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Voluntary Conservation Works on Private Lands Using the NRCS Conservation Programs

25th Annual Erosion Control and Stormwater Management Conference and Trade Show
Saint Cloud, Minnesota

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Hugh H. Bennett

"In this democracy, national action to conserve soil must be generated by these millions of land users. If they are active and willing participants in such a movement, it will endure; otherwise it will fail."
—Hugh Hammond Bennett, 1939

Aldo Leopold

"Most of what needs doing must be done by the farmer himself. . . . All the non-farming public can do is to provide information and build incentives on which farmers may act."
—Aldo Leopold, 1933

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Despite all the changes since 1935, and Hugh Hammond Bennett's passing 52 years ago, many of his ideas and principles have withstood the test of time and still greatly inform our work today . . .

1. We can't do conservation work from behind a desk or truck windshield.
2. Good science must be the foundation for conservation.
3. Natural resource concerns cannot be treated in isolation.
4. Coordinated action must be focused on a watershed or landscape scale.
5. Local leadership is critical to success.

Hugh H. Bennett

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"Seventy percent of the land in the lower forty-eight states is owned by private landowners."

"The quality of our environment depends on the millions of individual decisions those men and women make every day."

Chief Dave White

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NRCS Focus Through History (1935–2013)

- 1930s–1950s** Emphasis on sedimentation and impacts on flooding
- 1960s–1970s** New focus on fertilizers/pesticides and impacts on water quality and wildlife
- 1980s–1990s** Passage of 1985 Farm Bill.....conservation programs implemented to reduce commodity crop surpluses (CRP/WRP/WHIP)
- 2000–2008** Farm Bill conservation programs strengthened and funding; innovation grants
- 2009–present** Farm Bill geographic targeting and NRCS Landscape Conservation Initiatives

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Partnership Between NRCS and Landowners

- © **97 million acres of land** are currently enrolled in NRCS programs
- © **182,958 landowners** currently participate in NRCS programs
- © **Over 2.6 million acres of land** are enrolled in the Wetlands Reserve Program
- © **Every hour, 11 acres of wetlands** are restored by private landowners.

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Partnership Challenge

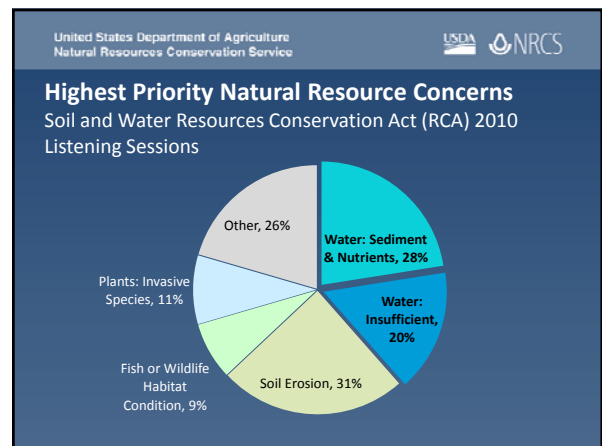
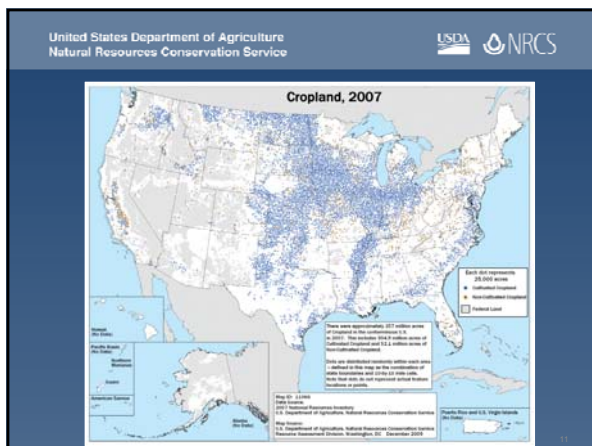
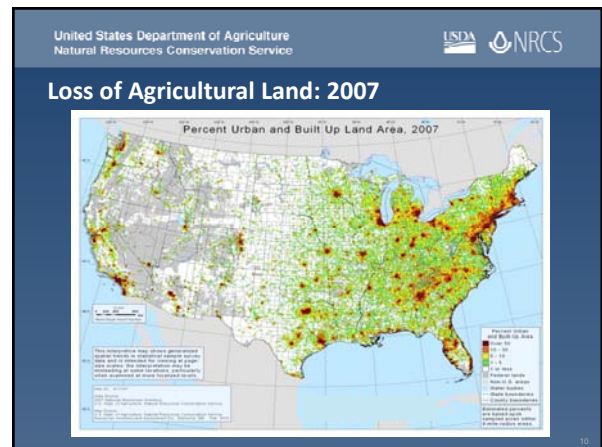
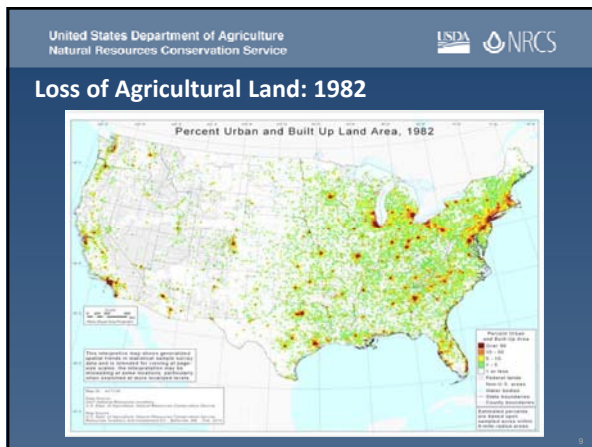
- By 2050 there will be **2.4 billion** more people to feed.
- U.S. cropland acreage **dropped by 63 million acres** between 1982 and 2007, from 420 to 357 million acres.
- To meet future food demand, food output will need to increase by **70 percent over the next 40 years**.
- Challenge:** Increased and safe food production that safeguards conservation values: healthy soil, clean air and water, quality wildlife habitat . . .

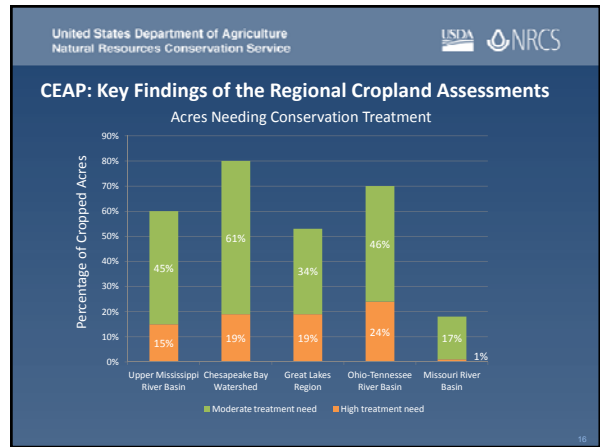
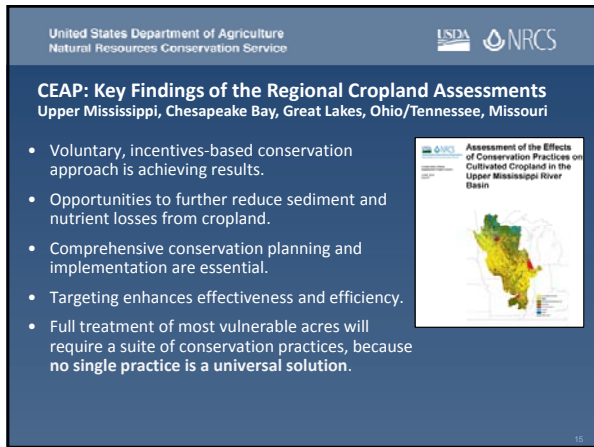
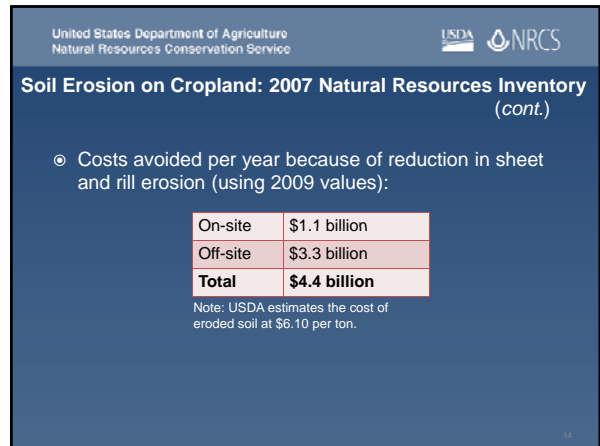
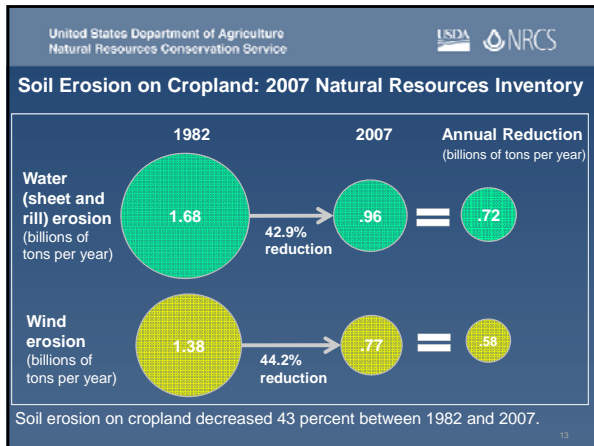
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Domestic and Global Issues

- Economics of agriculture:** Increased competition for natural resources; economics increasingly dominant in decision-making; decrease in number of mid-size farms and pressures to put more land into production
- Environment and public health:** Intensifying dissatisfaction with progress in improving water quality; keen interest in food safety and quality
- Changing climate:** Increasing temperature and more severe droughts, floods, and storms; more pressure on farms to reduce GHG emissions and increase energy efficiency
- Demographic trends:** Population growth leading to increased demand for food, fiber, and water





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- ### NRCS Conservation Programs:
- Environmental Quality Incentives Prog.
 - Wetland Reserve Program
 - Conservation Stewardship Program
 - Grassland Reserve Program
 - Farm & Ranchland Reserve Program
 - Agricultural Water Enhancement Prog.
 - Conservation Reserve Prog. (FSA Lead)

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Landscape Conservation Initiatives

Initiatives have national significance and focus on critical resource concerns at the landscape level.

- Build on existing locally-led efforts and are partnership driven
- Dedicated funding to accelerate implementation
- Science-based
- Assessment of performance and environmental outcomes

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NRCS Landscape Conservation Initiatives

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Mississippi River Basin Healthy Watersheds Initiative

Goals:

- To promote conservation systems in focused watersheds in order to avoid, control, and trap nutrient and sediment runoff, while maintaining agricultural productivity.
- To improve wildlife habitat in concert with agricultural production
- To restore wetlands in agricultural settings.

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Mississippi River Basin Healthy Watersheds Initiative

- 123 partner agreements covering 640 twelve-digit watersheds
- More than 577,508 acres of targeted conservation under contract or agreement
- Average of 9.5 partners per watershed
- FY10 – FY13 funding = \$222 million (MN- \$6.0M)
- MN-(11) projects, CCPI and WREP focus

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Progress Through NWQI (2012)

- More than 750 agreements with landowners in 154 small (12-digit HUC) watersheds
 - 128 have water quality monitoring stations
 - 82 have 319 projects
 - 68 are within Landscape Conservation Initiatives (e.g., MRBI and GoMI)
- Approximately 160,000 acres of targeted conservation under contract or agreement
- More than \$38 million in funding for FY12; MN has (3) projects: Seven Mile, Chippewa and Elm Creek

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Conservation in the New Farm Bill Regional Conservation Partnership Program (RCPP)

- Consolidates four programs:
 - Agricultural Water Enhancement Program (AWEP)
 - Chesapeake Bay Watershed Program (CBWP)
 - Cooperative Conservation Partnership Initiative (CCPI), and
 - Great Lakes Basin Program (GLBP)
- Funding set at \$100 million per year and uses the funds and acres from EQIP, CSP, and ACEP.
- 6 percent (House) or 8 percent (Senate) of covered programs will be available each fiscal year to supplement baseline funding.
- House has authority to use Watershed Operations and Flood Prevention authorities in Critical Conservation Areas.

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Certainty is a partnership tool to:

- Foster accelerated and increased voluntary conservation
- Provide reasonable assurance that conservation systems will satisfy current or future regulations for a prescribed timeframe
- Recognize sound environmental stewardship
- Afford protection against nuisance and civil lawsuits (Michigan)

MN leading country with the development of the MN Ag Water Quality Certification Program....focus on water quality "Certainty"

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Why focus certainty on priority small watersheds?

1. Prioritize and optimize use of limited technical and financial assistance
2. Produce greater environmental results in shorter time span
3. Avoid the inefficiency of "random acts of certainty"
4. Serve as fertile ground for lessons learned
5. Graduated approach where lessons learned can be applied in other watersheds

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Soil Health: MN-NRCS focus starting in 2013...Why??

The amount of water that flows over Niagara Falls in 83 days!

- 2% organic matter ~32,000 gals/ac.
- 8% OM ~ 128,000 gal/ac or 85% of 10yr storm



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Opportunities to Improve Water Quality Efforts (cont.)


- Further refinement of **targeting efforts**— greater focus on high treatment need/vulnerable acres
- Greater collaborative commitment to monitoring, modeling, and assessment of environmental outcomes on a long-term basis
- Development and implementation of recognition and certainty "programs" by states or added incentives to support voluntary approaches
- Continued development of environmental service economic opportunities



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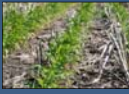
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Why Target??....Need Conservation Systems Approach, i.e..... Nutrients: Precision Ag and PRECISION CONSERVATION.....



Avoiding

- Nutrient management
- Rate, Timing, Form, Method



Controlling

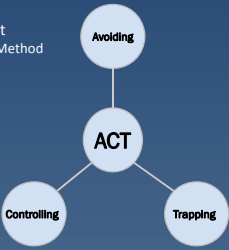
- Residue and tillage management
- Drainage water management



Trapping

- Buffers
- Wetlands designed for nutrient removal

ACT



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Partnership Opportunity

Sustainable, environmentally friendly, safe food production


- In 1960, one farmer fed 25 people.
Today, one farmer can feed 129 people.
- We'll need farming systems that are:
 - ✓ Even more productive,
 - ✓ More environmentally friendly, and
 - ✓ Capable of producing safe food from field to table.
- Targeting conservation resources generates 3 to 5 times the benefits of more general approaches.

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"Everything we do, all we share, even whatever we amount to as a great enduring people, begins and rests on the sustained productivity of our agricultural land."

—Hugh Hammond Bennett, 1959



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More than 77 Years of Helping People Help the Land



Thank you!

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