

*This series of opinion editorials were published by MN2020 from April 27-May 5, 2010*

## **Environmental Op-Ed Series: 600 Words for the Planet**

**By Roopali Phadke**

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*Published on April 27, 2010*

The 24 students in my Spring semester Environmental Politics & Policy course at Macalester College have been experimenting with the craft of op-ed writing. Their assignment was to write a persuasive 600-800 word piece about a policy they would like to see implemented or strengthened at the regional, national or international level. These pieces were peer reviewed and revised in small groups. With the help of MN2020 staff, the best of the set will appear here in the following week as a six-part series.

When it comes to persuading the public, there is simply no better way to attract attention to your cause than writing an opinion editorial, fondly known as the op-ed. While social media are all the rage on college campuses today, our nation's op-ed pages continue to serve a unique role in pushing open the democratic sphere for a diversity of public opinions. Editorial statements bring local, national and world events into focus for readers. They also invite the author to suggest pragmatic ways for individuals to act on controversial problems.

Most college students struggle with writing their first op-ed piece. In fact, everything about the op-ed goes against the way we commonly teach writing on campus. While students are trained in exhaustive citation and the creation of complex theories, the op-ed is intended to present a single, clear point of view, not a thorough and objective discussion of all sides of an issue. Producing authoritative voice without the crutch of references is a great challenge. It is even harder to shed all the technical jargon that students acquire as badges of academic study. Lastly, the op-ed structure makes us state our conclusion at the very top of the page. We don't have the luxury of 10 pages of build up to our argument. In short, students have to be clear, concise and powerful with their language.

Despite all of these challenges, students often learn that the most difficult part of the assignment is to create a practical call to action. They are forced to ask themselves: Who is my audience and what can I really ask them to do? How can I make a personal connection with my readers who will range from a 5th grader to a senior citizen? Do I really have a solution to share? Am I even an expert? Students learn that knowing a lot about a topic is quite different from being able to persuade your readers to act. Yet, it is these small and large actions that matter for producing positive environmental outcomes.

Newspaper editors select opinion pieces for publication based on a magical combination of quality writing, timeliness, and a fresh or paradoxical viewpoint. The collection of op-eds being published this week by Macalester students enrolled in this class showcase the range of interests current students have in environmental politics and policy issues. These op-eds cover everything from air quality and food politics to toxins in cosmetic products. Beyond quality writing, they demonstrate strong convictions and compelling voices for practical solutions.

Our partnership with MN2020 has taken this classroom assignment to a new level. Working with MN2020 staff, this group of students have sharpened their writing skills and reckoned with the vagaries of the media cycle. They have learned that stating your case persuasively in 600 words can be far harder and more important than writing that 6,000 word research paper.



## **Environmental Op-Ed Series: Beyond Corn Ethanol**

**By Natalie Camplair  
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*Published on April 28, 2010*

Ron Fagen knows about efficiency in the renewable energy industry. His specialty? Since 1988 it's been corn ethanol--a renewable automotive fuel made from corn sugar that many hoped would replace gasoline. His Granite Falls, Minnesota-based company, Fagen Inc., built more than half of the ethanol plants in the United States. Mr. Fagen says it was his company's dedication to technologically advanced and efficient designs that helped reduce the price per gallon of ethanol from \$3.60 in the 1980s to just \$1 in 2005.

But the ethanol boom is over now. In an interview at the 2010 National Ethanol Convention on February 16 in Orlando, Florida, Mr. Fagen announced that, in 2010 and beyond, he plans to "put ethanol [projects] on hold" and instead to invest in biomass and wind energy projects.

The fact that the nation's largest ethanol plant builder is actively investing in other renewable fuels should send a message to policy makers and other businesses. The future of renewable electricity and fuel lies in diversification, increased efficiency and the promotion of rural communities that foster the development of new technologies. Farm towns in Minnesota and around the country can become self-sufficient, productive hubs of green energy development by not specializing in monocrops.

A month after Fagen declared his change of focus, President Obama called for a tripling of biofuel production to 36 billion gallons by 2022 from last year's 11.1 billion. President Obama and other officials claim that this legislation will bring prosperity back to rural America. Interestingly, this is not what corn ethanol producers, who have relied on government subsidies, want to hear.

Ethanol is not the primary renewable fuel encouraged by Obama's mandate. The call to triple biofuel production is part of a series of government projects and programs that promote "second-generation" fuels, like those derived from prairie grasses, leftovers from lumber production, and manure. Nathanael Greene of the Natural Resources Defense Council said that "this [mandate] proves how important it is to put policies in place to make sure public dollars go to support real renewable energy."

Today, about one third of all corn produced in the U.S. becomes ethanol, which is then mixed with regular gasoline or piped into specially designed vehicles like Ron Fagen's Chevy Tahoe that takes a mixture of 85 percent ethanol and 15 percent gasoline. In recent years, the ethanol

industry has been slumping as subsidy-inflated production capacity exceeds the actual consumer demand. That aside, state and federal governments have continued to funnel tax dollars into the industry through legislation like the 2008 Farm Bill.

This gap between supply and demand has led to pleas from ethanol producers for higher percentages of ethanol permitted in gasoline to drive up demand. Both the Environmental Protection Agency and President Obama have withheld making a decision on whether to increase the amount of ethanol allowed in gasoline--announcements that have ethanol proponents tapping their feet. The negative environmental impacts of corn ethanol production, like the pollution of water and soil resources and high greenhouse gas emissions, also cause legitimate hesitation.

The question remains if the entire biofuel industry, ethanol included, has the infrastructure to meet President Obama's demand for a tripling of production. A lack of capacity to meet this mandate creates a niche for pioneering companies like Fagen's to expand efficient and renewable biofuel and energy production.

Business and government actors need to stop looking to the corn ethanol industry for a solution to the national energy crisis and rural unemployment. Instead, we should invest in an entire, diverse green energy sector that includes wind, biomass and increased efficiency. This would open up a variety of jobs in rural communities, from research engineer to farm mechanic. The same agriculturalists who have asked for an extension of government support to cultivate monocrops could reap huge long-term benefits from the diversification of the biofuels industry.

None of this change can happen unless citizens demand that their representatives in Congress support comprehensive renewable energy legislation. This means an end to the doling out of corn subsidies. In Minnesota, steps are already being taken to increase rural energy efficiency and promote wind energy, but we are still on schedule to increase the percent of ethanol in gasoline from 10 to 20 percent in 2013. There is still a long way to go before we move beyond corn ethanol.

With the media and political focus on health care coming to a close, the time is now to turn to the impending energy debate. Policies to further expand the corn ethanol industry should not be supported if there is consensus that ethanol is an unwise investment or that better alternatives are available. If state governments and private enterprises choose to follow Ron Fagen's example, the reward will be a healthy, diverse fuel economy and the preservation of the Midwestern environment.

## Environmental Op-Ed Series: Clean Water Is Crucial in a "Land of 10,000 Lakes"



**By Bryna Helle**  
**Student, Macalester College**

*Published on April 29, 2010*

As the warm weather brings Minnesotans out in droves to enjoy the lake paths and scenic views, we must bring our attention back to one of the Earth's most valuable resources: water. Minnesota's rivers and lakes sprawl across the landscape, but their abundance should not be mistaken as immunity from pollution. Ninety-one percent of tested Minnesota lakes are contaminated with pesticide pollution. In the American Rivers Organization 2009 report, the St. Croix River was identified as endangered due to the threats of nonpoint source pollution, or pollutants picked up by runoff and brought directly into the waters, from residents in the watershed.

The majority of rivers flowing through Minnesota are just beginning their journey across the country. The pollution is not only felt in our state but also by all the citizens living downstream.

A lot of attention has been paid to stopping point sources of pollution, such as power plants and industrial farms, where the origin of the pollution can be found and remedied. Far less attention has been given to halting nonpoint source pollution. We must call attention to the impacts of citizens on Minnesota watersheds and establish programs to improve the state of our valuable resource.

Water has the unique ability to absorb and dissolve a multitude of substances. When the snowmelt spreads across the streets towards the storm drains, it brings with it the salt and sand dregs from our winter of icy driving conditions, oil and gasoline. When we nurture our spring plantings with fertilizers and pesticides, these substances will also be absorbed by run off and flow directly into our river systems. The resulting abnormally high concentrations of pollutants

detrimentally alter the rivers and lakes of the entire freshwater ecosystem, as well as our drinking water supply.

In 2008, the Minnesota Pollution Control Agency (MPCA) released its Nonpoint Source Management Program, which is certainly a step in the right direction. However, it offers mainly tools to handle the current state of pollutants in Minnesota's waters, not plans to prevent the nonpoint source pollution. Regulations need to be put in place to encourage sustainable improvements to resident's individual yards, especially when their property is nearby a major natural water resource. Among these regulations should be a requirement for porous building materials in place of solid surfaces that block rainwater from entering the soil, such as pavers instead of concrete patios. When rainwater is allowed to seep into the soil, it undergoes a natural filtration process before it enters our freshwater, including the Great Lakes. Many facilities in Duluth, Minnesota have utilized porous pavers to achieve a significant reduction in polluted storm water runoff.

A portion of each yard, or city-owned boulevard, should be home to native prairie species whose root systems naturally draw rainwater deep into the soil instead of simply flowing down the streets. The captured rainwater is filtered through the soil and replenishes our aquifers. Maplewood, Minnesota started installing rain gardens in 1996 and has found them to be a successful method of storm water management. The city now has 30 gardens on city land and 450 home gardens. The MPCA and the EPA recognize porous paving materials and rain gardens as Best Management Practices for storm water management.

Next, information regarding the effects of pesticides and fertilizers needs to be easier for the general population to access. Currently, pesticide packaging is required to put "caution", "warning" or "danger poison" on the label signifying its toxicity rating. This rating scale offers little information to the consumer about the product's impact on water or the environment. Likewise, fertilizers are only required to show warnings when their use can be harmful to certain crops. Every pesticide and fertilizer label should have a clearly stated pollution rating. Consumers need to see the direct connection between their use of chemicals in the yard and the poor condition of Minnesota's waters.

The Freshwater Society has named 2010 the Year of Water in an effort to raise awareness about the polluted waters in Minnesota. What will you do to help preserve Minnesota's waters? As you get your yard ready for the summer season, consider using porous materials on any new surfaces or replacing a section of your lawn with a low maintenance native rain garden. Know that the use of fertilizers and pesticides on your lawn will be felt by Minnesota's river system and use them sparingly, especially before heavy rainfall. What will the "Land of 10,000 Lakes" be without clean water? Show Minnesota you care about the life it its waters; stop your pollution at home.

**Environmental Op-Ed Series: “Health Without Shame: Improving Childhood Food Security”**



**By Hannah Rivenburgh**  
**Student, Macalester College**

*Published on April 30, 2010*

Michelle Obama has the right idea. Her highly publicized "Let's Move" Childhood Obesity campaign works to improve the nutrition and health of our children. But her focus on obesity misses the real problem: that of a broken food system. And framing this issue as one of childhood obesity is too narrow and may end up traumatizing the very children she wishes to help.

Almost 10 percent of Minnesota's children are at risk of hunger, according to Minnesota's Emergency Food Shelf Network, and sadly 12.2 million children nationwide face the same hunger risk, according to WhyHunger.org. Michelle Obama's initiatives could do much to fix this.

Wait-hunger? Isn't Obama talking about obesity? Those junk-food-eating, video-game-playing, spoiled American children that need to get off their rear ends and go play outside? For many, this is the picture of obesity in America. No one can be obese and hungry-can they?

And therein lies the problem: the focus should be on family and community food security, not obesity.

In the U.S., hunger and obesity go hand in hand; they indicate poverty in America. Lack of access to healthy, fresh, nutritious-and affordable-food leads to increased consumption of energy-dense but nutrient-poor junk food. The timing of paychecks and food benefits often leads to cycles of want and plenty in which the pantry is empty by the end of the month. In our food system, energy-dense processed foods cost \$1.76 per 1000 calories while fresh fruits and vegetables cost \$18.16 per 1000 calories, according to the Food Research and Action Center.

Thus, children-particularly low-income children and children of color, who tend to live in neighborhoods under-served by grocery stores-are unable to access the healthy food they need to grow. Plus, we know that children without enough of the right kinds of food to eat have a harder time concentrating and more behavioral problems at school, setting these kids back further.

Michelle Obama recently rolled out an interactive map online called the Your Food Environment Atlas, developed by the USDA Economic Research Service. The map shows the connections between access to food and levels of health. This includes statistics on the number of grocery stores in a given neighborhood, the availability of fresh fruits and vegetables in stores, dependency on public transit, and relative prices of milk versus soda and whole grains versus refined grains. As the map shows, a lack of food freshness, quality and affordability becomes concentrated in poor neighborhoods, while an excess of food outlets with high quality and low prices is plentiful in richer neighborhoods. This picture of food insecurity at a community level demonstrates the inequality of our food system in the U.S. For example, while in more suburban areas the average is about one grocery store per 5,000 people, in North Minneapolis there are two grocery stores serving over 45,000 residents.

So why doesn't Obama focus on childhood food security? An anti-obesity campaign ends up vilifying fat and can quickly descend into a campaign against obese children. Anyone who has struggled with weight knows that fat-shaming does not work. Singling out fat children makes them targets of teasing, distancing them from their bodies and the food they eat. A focus on the negative prevents all children from learning about positive nutrition, self-care, physical activity, and a healthy relationship with food. And in the United States, where a 2006 study "Appearance culture in Nine- to Twelve- Year-Old Girls" revealed that 40 percent of nine-year-old girls say they are on a diet when asked about their food choices, kids need all the help they can get.

There are other, better ways to promote and evaluate children's health. Simple measures like more public green space and safer streets enable kids to play actively. Working toward more equitable food access, the implementation of localized food policy councils across the nation, teaching children knowledge about food and nutrition; all of this would be a good place to start. The goal: nourishing the 12.2 million hungry kids in the U.S. and more than 100,000 Minnesotan children, and helping all kids grow up healthy.

In her speech announcing the initiative, Obama said, "The tone, hopefully, that I approach this, is one that is inclusive, and not judgmental - and helpful." By reframing her campaign in terms of childhood food security rather than obesity, Obama can be more fully inclusive.



## Environmental Op-Ed Series: The Everyday Bite of Toxic Chemicals



**By Adam Van der Sluis**  
**Student, Macalester College**

*Published on May 3, 2010*

Almost every Minnesotan begins the day by brushing her teeth. No two sets of teeth are the same, so there are all sorts of toothpastes available to us with many different features: Colgate, Crest, and Tom's give us options such as extra-whitening, fluoride, plaque control, and the all-important breath freshener. It's hard to believe that such a simple and ingrained act at the beginning and the end of our day could potentially harm our health as much as it helps. Unbeknownst to most consumers, this is because toxic chemicals are often present in toothpaste, as well as in countless other household cleaning and hygiene products that we use on an everyday basis.

Most of these chemical-laden household products fail to indicate the potential harms on the label. Just this month, the Food and Drug Administration and the Environmental Protection Agency announced they are reviewing triclosan—a chemical found in a growing number of liquid soaps, hand sanitizers and dishwashing liquids—to determine its safety. Without policies in place requiring manufacturers to alert consumers when harmful toxins are present, most Americans are unaware of what lies within the products they use every day.

In Minnesota, state leaders are taking a closer look at the problem, and there are legislative efforts underway to reduce toxic environmental exposures. Legislators will review a bill this session that calls for the removal of all harmful cleaners used in public buildings. It's a small step, but a step in the right direction.



But why worry about these invisible toxins in the first place?

An estimated 80,000 man-made chemicals are used in the United States for anything from home cleaning and hygiene to water treatment plants. Of these, only about seven percent have been fully tested for their impacts on human health and another 1,000 new chemicals are being introduced each year. On a daily basis, each one of us is exposed to these chemicals in our food, air, water, homes, and workplaces. While we all have cause for concern, women and children are disproportionately at risk.

The chemicals of greatest concern to women and children are hormone disruptors. These chemicals can alter the ever-important balance of hormones in a woman's body, a balance critical to a woman's wellbeing at all stages in her life. These effects are seen right away during puberty. American girls are getting their first periods much earlier than they did 40 years ago. This can start a chain reaction that can lead to breast cancer, infertility, uterine fibroids-the number one cause of hysterectomy in reproductive age women-and miscarriage.

Chemicals can effect us during all periods of life. For children, chemical exposure can already start to have an effect in the womb. According to the Collaborative on Health and the Environment, the number of children with asthma has more than doubled since 1980. Though asthma is congenital, its recent prevalence has been strongly linked to chemical exposure in the womb. The developing brain is extremely sensitive to toxic chemicals. A child's exposure to chemicals in the womb and at an early age increases their likelihood of a learning disability. One in six children in the United States has some sort of learning or developmental disability, such as autism, asbergers, and Down's syndrome. For men particularly, hypospadias, a birth defect of the penis, can develop before birth. From there, men are at risk for reduced sperm count and semen quality, cryptochordism (under-developed testicles), and testicular and prostate cancer.

On an individual basis, there are many things that can be done to protect your health and the environment. For example: limit the use of plastics, buy safe cleaning products, and choose personal care products that have few toxic chemicals. It can often be difficult to be sure of what is safe and what is not. The Environmental Working Group provides a website ([www.cosmeticsdatabase.com](http://www.cosmeticsdatabase.com)) that allows you to search any product you have purchased or are thinking of purchasing, and will give a listing of any harmful chemicals in it. By being conscious of what we buy and use in our daily lives, we can significantly reduce the harms to our bodies and the environment. Buy the products that are chemical-free. Support organizations and companies working to remove toxins from our everyday lives.

But protecting ourselves should not be our responsibility alone. The use of these chemicals should be regulated, and their presence should be made readily known to us. We must take care of our environment and ourselves, and our state and national leaders need to support policies that make products transparent and public spaces chemical free.

## Environmental Op-Ed Series: Cleaner Buses Help Us All Breathe Easier



**By Rachel Huck**  
**Student, Macalester College**

*Published on May 4, 2010*

Spring in Minnesota means streets exploding into a myriad of color as trees begin to bloom and people enjoying the fresh air and sun any chance they get, marking the transition from a cold, dreary winter to the long awaited warmth. Children play outside while school buses line up waiting to transport them to the hallowed halls of academia (commonly known as elementary school). Yet, just as the blooming trees and happy children are ushered in by rising temperatures, with children comes asthma, and invisible clouds of pollution follow those big, yellow buses relentlessly. Needless to say, asthmatic children and diesel exhaust don't mix.

Enter Project Green Fleet--a collaborative effort among businesses, government agencies and nonprofit organizations. Project Green Fleet works to protect public health and improve air quality by reducing emissions from Minnesota school buses, heavy-duty trucks, and other diesel-run vehicles such as snowplows and dump trucks.

Buses are made "green" by the installation of federally approved filters and mufflers that can reduce engine emissions by up to 50 percent. The process is limited to old buses with diesel engines because new buses have "greener" engines and create less pollution, so they do not need the upgrade. Though the retrofits are reserved for older buses, 56 school districts in Minnesota, as well as 31 private and municipal vehicles, have been able to take advantage of this program.

Diesel exhaust contains small particles, as well as smog-forming and toxic air pollutants. The

exhaust emitted by idling school buses can create severe health risks, especially to children. When buses idle in the schoolyard, the exhaust can also pollute the air inside the school itself, posing a risk to children throughout the day. This exposure can lead to lung damage and respiratory problems and is associated with increased frequency of childhood illness. The pollutant-filled air triggers asthma and existing allergies.

Air pollution from diesel vehicles has health implications for everyone, but children may be more vulnerable to this type of pollution due to the fact that children breathe 50 percent more air per pound of body weight than adults do.

It is no coincidence that today, nearly 10 percent of children have asthma, and the total number of people with the disease is expected to increase by 100 million by 2025, as reported by the Center for Disease Control. And with more than 24 million U.S. children riding the bus to and from school every day, school buses' diesel exhaust is a serious threat that cannot be ignored.

Though Minnesota currently operates well within the bounds of the federal Clean Air Act, the Minnesota Environmental Initiative (MEI), a nonprofit partner of Project Green Fleet, is constantly seeking solutions to environmental problems through collaborative action. The U.S. Environmental Protection Agency (EPA) recognized the ingenuity of Project Green Fleet last summer by awarding MEI with a \$3 million grant to fund the program. The funds are currently being used to retrofit school buses and other vehicles with pollution control equipment, provide engine repowers, vehicle replacements, and idle reduction technologies.

MEI will be able to upgrade at least 684 diesel engines, including up to 275 school buses statewide. So why isn't every bus company in Minnesota chomping at the bit to get involved? This is perhaps due to a lack of awareness on the part of local governments and their constituents.

Global warming and pollution control are far from being solved at this point. In 2007, the EPA issued important regulations that required dramatic reductions in emissions from new diesel vehicles starting in 2007--but this applies to new vehicles only. The lifespan of the average diesel vehicle is nearly 30 years, allowing many buses and trucks to drive over a million miles. With this kind of longevity, we must be concerned with the amount of exhaust diesels pump into the air we breathe. Yet, if more organizations put into action Project Green Fleet's program, the simple retrofitting of diesel engines with two pieces of pollution control equipment can reduce the harmful exhaust by up to 50 percent.

The problems developing from diesel exhaust is not a problem unique to Minnesota. If executed on a nationwide basis, this program would improve air quality and public health. Project Green Fleet is an amazing start, but we must push for large-scale implementation and additional transportation innovations.

Unless we are serious about decreasing vehicle emissions, developing cleaner fuels and expanding programs such as Project Green Fleet, we will risk more than a few trees harmed by the pollution. Our health and the health of those around us are at stake, and it is up to us to take action to fix the problem.

## Environmental Op-Ed Series: Food Safety Bill Could Hurt Minnesota's Entrepreneurs



**By Jemma Brown**  
**Student, Macalester College**

*Published on May 5, 2010*

John Mesko of Princeton, Minnesota, is wary of Senate Bill S.510: the Food Safety Modernization Act. Mesko, the owner of Lighthouse Farm and the executive director of the Sustainable Farming Association of Minnesota, believes that, if passed, the bill will inhibit fresh food producers.

"I believe that the production of food is a noble calling, we ought not to put so many barriers on farmers who want to enter the market. Someone ought to be able to make a substantial portion, if not all of their living by selling food," he said.

Senator Richard Durbin, D-Ill., introduced the Food Safety Modernization Act, which may be voted on in the next few weeks, after several outbreaks of food borne illnesses. The intended purpose of the bill is good: to preemptively ward off food contamination by increasing the frequency of food facility inspections and by tightening safety standards. Its implementation, however, will place a significant financial burden on America's small food companies and start-up entrepreneurs,

At a press conference in April, Senator Jon Tester of Montana described S.510 as "really taking a punch at people who don't need to have a punch taken at them." In its current form, S.510 does not discriminate between multi-million dollar agricultural conglomerates and small-scale businesses. Every food processing facility would be required to pay the FDA an annual fee as well as submit extensive paperwork analyzing the safety of their operation. For small family-run businesses like Mesko's, these financial and administrative burdens could be fatal.

The "one-size-fits-all" approach to legislation presented by S.510 is precisely the kind of lawmaking that could inhibit rather than promote the production of safe food. In 2009, the major food outbreaks that triggered the creation of S.510 originated in plants of industry giants such as Nestlé and Cargill--not in crates of strawberries and potatoes sold by family farmers or at local food markets. While food produced on small farms and processed in small plants is susceptible to contamination that can cause food borne illnesses, the magnitude of such problems are far greater--and affect greater numbers of people--when they occur in large, industrial-scale food processing operations.

Food produced on small farms and processed at local plants tends to be less susceptible to contamination because it rarely comes into contact with food from other areas. In comparison, food processed in large facilities may commingle with goods from several states or nations. The traceability and transparency of these relationships from farm to consumer are important in ensuring food safety. This personal accountability is a more valuable weapon in the fight against food borne illnesses than any FDA inspection ever could be.

In order to continue advocating for safe, contaminant-free food while keeping the variegated needs of America's diverse farming and food production operations in mind, Senate Bill S.510 should be amended to include regulations that are tiered according to the annual volume of food products a business manufactures or sells. Senator Debbie Stabenow, D-Mich., has proposed The Growing Safe Food Act amendment to address small farmers' and small business owners' concerns. (Learn more about the Growing Safe Food Act, proposed revisions to S.510, and how to take further action by visiting the National Sustainable Agriculture Coalition's Website.)

With thousands of Americans suffering from food borne illnesses every year, it is undeniable that food safety standards in the United States are in need of radical overhaul. However, this transformation must concentrate on high-risk food production sites and have a fee structure that works for businesses of all sizes to enact cost effective change without devastating the livelihood of our nation's small business and farm operators.