Subsidies for Corn-Derived Ethanol May Leave Us Thirsty

Michael W. Lore

 Follow this and additional works at: https://digitalcommons.wcl.american.edu/peel_alumni
Subsidies for Corn-Derived Ethanol May Leave Us Thirsty

Michael W. Lore

Follow this and additional works at: http://digitalcommons.wcl.american.edu/sdlp
Part of the Energy and Utilities Law Commons, Environmental Law Commons, and the Health Law and Policy Commons

Recommended Citation
Lore, Michael W. "Subsidies for Corn-Derived Ethanol May Leave Us Thirsty." Sustainable Development Law & Policy, Fall 2007, 53, 86.
A new report from the National Research Council (“NRC”) indicates that ethanol from corn production may have a substantial negative impact on the U.S. water supply.\(^1\) The U.S. ethanol subsidy program, $0.51 per gallon, is designed to help wean domestic dependence on foreign oil. However, subsidies for corn-derived ethanol may accelerate a domestic and global water crisis without establishing national energy independence. Congress should eliminate inefficient subsidies for corn-derived ethanol in the upcoming Energy Bill because the over-production of corn for corn-derived ethanol will likely accelerate the depletion of U.S. water quality and quantity.

According to NASA and the World Health Organization, severe water shortages will affect four billion people by 2050 and southwestern states in the U.S. will face severe freshwater shortages by 2025.\(^3\) U.S. corn production has several externalities that contribute to freshwater scarcity and environmental degradation. For instance, it creates more soil erosion and uses more herbicides and insecticides than any other U.S. crop.\(^4\) These inputs become residues in well water.\(^5\) These pesticides are arguably the cause of the Gulf of Mexico “dead zone,” an ever-increasing seasonal phenomenon where nutrient runoff causes oxygen depletion in an area the size of Massachusetts, causing harmful impacts on marine and coastal fish populations.\(^6\) Moreover, ethanol itself is likely to leak into ground water and cause harm to our drinking supply because ethanol will mainly be stored underground and there have been over 400,000 reports of leaks in the last few decades.\(^7\) The NRC has taken alarm to statistics like these and undertook an extensive study to find answers to potential water concerns related to corn-derived ethanol. The NRC suggests alternative subsidies to reduce impacts of biofuels production on water use and quality, policies to encourage best agricultural practices and policies to encourage biofuels produced from some cellulosic alternatives rather than from corn.\(^8\)

The perfect storm of high oil prices and record-breaking U.S. corn yields has allowed the powerful corn lobby to dictate many policies in the renewable energy debate. The Energy Policy Act of 2005 established the Renewable Fuel Standard (“RFS”) that requires the use of 7.5 billion gallons of renewable fuels by 2012, with most of the renewable fuel originating from subsidized corn ethanol.\(^9\) President Bush suggested a thirty-five billion gallon domestic ethanol target during his 2007 State of the Union Address.\(^10\) Last June, the Senate voted 65-27 to expand the production of renewable fuels to thirty-six billion gallons by 2022, with fifteen billion to come from corn-derived ethanol.\(^11\) The U.S. House of Representatives is in the process of negotiating an Energy Bill but House and Senate Democratic leaders intend to avoid the conference committee process and instead plan to bounce versions of their bills back and forth.\(^12\)

Critical debate over the impact of corn-derived ethanol subsidies on water supplies must occur immediately.

The ethanol debate is complex and it is perpetually evolving because new environmental externalities periodically emerge and prices of energy and food commodities perpetually change. Congress has the duty to include all future costs associated with ethanol in their energy and environmental impact analysis when developing federal policy related to subsidies that promote corn ethanol production. Over-farming to produce ethanol from corn will significantly erode drinkable water quantity and overused pesticides, herbicides, and fertilizers will eventually ruin the general quality of our water. Only a diligent analysis of all environmental factors and wise policy choices in the Energy Bill can supply the United States with its greatest needs while reflecting the country’s highest values.

### Endnotes:


ENDNOTES: SUBSIDIES FOR CORN-DERIVED ETHANOL continued from page 53


ENDNOTES: DEFENDING STATE’S RIGHTS continued from page 58

10 Compare 16 U.S.C. § 1456(c)(1)(B), with § 1456(c)(3)(A). For a federal agency activity, the state must file a legal challenge if the agency decides to proceed with an action over the state’s objection.
11 The President may also exempt a federal agency activity from the CZMA if the President determines that the activity is “in the paramount interest of the United States.” 16 U.S.C. § 1456(c)(1)(B). For a privately proposed activity, including oil exploration or development, the Secretary of Commerce may overrule a state’s objection by finding that the activity is consistent with the objectives of the CZMA or “is otherwise necessary in the interest of national security.” 16 U.S.C. § 1456(c)(3)(A), (B)(iii).
14 California, 464 U.S. at 319.
15 California, id. at 318.
16 California v. Norton, 150 F. Supp. 2d 1046 (N.D. Cal. 2001), aff’d, 311 F.3d 1162 (9th Cir. 2002).
17 California, 464 U.S. 312.
18 California, id. at 315-18.
19 California, id. at 342-43.
20 California, id.
21 Act Nov. 5, 1990, as amended by § 2205(13) of Act Nov. 4, 1992, Pub. L. No. 102-587. Congress’ specific attack on Sec’y of the Interior v. California was apparent in the statements of the legislature, including the notation that “the ‘directly affecting’ standard which was the central feature of the Court’s decision has been struck and replaced with a new triggering standard: ‘affecting any natural resources, land uses, or water uses in the coastal zone.’” Congress also stated that “the interpretation that an OCS lease sale is not subject to subsection (c)(1) because it is not an activity ‘conducted or supported’ by a federal agency is addressed by striking those words.” 136 CONG. REC. H8068, H8076 (1990).
22 Essentially, MMS is asked to suspend the expiration of the lease, so that the lessee may continue to pursue production of the lease.
30 H.R. 2701 was introduced by Rep. Jim Oberstar (D-MN) and its provisions on short sea shipping were included in H.R. 6, the House-passed CLEAN Energy Act of 2007, presently in Conference.
33 A caveat to this conclusion is to acknowledge the work of Senators Lieberman (IND-Conn) and Warner (R-VA) who recently introduced S. 2191, America’s Climate Security Act of 2007, a bill to reduce U.S. greenhouse gas emissions substantially between 2007 and 2050.