Precision Ag and the Chesapeake Watershed

Keith Harris, Harris Farms
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Keith’s Background - The Chesapeake Bay Water Act

- Graduated 1989 –
  - Virginia Tech – Plant Agriculture

- First Job – District Conservation Specialist

- Second Job – Chesapeake Bay Specialist
  - Specialized in non-point source pollution in ag

- 1988 - The Chesapeake Bay Water Act was enacted

- Currently a nutrient management specialist in the state of VA
One of America’s Greatest Treasures – The Chesapeake Bay
Back to the Farm and Starting Data Management

- Working for the State
  - Documentation was going to become very important
  - Data collection and reporting was going to play a big role

- The “old ways” of farming had to change

- This changed the way we managed crops and managed our business
How did we start using technology?

• Had been collecting data since the mid-90’s
  • ...but didn’t really know how to use.

• Around 2005 we realized that we weren’t really making use of the data that we had been collecting.

• We started using equipment technology to become more efficient and accurate in our operations with used of automatic steering.

• This is when we began using “Precision Ag”
What are we doing with Precision Ag

Where did we start?

• Yield data
• Soil Sampling – Grid and Zone
• The Bay Act focused on soil nutrient levels
• The data enabled me to tailor the Bay Act to my operation rather than the Bay Act dictating to my operation.
• Tailor N split applications
  • Nurture the crop throughout the season.
What are we doing today?
Why Am I Doing This?

- Sustainability?
- Profitability?
- Environment?
  - Virginia has achieved most all of the goals of the Bay Act without any kind of mandate.
- Applying this to your farm
What We Do Affects Others