



IOWA CHAPTER

Policy on Biofuels

The biofuels industry in Iowa comes in two forms – ethanol and biodiesel.

Ethanol largely is produced by the extraction of alcohol from corn kernels. More recently, ethanol production has begun extracting ethanol from cellulosic sources, such as corn stalks, leaves and cobs. Researchers are also studying how to use algae to create ethanol.

There are environmental implications and concerns with the creation of biofuels, including

- Air quality
- Water quality
- Water withdrawal
- Loss of soil
- Loss of habitat for ground-nesting birds

Policy Recommendations

The Iowa Chapter supports policies that ensure that biofuels, such as ethanol and biodiesel, are produced in a manner that enhances our natural environment. These policies include:

- The current, corn-based ethanol production methods require approximately four gallons of water for each gallon of ethanol that is produced. For this reason, the Iowa Chapter supports a study to be undertaken by the Iowa Department of Natural Resources (DNR), on the effect of biofuel production on Iowa's water resources. Biofuel production draws significant amounts of water from ground water sources and surface sources. The study needs to determine if the withdrawal of the water is sustainable or if the water levels in the aquifers will be significantly lowered, affecting all Iowans.
- The Iowa DNR should monitor aquifer health on an on-going basis so that this water resource is not depleted. The Ogalla Aquifer west of Iowa is being depleted so it is prudent that we wisely manage the water resource in Iowa.

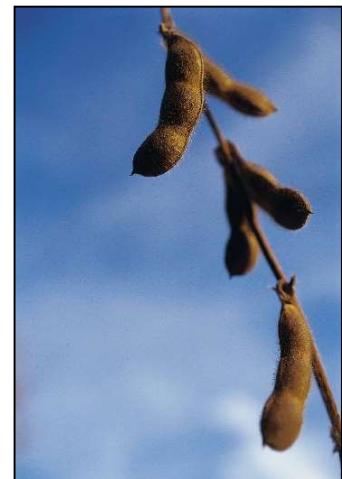


Photo courtesy Lynn Betts, NRCS

- Industries that are withdrawing large quantities of water from the aquifer should pay for that withdrawal. The Chapter supports laws to increase the water use permit fees paid by industries for large-scale water withdrawal. A 10-year water use permit is required of any entity that withdraws at least 25,000 gallons in a 24-hour period during any calendar year. A new permit to withdraw water costs \$350 with a renewable permit issued at no charge. A modification of a permit to increase the rate of water usage or the source of the water costs \$350, while other

changes to a permit are allowed at no charge. Increased fees would be used to support Iowa DNR water monitoring programs.



- The state of Iowa should stop the subsidy of ethanol by terminating the Iowa Ethanol Blended Gasoline Income Tax Credit and the Ethanol Promotion Tax Credit.

- The Chapter supports the labeling of ethanol at the pump. Over the last several years the Legislature

has been approached to stop the labeling requirement. We believe that customers deserve to know when they are purchasing ethanol or non-ethanol gasoline.

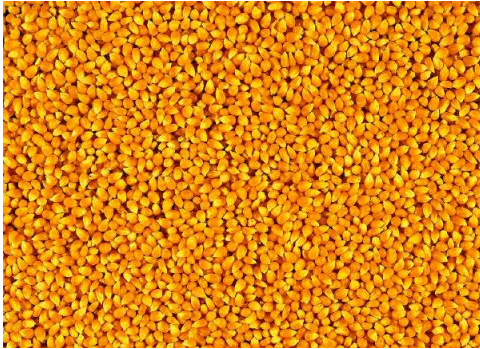
- The Chapter does not support the use of coal-fired boilers to manufacture biofuels.
- The Chapter supports the development of standards and guidelines for growing and harvesting switchgrass, diverse prairie or other cellulosic biofuels. The standards should include recommendations for beginning the harvest of biofuels on September 15 in order to provide protections for ground-nesting birds, such as meadowlarks and Henslow's sparrows.
- The Chapter does not support the introduction of genetically-modified prairie plants for use in biofuels production. This includes switchgrass. Native prairies are an important part of the nature food sources for native wildlife. Due to farming and development projects, the number of acres of native prairie have been significantly reduced.
- The Chapter supports protecting streams with buffers that are not harvested. This is important to protect the streams from silt and to provide wildlife habitat.
- The Chapter supports the monitoring of the use of stover in cellulosic ethanol production and the effects of the loss of stover on increased erosion and depletion of soil health. Stover is the residue left on the fields after the grain is harvested, including stalks, leaves and roots. It includes corn stalks, corn cobs and the remains of soybean plants. Crop residues are beneficial for water retention in the soil, serving as carbon storage, and providing soil nutrients. The Chapter supports development of standards and guidelines that reduce the effects of stover loss.



Photo courtesy Lynn Betts, NRCS

- The Chapter supports the preservation of Conservation Reserve Program (CRP) land. As the demand for ethanol has increased, land has been removed from the CRP program. The CRP lands are marginal lands that are idled from farming. Those lands have become habitat for ground-nesting birds. Also, when marginal lands are taken out of CRP and are farmed, those lands are more prone to erosion, which leads to silt, fertilizers and pesticides being deposited in water bodies, which affects water quality.

- The Chapter supports continued research into the use of algae and other feedstock to create biofuels.
- Once the distillation process has removed the ethanol from the corn kernels, the leftover material is called distillers grains. The distillers' grains can be dried or wet. Ethanol plants need to dispose of it. Hogs are able to digest the distillers' grains while cattle cannot digest them. The Chapter does not support co-locating industrial-scale concentrated animal feeding operations (CAFOs) near ethanol plants in order to readily dispose of the distillers grains. CAFOs present their own environmental problems related to air quality, water quality, degradation of natural areas and degradation of streams and rivers.



- The Chapter does not support the use of antibiotics in the production of alcohol; there are anti-microbial products on the market that can be used instead. The ethanol industry uses antibiotics to kill bacteria that contaminate the equipment used to manufacture the ethanol. The Food and Drug Administration conducted tests on dried distillers' grains and found that the antibiotic residues were present even after they antibiotics had gone through ethanol production processes. Some of these antibiotics are the same ones used by humans to combat illnesses. Tests have shown that the bacteria in ethanol plants become resistant to the antibiotics. When bacteria become resistant to antibiotics, it poses human health risks should humans become ill due to those bacteria and need antibiotics to treat the illness.

In order to reduce the environmental effects from ethanol and gasoline, we encourage people to

- drive fuel-efficient vehicles;
- reduce the number of miles driven, such as combining trips, car-pooling, driving to locations closer to home, riding a bike, walking; and
- use public transportation, such as buses and rail, which are more energy efficient.

Sources

www.iowadnr.gov/InsideDNR/RegulatoryWater/WaterSupplyEngineering/WaterAllocationUse.aspx

Jane Braxton Little, "The Ogallala Aquifer: Saving a Vital U.S. Water Source," *Scientific American*, March 30, 2009

Julia Olmstead, "Fueling Resistance? Antibiotics in Ethanol Production," Institute for Agriculture and Trade Policy, 2009

Dennis Keeney and Mark Muller, "Water Use by Ethanol Plants - Potential Challenges," Institute for Agriculture and Trade Policy, 2006

