'POLITICAL HYPOXIA' KILLING COASTAL WATERS

Political hypocrisy we understand. Political hypoxia we do not.

In the familiar case, politicians say one thing but do another, and are often caught with their pants down. In the second case, a dearth of oxygen in political discussions involving the environment leads to a damaging dearth of oxygen in the nation's fresh and coastal waters.

The breaking news this August is dominated by the global debt crisis and the shameful partisan responses thereto. But by November, attention will shift to the Iowa caucuses, the first nationally significant litmus test for the 2012 presidential election. This political jockeying will put on exhibit our nation's most chronic and regular case of political hypoxia, the case of corn-fed America vs. the dead zone of the Gulf of Mexico.

The story begins with the iconic image of the American farm family, the founding archetype of Jeffersonian democracy and the lifestyle of patriot families in New England. By the early 20th century, the U.S. farm population was in decline. By mid-century, rural populations were plummeting as modest family farms converted to government-subsidized mega-businesses.

What had been a homestead landscape of dispersed pastures, hayfields and chicken yards became a bipolar world of enormous fields measuring thousands of acres on the one hand, and highly concentrated feedlots, poultry factories and slaughterhouses on the other. This conversion was brought to you by an exponential increase in the application of manufactured fertilizer and the cheap oil used to plow, harrow, seed, spray, harvest and ship grain.

Aside from California's Central Valley and the coastal plain of Texas, most of this conversion took place within the Mississippi River Watershed, which drains 30 states from Montana and New York south to Louisiana. A direct consequence of natural runoff from heavily fertilized fields and from concentrated manure at meat factories was an extraordinary increase in nutrient pollution to Mississippi River wetlands and watercourses.

Upon reaching the Gulf, this nutrient loading stimulates algal blooms within a warm and relatively fresh upper layer of water. After settling, decomposition of the algae progressively robs the bottom water layer of its vitality. Below an oxygen concentration of about 2 parts per million, the water becomes biologically dead.

Aside from the ecological harm, this chemical hypoxia damages the northern Gulf fishery, which supplies nearly three-quarters of the U.S. shrimp catch and nearly two-thirds of its oysters.

Historically, the key pollutants of nitrogen and phosphorus have increased at least threefold since early settlement. And given the current economic trends, this situation is likely to get worse as agricultural productivity in the food and energy sectors of our economy takes precedence over environmental sustainability. The main drivers here are hot-button political issues: the staggering rise in global human population, climate-related crop failures and energy independence through biofuels.

Meanwhile, back to Iowa, the leading state for political hypoxia. Despite its middling size and small population, it's No. 1 for corn, hog and egg production. There, agriculture has the highest economic clout per square mile. There, agriculture is roughly six times more important per voter than in California and Texas, the only two states with more total agricultural output.
Iowa is near the epicenter of the Mississippi River agricultural watershed, a geopolitical domain represented by 60 corn-fed senators, a supermajority on this issue alone. No wonder the Gulf remains in such bad shape.

During national political campaigns in Iowa, presidential wannabes breathe very little oxygen on the externalized costs of pollution from tillage, fertilizers and pesticides flowing to the Gulf. The result of this political hypoxia is a chronic dead zone of our own making. Unless they concede Iowa as part of their campaign strategy, no successful candidate walks away from the state caucuses without having made a concession to King Corn and the feedlots and meat factories that are its spawn.