

Producing Ethanol Could Strain Resources

New report shows challenges and solutions of making biofuels in Ogallala region

Biofuels are getting a lot of attention as a way to slow global warming. But not all biofuels are created equal. Whether they help the environment depends on how they are produced. A new Environmental Defense report recommends policies that will ensure that renewable fuels live up to their promise. Specifically, our study shows that we need:

- a [low-carbon fuel standard](#) to spur production of biofuels with low greenhouse gas emissions and
- better protections for water and land resources that are vulnerable to increasing production of biofuel feedstocks.

In the Ogallala Aquifer region, how to avoid unintended consequences

Our new report, [Potential Impacts of Biofuels Expansion on Natural Resources \[PDF\]](#), focuses on the second requirement, protecting land and water resources. It suggests how to avoid unintended consequences of producing more ethanol in the Ogallala Aquifer region. It uses the Ogallala Aquifer as a microcosm of the challenges we'll face as renewable fuels are developed.

The Ogallala Aquifer is one of the world's largest aquifers and an important water source for the eight Great Plains states it lies beneath: Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas and Wyoming. But the region's water resources are stressed, and the land, which was the center of the Dust Bowl in the 1930's, is prone to erosion.

Making ethanol requires substantial resources. For example, between three and six gallons of water are needed to produce one gallon of ethanol. Our study shows how plans to expand the production of ethanol, primarily with corn-based feedstock, will further strain the region's resources. Topping the list of potential issues are:

- increased use of water in places where supplies are already dwindling,
- retired croplands reverting to working lands, and
- the loss of important grasslands to crop production.

2007 Farm Bill offers opportunity to guard against unintended problems of ethanol

We are releasing our report as Congress considers reauthorization of the laws that govern America's food and farm policies. To help Congress decide what to change and what to keep in the Farm Bill, our report recommends the following:

- maintain the Conservation Reserve Program, which provides cost-share and rental payments to farmers and ranchers; and target environmentally sensitive lands for enrollment;
- strengthen groundwater protections, either by expanding Farm Bill water programs or through improving state and local groundwater policies;
- increase funding for the Grasslands Reserve Program, which pays farmers and ranchers permanent easement or rental payments to protect, restore or enhance grasslands or grazing operations from conversion to other land uses
- adopt a "Sodsaver" policy that eliminates subsidy support for converting grasslands to croplands.

For more information

- Download report - [Potential Impacts of Biofuels Expansion on Natural Resources \[PDF\]](#): A Case Study of the Ogallala Aquifer Region
- Learn more about [the Farm Bill](#)



Producing renewable fuels will need good policies to ensure they live up to their environmental potential.

Maps of What Additional Ethanol Plants Could Mean

State maps show the overlap between ethanol production and water supplies, important grasslands and unplanted croplands

- [Colorado](#)
- [Kansas](#)
- [Nebraska](#)
- [New Mexico](#)
- [Oklahoma](#)
- [Texas](#)

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