

US EPA ARCHIVE DOCUMENT

Managing Agricultural Nutrients: State-Level Effort

Jerod Chew

Indiana State Dept. of Ag,

Director of Environmental Stewardship



Ag is a way of life.....

- The Hoosier state ranks 6th in the U.S. in turkeys raised. Indiana produces 5.9% of the turkeys for the whole country.
- \$3 Billion per year is contributed to Indiana's economy by the pork industry.
- Indiana's pork producers spend over \$465 million in local, rural economies on farm operation-related expenses.

Ag is a way of life.....

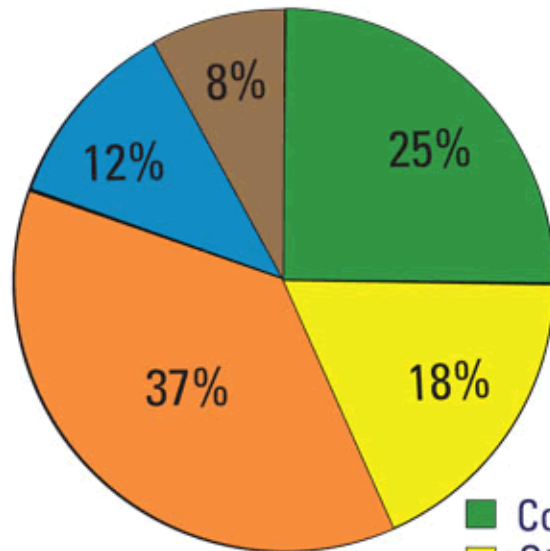
- Indiana ranks 5th in the nation in production of corn for grain.
- \$3.28 billion worth of corn for grain was marketed by Indiana farmers last year.
- Indiana farmers sold \$2.27 billion dollars worth of soybeans last year.

Agriculture and the Environment

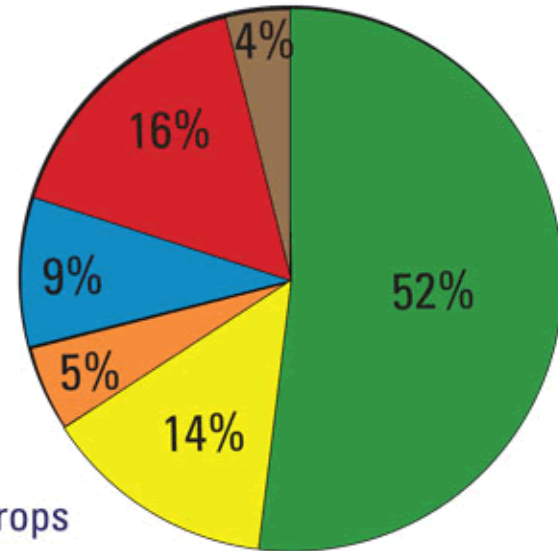


Sources of nutrients delivered to the Gulf of Mexico

PHOSPHORUS



NITROGEN



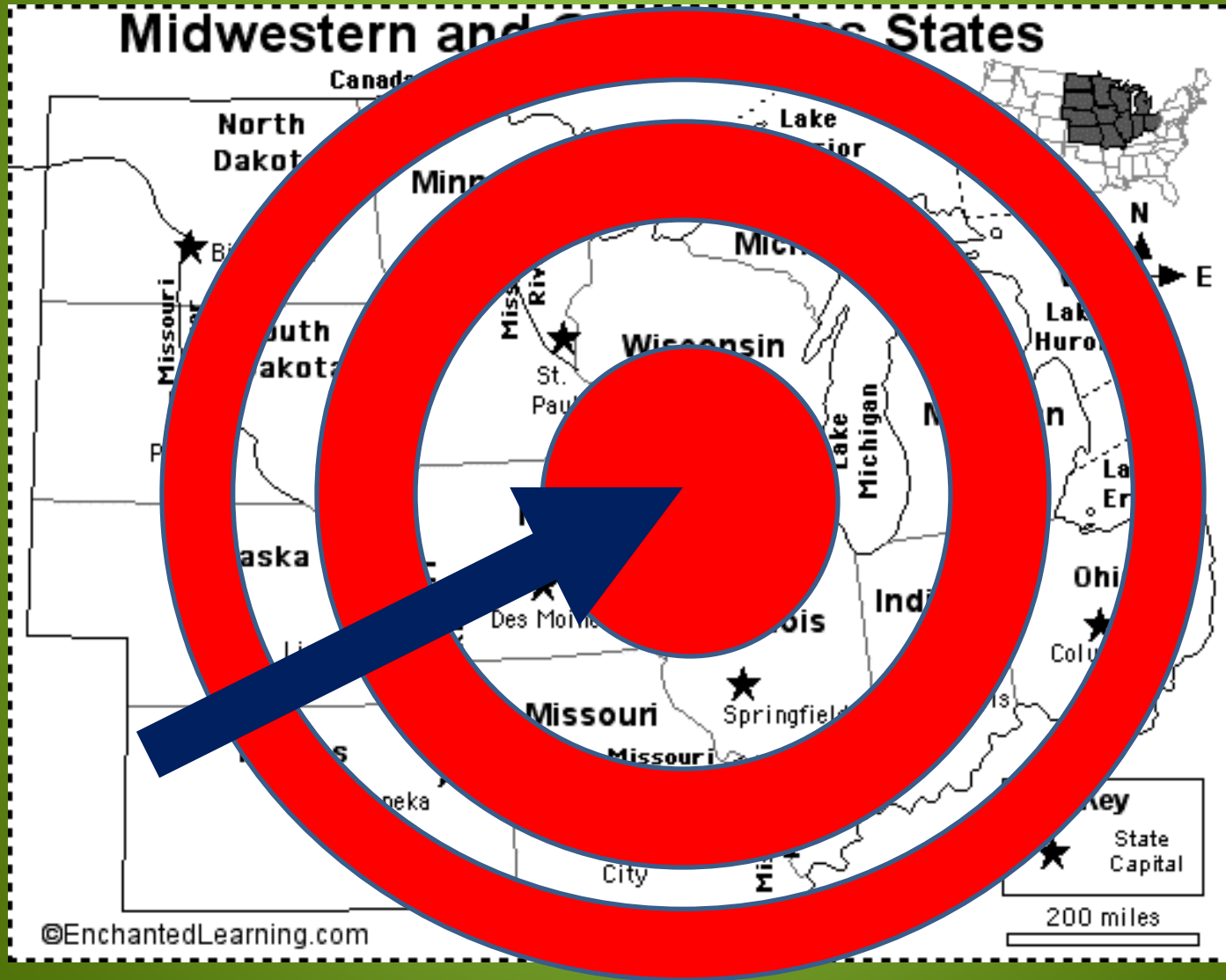
Sources

- Corn and soybean crops
- Other crops
- Pasture and range
- Urban and population-related sources
- Atmospheric deposition
- Natural land

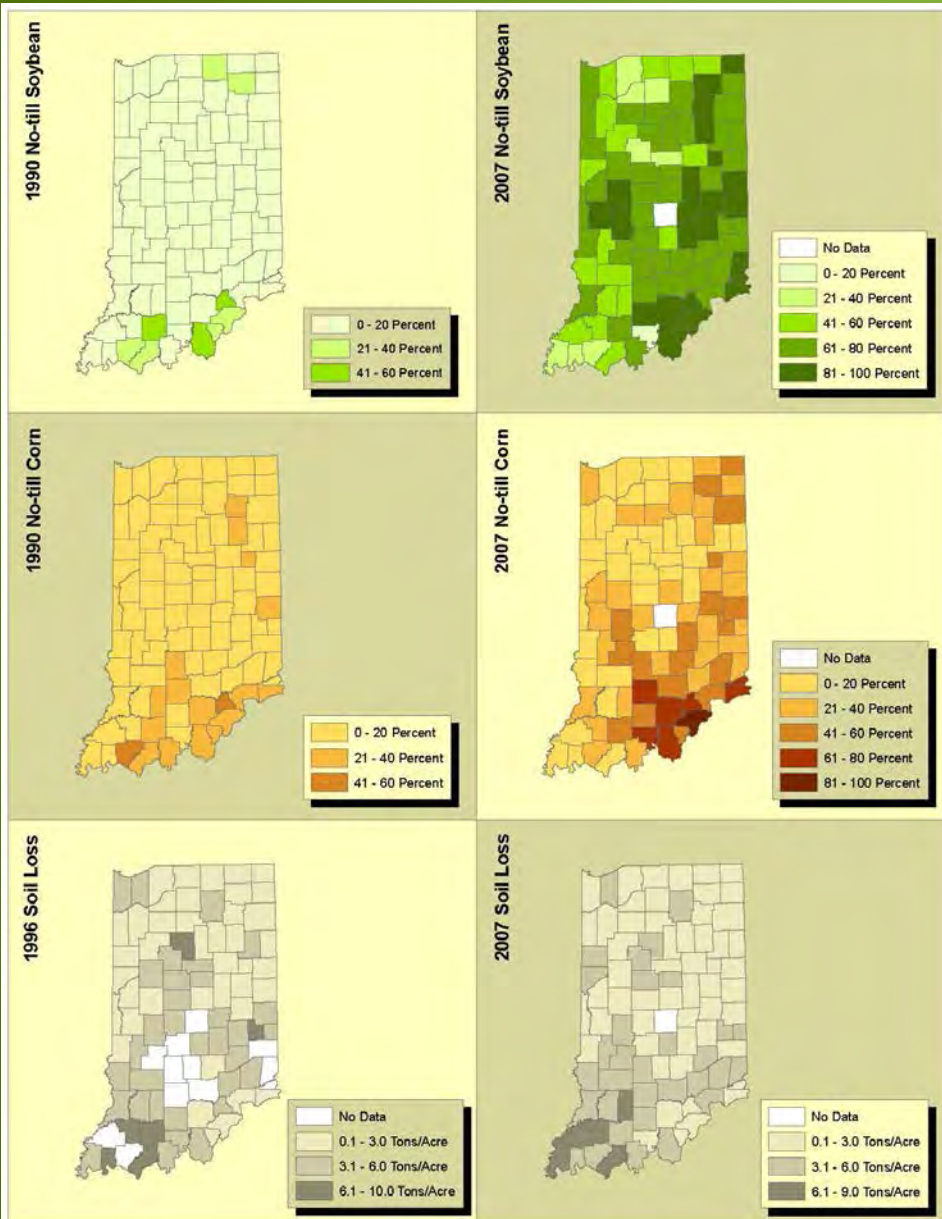
Agriculture and the Environment

- Ohio River contributes 35% of the water from the Mississippi River Basin
- Estimated 65% of N & P to the Gulf of Mexico

Midwest Hypoxia Target



Environmental Stewardship: 1990-2007



Since 1990, the overwhelming adoption of conservation tillage has resulted in 75% of the state managing erosion at or below “T” (tolerable rate of soil loss)

Environmental Stewardship: Watershed Initiatives

- Mississippi River Basin Initiative (MRBI)
- Great Lakes Restoration Initiative (GLRI)
- 319
- Targeted Partnership Projects from Environmental, Conservation and Ag Sectors



Environmental Stewardship: Conservation Cropping Systems Initiative



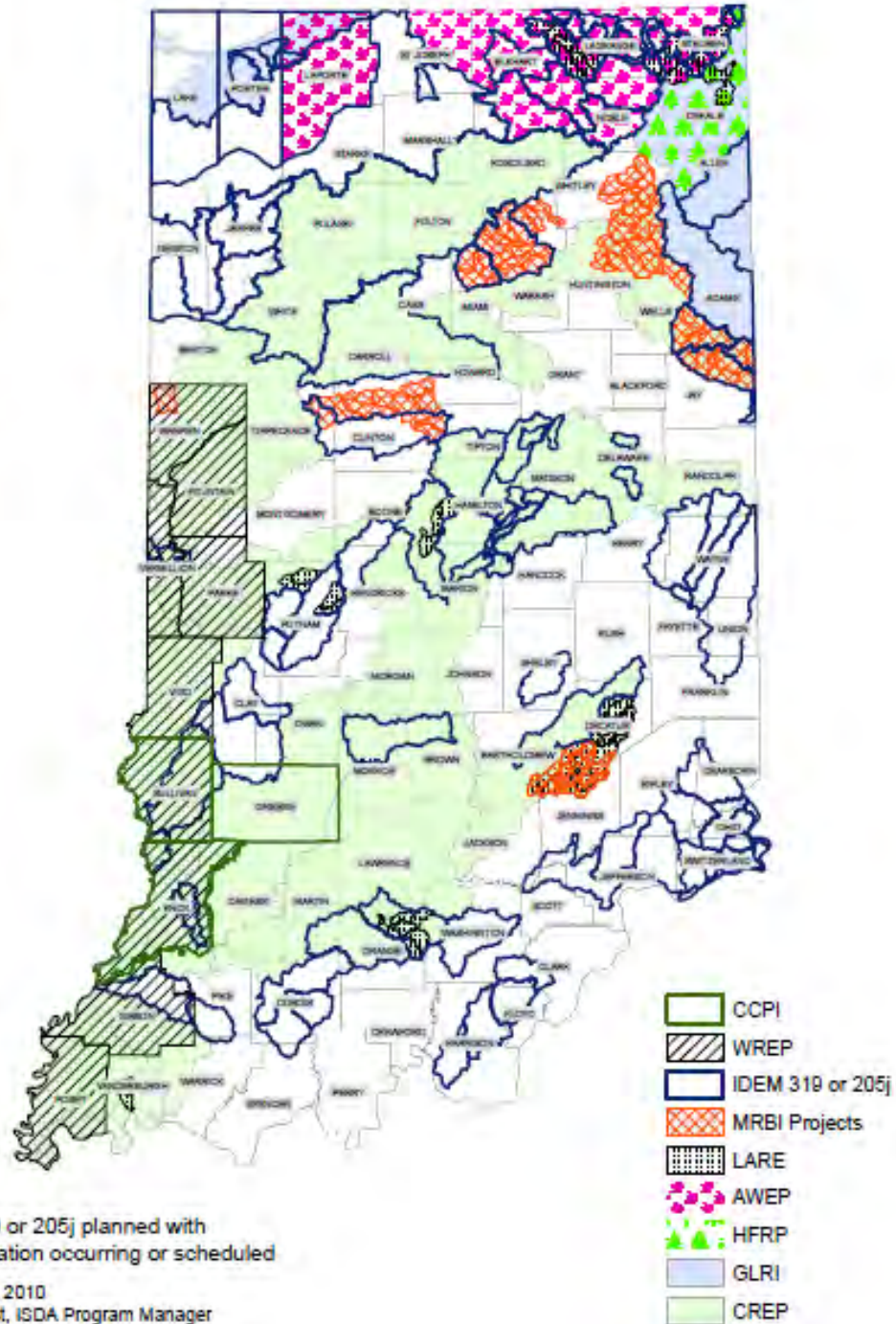
- Partnership Effort
- Systematic approach
 - Continuous no-till/strip-till
 - Cover crops
 - Precision farming
 - Nutrient and pest management
 - Conservation buffers
- Innovation

Environmental Stewardship: On-Farm Network



- Using science and data to drive management changes
- Corn Stalk Nitrate Test
- Aerial Imagery
- Farmer Networking Meetings

ICP Project/Initiatives



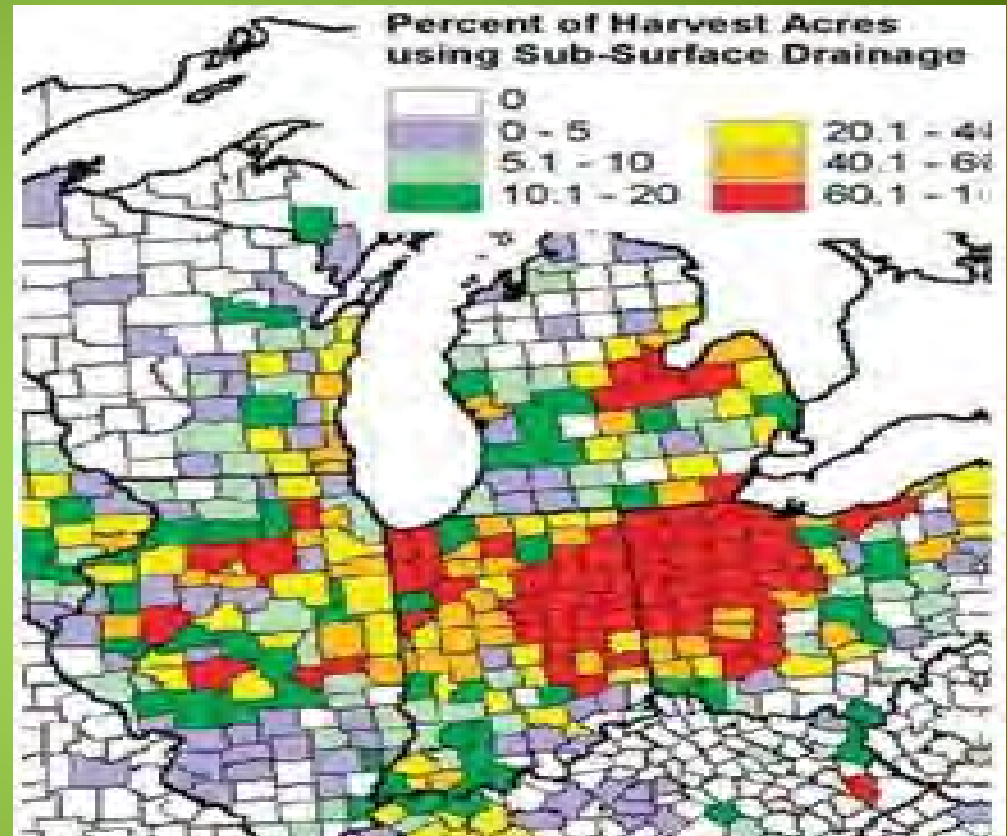
*IDEM 319 or 205j planned with implementation occurring or scheduled

November 8, 2010
 Deb Falmurst, ISDA Program Manager



Variables

- Seed type
- Temperature
- Moisture
- Pest Control
- Weed Control
- Erosion Control
- DRAINAGE
- What about ecological factors...nutrient fate?



Thank you!



Jerod Chew

jchew@isda.in.gov

317-517-9445