



Biofuels and the Environment

11/11/13

A recent biased Associated Press feature story on renewable fuel and land use contained numerous allegations and omitted important facts about the environmental footprint of ethanol. 25x'25 offers the following to help set the record straight and put facts on the table.

Crop and Livestock Production

- Thanks to advances in crop genetics, technology, precision farming equipment and conservation practices, U.S. farmers are delivering on the 25x'25 food, feed, fiber and fuel goal, while improving soil, water and air quality and the environment.
- 2013 corn production is [forecast](#) at 14 billion bushels, up 30 percent from 2012. If realized, this will be a new record production for the United States. Based on conditions as of November 1, yields are expected to average 160.4 bushels per acre. Area harvested for grain is forecast at 87.2 million acres. In way of comparison, in 1931 US farmers planted 109.6 million acres of corn, and raised 24.5 bushels per acre.
- According to U.S. Commodities, cattle feeding is now profitable, profit margins for feeding hogs are at record or near record levels, and the ethanol industry is profitable.

Land Use

- Current law strictly prohibits the conversion of sensitive ecosystems to cropland. The provisions of the Energy Independence and Security Act (EISA) require that corn and other feedstocks used to produce renewable fuels for RFS may only be sourced from land that was actively engaged in agricultural production in 2007, the year of the bill's enactment.
- In order for cropland to be eligible for current farm support programs, it must be in compliance with Swampbuster and Sodbuster rules.
- EPA is required to annually evaluate whether the RFS is causing U.S. cropland to expand beyond the 2007 level of 402 million acres (the year the RFS was expanded). Each and every year, EPA has found that cropland has been below the 2007 baseline; and the 2012 cropland total was at its lowest point (384 million acres) since EPA began this annual analysis.

Conservation

- The most current national data gathered the Conservation Technology Information Center show that some form of crop residue management, which includes conservation tillage plus "reduced tillage," was practiced on 38% percent of total cropland. And the number is growing. Total acreage of cover crops among farmers surveyed by CTIC increased 35 percent from 2008 to 2012.
- Recent press reports attribute reductions in the amount of land enrolled in the Conservation Reserve Program (CRP) to ethanol production. The primary reason CRP acreage has contracted is that the Congress, as a budget savings measure, reduced the maximum size of the program from 39.2 million acres in 2008 to 29.5 million acres in 2012.
- The Field to Market Initiative has documented that from the period 1980-2011 farmers have done a better job in managing soils, water, and nutrients and at the same time have increased productivity. For corn:
 - Productivity is up 64%
 - Land use/bushel is down 30%
 - Irrigated water use/bushel is down 53%
 - Energy use/bushel is down 43%
 - Soil loss/bushel down 67%
 - GHG/bushel is down 36%

Nutrient Leaching and Greenhouse Gas Emissions

- This spring set an all-time record for rainfall in the Midwest, on the heels of massive drought in the last two years. This perfect storm caused a high level of nutrient losses into some rivers and streams. Production agriculture, conservation and water stakeholders are partnering to implement the nutrient reduction strategies which aims to reduce nitrogen and phosphorous losses, so the next time this perfect storm comes, runoff will be significantly reduced.
- A lifecycle analysis done by researchers at the Argonne National Laboratory and published earlier this year in the journal *Environmental Research Letters*, found that corn ethanol produced between 2008 and 2012 reduced GHG emissions by an average of 34% compared to gasoline, including hypothetical indirect land use change (ILUC) emissions.

The 25x'25 National Steering Committee recommends the following Sustainability Principles to 25x'25 partners and supports their adoption by renewable energy stakeholders, producers and policy makers.