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UNITED STATES SENATE
THE COMMITTEE ON AGRICULTURE,
NUTRITION AND FORESTRY

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National Water Quality Challenge

- Biological conditions of nation's rivers and streams
 - Poor: 55.3%
 - Fair: 23.3%
 - Good: 20.7%
 - Unknown: 0.8%
- Greatest stressors:
 - Phosphorous
 - Nitrogen
 - Riparian cover and disturbance
 - Streambed sediment

National Biological Condition

Region	No Data	Poor	Fair	Good	Unknown
National	0.8%	55.3%	23.2%	20.7%	0.8%
West	0.8%	30%	27.3%	41.9%	0.8%
Plains	0.7%	58.4%	24.8%	16.1%	0.7%
East	0.9%	62.7%	19.2%	17.2%	0.9%

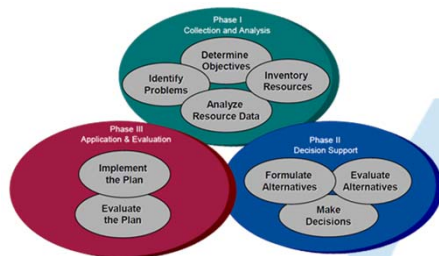
From National Rivers and Streams Assessment (2008–2009) (EPA, 2013)

Private Lands and Conservation

- 70 percent of the land is privately owned
- 88 percent of all surface water occurs on private land
- The quality of our environment depends on the decisions private landowners make every day



NRCS Conservation Planning






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Conservation Practices

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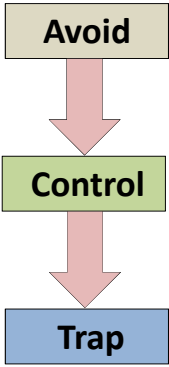
ACT for Water Quality Improvement

Avoid point and non-point source contributions from agricultural operations

Control runoff, erosion, and nutrient leaching

Trap or physically stop nutrients before they can exit the agricultural landscape





Investment in Conservation

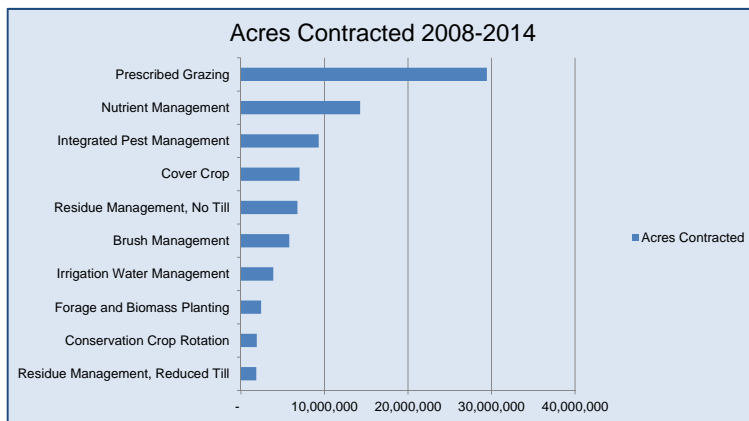
During the period of 2008-2014:

- NRCS helped producers install **727,000** conservation practices for water quality.
- 86,000,000 acres of conservation practices implemented on private agricultural lands with specific water quality benefits.
- Represents an investment of **\$3.4 B** in federal funding
- **In addition** producers invested **\$1.7-\$3.4 B** (estimate based on 25-50% of practice costs)



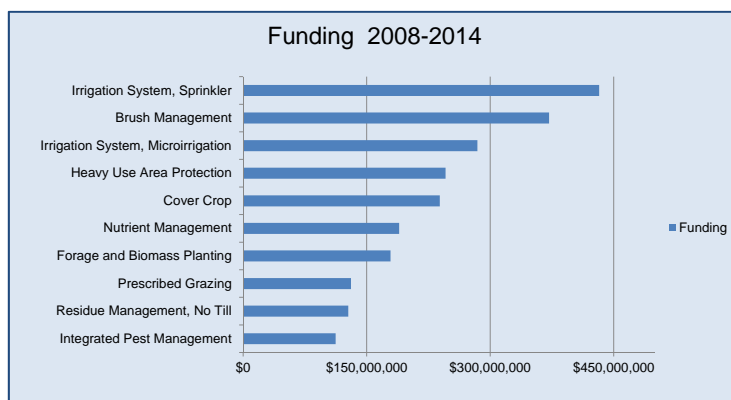
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Top Ten Practices by Acres Contracted



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Top Ten Practices by Funding





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Investments Pay Dividends

- **Chesapeake Bay:** Conservation practices installed between 2006 and 2011 reduced:
 - » Sediment losses **by 62 percent**;
 - » Surface N losses **by 42 percent**;
 - » Subsurface N losses **by 16 percent**;
 - » Total P losses **by 49 percent**.

- Based on 2003-2006 and 2011 surveys conducted as part of the Conservation Effects Assessment Project and reflect edge of field impacts.



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Targeted Approach is Best

NRCS Landscape Initiatives for Water Quality:

- Mississippi River Basin Initiative
- Great Lakes Restoration Initiative
- National Water Quality Initiative
- The Bay Delta Initiative
- Chesapeake Bay Watershed Initiative
- Driftless Area Landscape Conservation Initiative
- The Everglades Initiative
- Gulf of Mexico Initiative



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Before and After - Iowa



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Before and After in Michigan





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Before and After in Vermont



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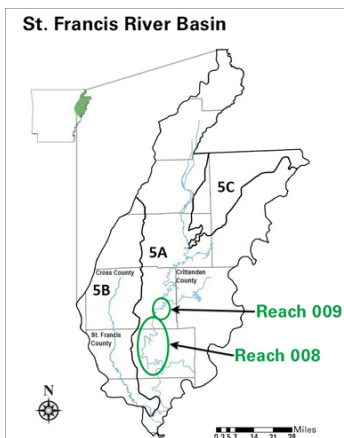
Before and After in Mississippi





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Arkansas Success Story



Agricultural runoff contributing sediment to the St. Francis River



Drop pipes used to discharge runoff into waterbody to avoid erosion

Map and photos courtesy of Arkansas Department of Environmental Quality



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South Dakota Success Story



Fencing to exclude livestock



Second year of livestock exclusion on the Keya Paha River

