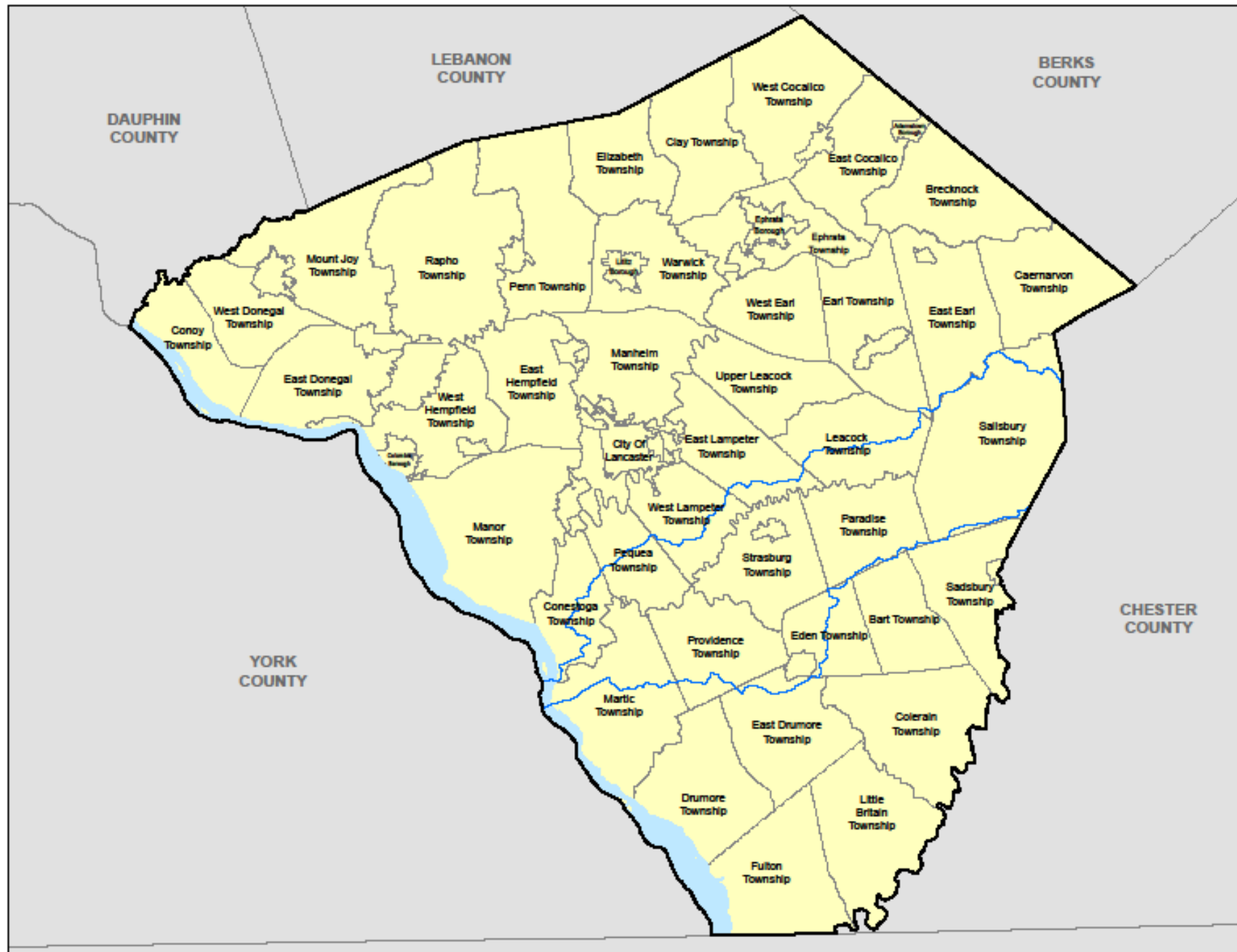
Gordon Hoover

Chris Sigmund

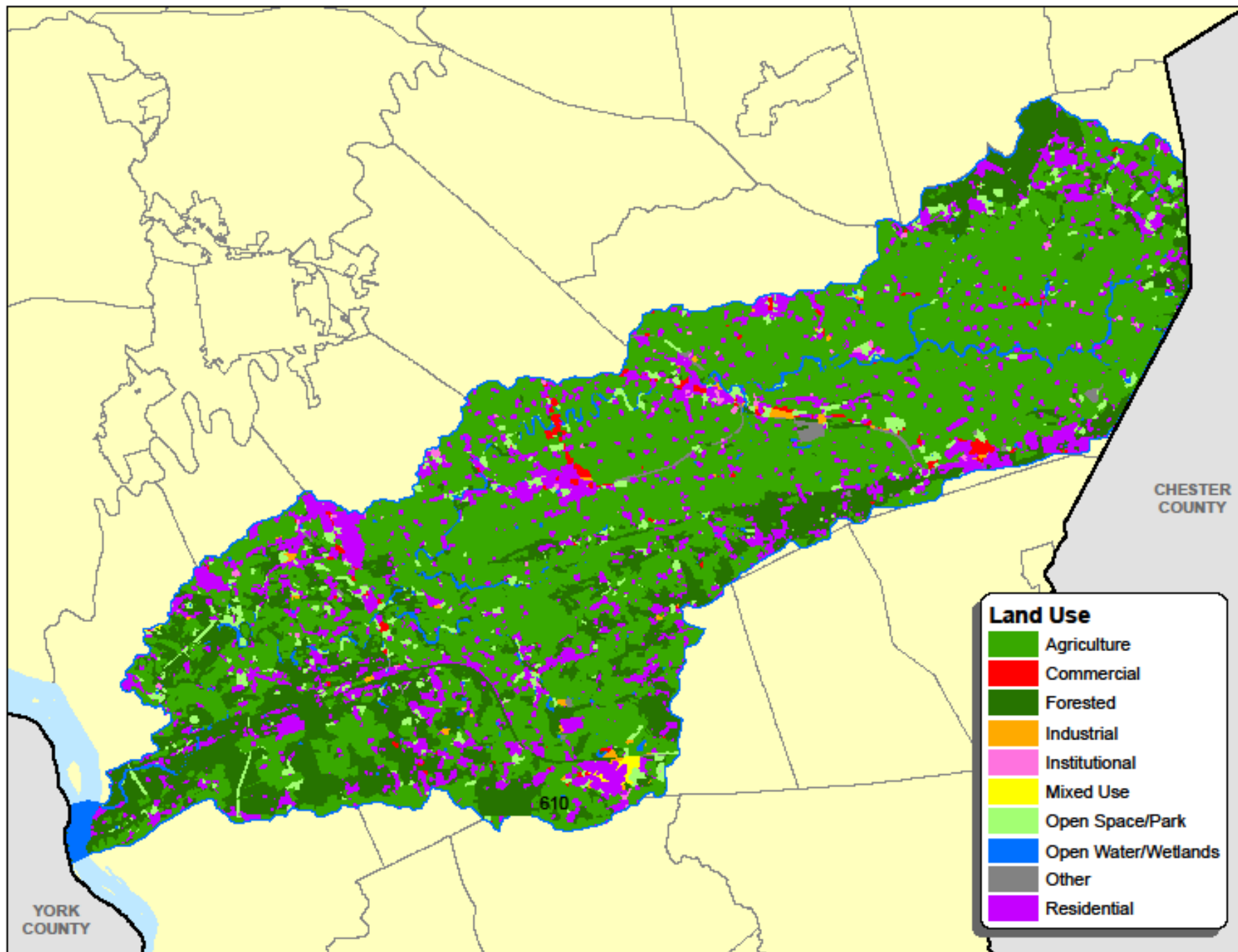
Allyson Gibson

Chris Thompson









Blank Farm

- ▶ 75 acres
- ▶ Dairy Operation with support crops & tobacco
- ▶ Pre-project: inadequate manure storage, heavily degraded animal use areas & walkways, some erosion in cropland
- ▶ BMPs Implemented
 - ▶ Increased manure storage capacity
 - ▶ Improved roof structure & manure transfer system for handling manure
 - ▶ Improved animal walkways with geotextile & stone
 - ▶ New concrete & curbing in barnyard
 - ▶ New guttering & stormwater controls
 - ▶ Grassed waterway in crop field









Blank Farm

- ▶ Pollution Reductions over 6 years
 - ▶ Nitrogen - 15,336 lbs
 - ▶ Phosphorus - 5,850 lbs
 - ▶ Sediment - 14,520 lbs



Glick Farm

- ▶ 61 acres
- ▶ Dairy Operation with support crops & tobacco
- ▶ Pre-project: inadequate manure storage (30 days capacity), heavily degraded animal trail, degraded barnyard & animal heavy-use areas
- ▶ BMPs Implemented
 - ▶ Increased manure storage capacity in existing pit & constructed new satellite manure storage
 - ▶ Concreted and curbed barnyard with manure storage underneath
 - ▶ Improved animal access lanes
 - ▶ Concreted & curbed animal heavy-use areas
 - ▶ Roof gutters/stormwater controls









Circular Manure
Storage Pit

Concrete &
Curbing



Glick Farm

► Pollution Reductions over 6 years

- Nitrogen - 14,472 lbs
- Phosphorus - 3,828 lbs
- Sediment - 25,800 lbs



Other Pequea Projects



Roofed Manure Stacking Area



Other Projects



Livestock Stream Crossing



Livestock Exclusion Fencing & Buffer Planting

Results from Pequea Creek Project

- ▶ Assisted 6 farmers with BMP Implementation
- ▶ Implemented 67 BMPs including stream buffer, no-till, concrete barnyard & heavy use area, manure storage unit, gutters & downspouts, stabilized cattle crossings, grassed waterways, terraces, and more.
- ▶ Annual reductions of 11,349 lbs. N, 5,536 lbs. P, & 121,080 lbs. S
- ▶ Price tag
 - ▶ \$383,744 - NFWF
 - ▶ \$502,592 - Match Dollars
 - ▶ \$886,336 - Total Project Budget
 - ▶ Vast Majority for design, engineering, & construction of BMPs

Other Projects – “Preserve & Conserve”

- Pairing farmland preservation with implementation of ag BMPs



Other Projects – “Preserve & Conserve”



Rectangular manure storage under heifer barn



Questions?

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