WAL-MART AND THE ENVIRONMENT

IT’S NOT EASY BEING GREEN:
THE TRUTH ABOUT WAL-MART’S ENVIRONMENTAL MAKEOVER

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Wal-Mart and the Environment: Big Business, Bigger Negative Impact

The average Wal-Mart supercenter is a 200,000+ square foot behemoth sitting on 20 to 30 acres of land. There are over 2,200 supercenters in the United States, in addition to standard Wal-Marts, Neighborhood Markets, Sam’s Clubs, distribution centers and warehouses that blanket the United States. Wal-Mart is the largest commercial entity in the United States, both physically and economically, and its stores require massive amounts of land, energy and labor to function. It is widely understood that Wal-Mart is the largest “private” purchaser of electricity in the world. Wal-Mart’s business model relies on market saturation and low costs, but the negative effects of that strategy, especially on the environment, are becoming more apparent. Stores are built in outlying areas, away from municipal centers. Often, there are several supercenters within five miles of each other, and most Wal-Marts have an accompanying store within ten miles.

Wal-Mart’s impact on our states, cities and towns is felt in a multitude of ways. Of particular importance are the adverse effects that Wal-Mart imposes on the environment, especially as undeveloped land continues to disappear, temperatures continue to rise, and concerns over global warming and climate change increase. Big box retail stores continue to multiply, and Wal-Mart is at the forefront of that movement.

With the amount of area that one Wal-Mart Supercenter takes up, combined with the sheer number of stores that dot the American landscape, it is hard to imagine a retailer with a larger impact on our environment than Wal-Mart. The company recently announced its goal to cut over two million metric tons of CO₂ emissions within six years, yet if Wal-Mart continues to add stores at its current growth rate, its new stores alone will use significantly more energy than any of its energy saving measures will save. Though the environmental effects of big box sprawl cannot always be easily seen, they are very real and very serious.

The National Trust for Historic Preservation has defined “sprawl” as: “poorly planned, low-density, auto-oriented development that spreads out from the center of communities.” Big box sprawl induced by mega-retailers such as Wal-Mart robs a state of it uniqueness, causes economic disinvestment in historic downtowns and loss of locally-owned businesses, and removes a sense of community and individuality we all love in our towns. During the 1990s, Wal-Mart opened four stores in Vermont, which is known as the “Green Mountain State” and attracts tourists from across the globe because of its...
historic towns, working farms, spectacular forests, and scenic mountain views. Once Wal-Mart began its development and expansion plans, however, the National Trust for Historic Preservation placed Vermont on its list of America's 11 Most Endangered Historic Places in 1993, and then took the rare step of re-listing the state again in 2004.6

Wal-Mart needs a vast amount of space in order to build a store, and often this space comes in the form of open greenspace, acres and acres of which are paved over and covered by Wal-Mart’s single-story warehouse-like stores and accompanying massive parking lots. Built away from town centers, they often require services such as new sewer lines, plus more roads and increased driving to reach them. They use massive amounts of electricity, often running 24-hours a day, the increased light causing night-glare and disrupting surrounding plant and animal life. New stores can destroy established wetlands and lead to an increase in flooding potential. Residents living nearby to new Wal-Marts often complain of increased traffic and noise pollution.

Big-box stores often only compete with each other and frequently the simple solution for Wal-Mart to get ahead is to abandon one store and build an even larger one. It is estimated that Wal-Mart alone has abandoned over 300 stores across the country in order to build newer and larger supercenters, all the while leaving empty concrete shells behind resulting in over 500 million square feet of unused retail space.7 This doesn’t include the number of Wal-Marts that have closed because a second and third Wal-Mart store built just a mile or two away pulled business from the original. These empty concrete boxes and parking lots serve no valuable service to a community yet continue to produce huge volumes of polluted storm water runoff.

The construction process itself can be devastating. A 2006 landslide at a Wal-Mart construction site in Kilbuck, PA, dumped over 350,000 cubic yards of earth and closed Route 65 and all three main tracks of the Norfolk Southern Railway.8 The environmental debacle at the Kilbuck site would be even more eye-opening if construction issues weren’t so common – EPA and state inspections at construction sites have found numerous instances of failure to obtain proper permits, discharge of excessive sediment into waterways, and failure to develop an adequate plan for controlling sediment and minimizing erosion.9 The residents of Kilbuck could see danger lurking, but warnings of possible landslide were ignored, Wal-Mart got township officials to waive a grading ordinance, and nearly one year later stabilization plans to repair the damage are still being discussed.10

This paper will address the negative impact the building of a Wal-Mart store has on our environment; it will discuss the numerous penalties already levied against Wal-Mart for violating environmental laws and regulations; and it will describe Wal-Mart’s efforts to become more “green”, and why the actions taken by the retail giant aren’t nearly enough to offset the environmental damage it causes. This paper will also examine the issues brought forward by environmental impact studies, and how mandatory studies can allow cities and communities to make informed decisions on proposed big box development.
What Wal-Mart Will Bring to Your Town

Wal-Mart’s Big Feet Leave An Even Larger Footprint

When the average Wal-Mart store moves into a neighborhood, it brings with it much more than just cheap DVDs, low-price electronics, and aisle after aisle of groceries. New supercenters require over 200,000 square feet of land, nearly twice the space of many older Wal-Marts. Studies indicate that the typical Wal-Mart requires over 1,000 parking spaces. From an environmental standpoint, parking lots rank among the most harmful land uses because they produce huge amounts of runoff delivered into the ground faster than anything else.\textsuperscript{11}

Often, parking lots are an overlooked threat. While a Wal-Mart supercenter may cover several acres, its parking lot can be three times the size of the store itself, placing its footprint at well over 18 acres.\textsuperscript{12}
A 2005 report by the Institute for Local Self-Reliance estimated that Wal-Mart stores and parking lots covered roughly 75,000 acres in the U.S., a figure that has continued to rise as Wal-Mart has continued to expand over the last two years. Parking lots contribute directly to what is referred to as “non-point source water pollution,” the leading cause of water pollution in the United States. Large parking lots such as Wal-Mart’s generate huge volumes of polluted storm water runoff – each acre of parking surface produces average runoff of 25,000 gallons of water during a 1-inch storm. Runoff leads to erosion and flooding, and contains high levels of pollutants such as sediment, bacteria, trace metals, phosphorus, nitrogen, hydrocarbons and oil.

Now at Wal-Mart: More Traffic and Noise for One Low, Low Price

Increased air pollution is another by-product of the large-scale retail movement. As Wal-Mart grows, it builds more and more stores on the outer edges of towns, where land is cheaper and more readily available. By building in these areas, it necessitates millions of additional car trips for consumers. Big box stores serve large areas, drawing customers from much farther away and resulting in increased air pollution.

By itself, Wal-Mart is a major factor in the dramatic increase in amount of distance Americans drive to fill their shopping needs. Wal-Mart has contributed heavily to the more than 40 percent increase in the amount of vehicle miles American households travel for shopping purposes since 1990. The jump is not attributable to consumers going to the store more often, however, but instead to the average trip being two miles longer. Studies have found that the size of a store is directly related to the
amount of traffic it generates. Larger stores pull customers from a larger geographic area which results in increased traffic – a 200,000+ square-foot supercenter on average generates over 10,000 car trips during a weekday, and even more on a weekend day.\textsuperscript{20}

All this traffic leads to higher emissions of pollutants such as nitrous oxide, volatile organic compounds, and carbon dioxide, sited as a leading cause of global warming.\textsuperscript{21} The rise of big box stores in America – led by Wal-Mart – has resulted in an increase in travel miles logged for shopping trips by the average American household of 95 billion additional miles a year during the 1990s.\textsuperscript{22} Shopping miles have grown at such a rapid rate that even huge advancements in car fuel economy would soon be outdone by the increased miles traveled on the road.\textsuperscript{23}

In her article “Can Wal-Mart Ever Be Green?” author Stacy Mitchell points out that Americans are conservatively estimated to be logging more than 365 billion shopping-related miles each year, resulting in 154 million metric tons of CO$_2$.\textsuperscript{24} With Wal-Mart accounting for about 10 percent of retail sales in the United States, its share of those CO$_2$ emissions stands at roughly around 15.4 million metric tons, or more than its entire estimated carbon footprint from store operations.\textsuperscript{25}

These concerns aren’t necessarily new, and their effects on local economies can be surprisingly large. A 2004 study of the additional driving costs of supercenters in the San Francisco Bay area alone found that Wal-Mart’s entry into the region would lead to an additional 238 vehicle miles traveled per year, costing local communities up to $256 million in additional costs such as infrastructure repair and environmental degradation.\textsuperscript{26} Researchers found that the size of Wal-Mart stores force the retailer to locate its stores on the outskirts of town, requiring shoppers to drive farther and/or more often in more traffic while causing smaller competitors in pedestrian-friendly areas to close down.\textsuperscript{27} Longer drives are needed to buy simple items such as milk, bread, or simple household items such as environmentally friendly light bulbs.

Despite some growth slowdown, Wal-Mart plans to continue to expand at the rate of several dozen supercenters per month.\textsuperscript{28} At Wal-Mart’s 1.2 million-square-foot distribution center in Beaver Dam, Wisconsin, 35 of the 84 loading dock doors are without a store assignment, but that number continues to drop.\textsuperscript{29} Four more supercenters are in the works, soon to join the 49 Wal-Marts and Sam’s Clubs currently served by the Beaver Dam center.\textsuperscript{30} If its expansion goals are met, by 2015 Wal-Mart will have expanded its domestic footprint by an additional 20,000 acres.\textsuperscript{31}
More Stores = More Distribution Centers

The impact distribution centers can have is even more insidious. One distribution center – of which Wal-Mart currently has 135 in 38 states – can cover over 5.5 million square feet, including over 4 million square feet of pavement and parking, a 1 million square foot warehouse, an office, storage, and truck maintenance buildings. A single new distribution center generates 900 additional truck trips and 2,150 additional car trips per day, or 328,500 truck trips and 784,750 car trips per year. Using the Environmental Protection Agency’s average emissions rates, those numbers work out to 2.4 extra tons of particulates and 83 extra tons of nitrogen oxides (the major precursor to ozone) emitted into the air every year by Wal-Mart trucks driving to and from a single distribution center alone.

The above figures say nothing of the air pollution caused by truck idling. In 2004, the EPA took action in Massachusetts and Connecticut for allowing trucks to idle for long periods of time. Why is truck shipping and idling so important? Studies show that diesel pollution is currently at least partially responsible for 600,000 lost work days in the State of California annually. Lost productivity combined with the costs associated with pollution-related health problems can cost states huge sums of money every year. A 2006 study from Cal State Fullerton’s Institute for Economic and Environmental Studies showed that the San Joaquin Valley’s (California) failure to meet federal particulate and ozone standards currently results in nearly 200,000 days of reduced activity in adults and 3,000 lost days of work – the financial cost of these losses combined with health-related costs totals over $3 billion annually, or $1,000 per year per person living in the valley.

No Vacancy? Not With Wal-Mart

Throughout the United States, hundreds of former big box stores sit empty, massive buildings left vacant because a retailer like Wal-Mart decided it needed more space. Though Wal-Mart can absorb the cost of closed stores and their leases, cities and towns are often left dealing with empty buildings that can lead to a rise in crime and vandalism, the lowering of property values, and depressed sales for neighboring retailers when the closed store is the anchor for a strip mall.

Empty Wal-Mart buildings plague cities and towns across the nation. At any given time, approximately 300 former Wal-Marts lie vacant in America. In North Carolina alone, nine abandoned former Wal-Marts the equivalent of 12 football fields in size sit vacant. In 2002, Wal-Mart had a staggering 396 stores for sale or lease, which translated into approximately 32.5 million square feet of unused retail space. By 2004, the retailer, which has its
own realty unit, announced that while many stores had been filled, it still had about 152 vacant properties, or 13 million square feet, across the country. As of the first quarter of 2007, however, Wal-Mart’s realty unit, Wal-Mart Realty, listed 225 buildings for lease and an additional 33 buildings up for sale. Similarly, the Vermont Natural Resources Council estimates Wal-Mart has abandoned over 300 stores, leaving over 500 million square feet of unused space.

Wal-Mart continues to expand, and often instead of simply upgrading an existing location to a super-center, the retailer elects to build an entire new super-sized store, leaving its former home empty. This has the doubly negative effect of continually gobbling up fresh greenspace and continuing to compound issues such as polluted storm water runoff into lakes and rivers and loss of ecological habitat, while empty shells are left behind to gather dust and weeds, often vacated after less than ten years of use.

**Commitment to the Environment, or Corporate Greenwashing?**

During the past year, Wal-Mart has worked hard developing environmental efficiency initiatives, and even harder to promote them. To be fair, progress has been made on this front, and for that the company deserves credit. There is certainly, however, more to being environmentally friendly than simply pushing energy-saving light bulbs. As seen above, the negative impact massive retail stores such as Wal-Mart has on the environment is becoming clearer and clearer. While Wal-Mart continues to throw millions and millions of dollars at public relations campaigns aimed to address its negative environmental image and steal attention away from the long-established concerns associated with big-box development, the concern is that the retailer continues to treat the symptoms of its environmental problems, while ignoring the root causes.

Lost in the sex discrimination and race discrimination class actions and the large number of wage and hour cases is the reality that Wal-Mart has been charged with a multitude of environmental violations over the course of the past ten years. Charges have come from both state and federal environmental officials costing Wal-Mart millions in penalties – and costing the environment even more.

Beyond that, there is evidence that all of the hard work Wal-Mart has done on environmental efficiencies will be wiped out by the one thing most dear to the retailer: its customers. As Wal-Mart continues to expand, its in-store energy saving measures will be offset by the increase in the number of supercenters consuming electricity. Pushing suppliers on environmental performance, carrying efficient light bulbs, and selling organic foods will be offset by the continued increase in shopping-related vehicle miles and the resulting vehicle emissions and air quality degradation. Below is a discussion of Wal-Mart’s environmental initiatives, and whether the retailer truly deserves the credit it’s been receiving.
The Case for a Greener Wal-Mart…

In recent years, Wal-Mart has begun to position itself as more environmentally friendly, looking to erase the negative environmental image surrounding the company and shift the focus away from other public relations nightmares, such as facing the largest class action lawsuit in U.S. history. The company has pledged to double the efficiency of Wal-Mart’s truck fleet, and reduce greenhouse gas emissions from its existing stores and warehouses by twenty percent. By 2009, Wal-Mart states it will have a store design using 25-30 percent less energy and producing thirty percent fewer GHG emissions, thanks to technology developed at its two experimental “green stores” located in McKinney, Texas, and Aurora, Colorado.

Wal-Mart’s green push is being directed at its suppliers as well. Beginning in February 2008, the retailer has announced it will begin grading suppliers on their environmental performance, and adjusting business conducted with them accordingly. If suppliers want to keep doing business with their largest customer, keeping pace with Wal-Mart’s environmental initiatives will be key. The grading will begin one year after the retailer introduces its green score card and distributed it to its suppliers, allowing them to familiarize themselves with new packaging and gas-usage guidelines. And because suppliers, for example, will not want to package products in two different ways, the guidelines could change an entire company’s packaging practices.

In mid-2005, Wal-Mart opened its first experimental green store in McKinney, Texas, with a design that featured sidewalks made from recycled rubber, solar energy panels, and a 120-foot windmill. A second store was opened in Aurora, Colorado, and together, the stores are to serve as testing labs for environmentally friendly techniques that could then be adopted by regular Wal-Marts and supercenters based on need and budgets. Wal-Mart is tracking the stores’ tests for a 3-year period before choosing which elements to implement across the country.

In addition to experimental stores, Wal-Mart recently announced it will be adding its first Class 8 hybrid truck to its massive fleet of over 7,000. The Peterbilt 386 Hybrid is viewed as the premier aerodynamic truck because of its exceptional efficiency and low operating costs, and will join Wal-Mart’s fleet of 230 other Peterbilt tractors. Wal-Mart’s CEO might have overreached in 2005 when he set out to improve the efficiency of Wal-Mart’s fleet by 25 percent by 2008, but improvements such as more aerodynamic side skirts, better tires, and auxiliary power units to reduce engine idling could improve fuel efficiency by up to 13 percent. And incorporating hybrid trucks would be another step in the right direction.

Wal-Mart is beginning to push environmentally friendly products as well, such as offering organic foods and products. Organic products have several positives associated with them, including the following:

- Organic farms do not release synthetic pesticides into the environment—some of which have the potential to harm local wildlife.
- Organic farms are better than conventional farms at sustaining diverse ecosystems, i.e., populations of plants and insects, as well as animals.
- When calculated either per unit area or per unit of yield, organic farms use less energy and produce less waste, e.g., waste such as packaging materials for chemicals.
In March of 2006, Wal-Mart’s Vice President of Marketing announced that the company was going to double its offerings of organic products and make them more affordable for the average consumer. Wal-Mart CEO Lee Scott has been straightforward when it comes to the retailer’s goals: provide organic and natural foods for customers at all ends of the income spectrum. Logic says that if Wal-Mart were to apply its size and logistical expertise to the organic market, the results would include lower cost and greater accessibility for consumers and higher sales volume for agricultural producers.

Wal-Mart has even been the leader in pushing compact fluorescent light bulbs, which today can emit the same light as everyday light bulbs while using 75-80 percent less energy. Even when pushed to its usage limits, a single compact fluorescent bulb can last 5-10 years. By winter 2007, Wal-Mart hopes to have sold every one of its customers one compact fluorescent bulb.

...Or do Wal-Mart’s Environmental Initiatives Gloss over a Larger Problem?

Wal-Mart’s environmental initiatives, while not without substance, tend to gloss over larger issues. Take those compact fluorescent light bulbs. Although they are a way to save energy and fight global warming, they also pose a potential threat to our food and water supplies. The bulbs contain small amounts of mercury, a potent neurotoxin that is especially dangerous for children and fetuses. Wal-Mart has promoted CFL bulbs heavily as a cornerstone of its environmental push, yet even as they were being rolled out neither the company nor the federal government had come up with a way to effectively recycle them. Most Americans throw them into the trash, placing them at risk for breakage prior to reaching landfills. Breakage can cause mercury to seep onto and contaminate soil and groundwater, and can also be hazardous to trash and recycling workers.

If recycled properly the CFL bulbs can do a lot of good, yet the U.S. Environmental Protection Agency has conceded that not enough has been done to urge people to recycle them or make it easier for them to do so. To be fair, Wal-Mart has begun to take baby steps – the retailer recently partnered with Waste Management in Minnesota to hold a recycling day for the fluorescent light bulbs. The recycling day was literally held for one day, June 23rd, from 8am to 4pm at any Wal-Mart or Sam’s Club.

Wal-Mart’s organics program has been criticized as well. After the retailer announced it would be expanding its organic offerings, watchdog group The Cornucopia Institute began surveying Wal-Mart stores across the country and discovered widespread labeling issues. The group discovered that Wal-Mart was labeling non-organic food as organic, misleading consumers in the process.

Four months after notifying Wal-Mart of the labeling issue, a consumer fraud violation, and two months after notifying the United States Department of Agriculture, many of the misleading signs were still being used in stores. State officials in Wisconsin launched an investigation after the Wisconsin Bureau of Consumer Protection began receiving complaints. That investigation found numerous examples of conventional food labeled as organic within Wal-Mart stores, and state officials warned the retailer that such instances may be considered a violation of Wisconsin law.
Wal-Mart is also beginning to affect the actual process of organic farming. The retailer depends heavily on “factory farms” that have questionable histories within the organic community – dairies such as Aurora Organic Dairy (Aurora and Wal-Mart entered into a contract in 2006) are being investigated for confining cattle in feedlots with little to no access to pasture as required by the National Organic Standards. Many of these large industrial dairies import their feed from countries such as China and Brazil, and in reality are neither organic nor environmentally sustainable. Wal-Mart is also increasingly importing more and more finished product from China, worrisome on many levels as China’s industrial advancement has created serious pollution and toxic waste risks – toxic sludge is commonly dumped in mass quantity into the Yellow River and its tributaries, the water from which is then used for crop irrigation. Also troublesome is the reality that in countries such as China where many cheaper organic products are outsourced from, organic and labor standards are much, much lower than here in the United States.

What is especially worrisome, however, is that Wal-Mart’s green initiatives have diverted attention away from its most damaging source for pollution – American drivers. Big box retailing is a fundamentally unsustainable method of distributing goods to consumers, and as the big box retail sector has grown, so have the number of miles consumers are forced to travel while running errands. In 2005, Wal-Mart published a calculation of its own carbon footprint, revealing that its U.S. operations were responsible for 15.3 million metric tons of CO₂ emissions. Estimates show a substantial increase in 2006, to 19.1 million metric tons of CO₂. What both carbon estimate failed to include was the enormous source of CO₂ inherent to its daily retail operations, and at the very least equal to all of its other greenhouse gas production combined – carbon dioxide produced by consumers driving miles and miles to its stores. Even as energy saving measures are being integrated into store design, Wal-Mart’s carbon footprint continues to grow.

Moreover, as stated above, Wal-Mart’s new stores will use more energy than its energy-saving measures will save. Wal-Mart hopes to cut CO₂ emissions by 2013 via making its existing stores 20 percent more efficient. New stores built in 2007 alone, however, will consume enough electricity to add approximately 1 million metric tons of CO₂ to the atmosphere. At that rate – adding an additional 1 million metric tons of CO₂ per year because of new stores – by 2013 Wal-Mart will be offsetting its goal to reduce by 20% its greenhouse-gas footprint at existing stores by adding 28 million metric tons of new emissions through expansion over the same time period. And Wal-Mart, which set a goal for new stores to be 30% more efficient by 2009, has already dropped that target to 25% according to a new article in Fast Company Magazine.

Wal-Mart’s Quiet Support of Anti-Environment Candidates

Earlier this year, Friends of the Earth and Corporate Ethics International released a report detailing Wal-Mart’s political campaign spending. The report found that despite preaching lofty environmentally-friendly goals, Wal-Mart continues to support political candidates who oppose environmental protection. When combined with the negative effects of supercenter expansion, Wal-Mart’s environmental efficiency initiatives appear flawed at best, and at worst woefully inadequate. Using information from the Federal Election Commission and OpenSecrets.org, the report reveals that during the 2006 election...
cycle Wal-Mart’s political action committee supported 33 Members of Congress who scored a 0% on the League of Conservation Voters National Environmental Scorecard (http://www.lcv.org/scorecard/), and sixty-six percent of Wal-Mart contributions went to 173 Members of Congress who received a failing grade of under 50%. Wal-Mart also contributed to 187 Members of Congress who voted against improving fuel efficiency standards for cars and light trucks.

The LCV scorecard is a widely accepted measure of where members of Congress stand on issues including energy, global warming and clean-water protections. Wal-Mart’s political action committee is the 3rd largest such committee in the United States, and the largest in the retail industry. The key to this is simple – by supporting global warming reduction proposals and announcing green initiatives on one hand, while sending hundreds of thousands of dollars to political candidates whose environmental records are questionable at best on the other, Wal-Mart has created two very different and competing positions when it comes to its relationship to the environment.


Comprehensive Impact Reports

When faced with the prospect of a Wal-Mart moving into their city or town, the best thing legislators and citizens can arm themselves with information. Economists can debate whether the costs of large retail development outweigh the benefits, but the surprising reality is that cities often make decisions over whether to approve retail projects without any objective information about the effects they are likely to have on other businesses, jobs, wages, or the environment.

In June, Maine Governor John Baldacci signed into law the Maine Informed Growth Act, a law requiring developers of retail stores in excess of 75,000 square feet to provide independent studies of the proposed development’s impact on municipal services and local business, and then, in the case of large development such as a Wal-Mart supercenter, review of a variety of additional information including environmental impact. If the proposed store will cause a quantifiable undue adverse impact and will have a harmful impact on the community overall, approval for the development could be denied.

The Maine Informed Growth Act is the first of its kind in the United States. The law requires that developers deposit $40,000 with the state for use by the appropriate city or town to pay for a study of the development’s impact on the community. After taking into account the study’s findings, additional reviews and holding public hearings, a town can only approve a large-scale retail project of over 75,000 square feet if it finds that there would be no undue impact on the local economy. According to The New Rules Project, which helped push for passage of the Informed Growth Act, the act ensures that even in areas zoned for commercial development, citizens and local officials will have the chance to assess big-box development and make educated decisions about whether to approve or deny such projects. Language explicitly requiring review of environmental impact was removed before final passage, though the legislation works in conjunction with other state requirements, including a Maine
Department of Environmental Protection regulation requiring review of developments that may have a substantial effect upon the environment.

Attempts at similar legislation have been made in other states, to this point falling short of passage. According to the New Rules Project’s Economic Impact Review, similar bills fell in California and Montana, and are currently pending in New Jersey and Oregon. Several cities and towns, however, now require comprehensive economic and community reviews.\textsuperscript{97} The following provides brief summaries from these states:

**New Jersey**\textsuperscript{98}

Introduced in February 2006 to the New Jersey Assembly, A2701 would require a regional impact report before a store over 130,000 square feet, containing more than 25,000 items for sale, and which derives more than 10% of total sales from the sale of nontaxable merchandise could be approved. A similar bill, A3504, was introduced in 2004 but did not make it out of committee. The impact report would look at the extent to which the proposed store would capture a share of the region’s retail sales; how it would affect retail vacancy rates; its impact on wage and benefit levels; the cost of providing public services to the new store; its impact on existing retail businesses; and its effect on the number of vehicle miles residents travel for shopping. The report would also look at the effect the store will have on the surrounding county, and could only be approved if the city determines that the store would not cause “substantial detriment to the general welfare of the adjoining municipality based on the specific areas of intermunicipal concern raised” and that it would not impair the “intent and purpose of the master plan or zoning ordinance of the adjoining municipality.” A2701 has been referred to the Assembly State Government Committee.

**Oregon**\textsuperscript{99}

Introduced on February 2, 2007, Senate Bill 542 would provide that cities and counties may not approve retail stores over 00,000 square feet without a completed economic impact study and public hearings. An independent reviewer would be chosen by the city/county, and the report would be paid for by the developer. The report would analyze the effect on local businesses, jobs, wages, public revenue, public services, retail vacancy rates, and the number of shopping-related vehicle miles traveled by consumers. SB 542 has been referred to the Business, Transportation and Workforce Development Committee, and remains in committee upon adjournment as of June 28th.

**California**\textsuperscript{100}

Senate Bill 1523 passed the California legislature in August of 2006, only to be vetoed by Governor Arnold Schwarzenegger. The law would have required cities to commission impact reports for any store larger than 10,000 square feet, the cost of which would be paid by the city and reimbursed by the developer. The reports would have assessed the impact on existing businesses, jobs, wages, retail vacancy rates, public services, and shopping-related vehicle miles traveled by consumers in the region. Once the report was finished, a public hearing would have been held to provide information on the store’s predicted impact to the general public.

**Montana**\textsuperscript{101}

HB 652 was introduced on February 12, 2007, and referred to the House Committee on
Business and Labor. The bill was tabled and died in Standing Committee in April 2007. The bill was designed to allow communities to be able to compare development proposals and decide which they preferred. The bill would have allowed a retailer to implement the default state community benefits package described in the bill, or to negotiate an alternative agreement with a county government which would include preparing a local economic impact statement and an environmental impact statement. The large retailer or developer would compensate the county for the costs of the statements.

**Vermont**

Vermont has had its own strict natural resource regulations for over three decades. Vermont Act 250 (1970) requires a regional environmental and fiscal impact review of large-scale development. Act 250 requires developers of projects covering 10 or more acres of land to obtain a land use permit from one of Vermont’s District Environmental Commissions. The law places strict criteria that must be met regarding water and air pollution, energy conservation, soil erosion, and specifies that developments must not place unreasonable fiscal burdens on the ability of local governments to provide education and other services, must not exhaust the town's ability to accommodate growth, and must be consistent with local land use policies.

**The Benefits of Impact Studies**

When impact studies are a standard part of the development review process, legislators and citizens alike can feel confident that they are evaluating an independent and comprehensive review of the development’s costs and benefits. In particular, regardless of whether the development is a new supercenter or (much more rarely) a new distribution center, mandatory impact studies can reveal the effects it will have on the local (and beyond) environment. The environmental issues that turn up can include degradation in wetland areas; impact on habitat and species present; reduction in flood regulation, water filtration, erosion control and other ecosystem services; light pollution from the parking lot; water pollution and storm water runoff; reduction in ground water; energy use; air pollution; and urban sprawl.

It’s important that impact reports not be approved until they are prepared completely and accurately. On many occasions, Wal-Mart has been forced to re-submit reports because potential adverse impacts to a neighborhood and the environment are not satisfactorily analyzed and mitigated. California’s 5th District Court of Appeal invalidated two environmental impact reports under the California Environmental Quality Act for failing to consider the potential for each project to indirectly cause urban decay by precipitating store closure and long-term vacancies in existing shopping centers, and for failing to acknowledge the potential human health effects from air quality impacts caused by the development.

Potsdam, New York, has been the site of a particularly contentious fight between Wal-Mart and local residents, and environmental studies have brought into focus the kind of environmental impacts that the proposed supercenter would have on the local ecosystem:

**Air Pollution** • Studies suggested that traffic volume would increase around the development by at least forty-six percent (46%), increasing the pollution from vehicle emissions the effects of which would touch much more than the immediate area.
Light Pollution • The artificial light from a 24-hour supercenter and its accompanying 900-1000 space parking lot can create “sky glow,” which can have a negative effect on insects, fish, birds and animals, by disrupting normal feeding and mating patterns and leaving certain species more open to predators.107

Energy Use • The 24-hour supercenter was estimated to require 96.5 MBTU of energy per day, or nearly three times the average use by a residential home in the United States each year – the incorporation of energy-efficient bulbs and skylights could reduce this usage.108

Wetlands • Destruction or the filling in of surrounding wetlands would, among other things, impact the ability of the ecosystem to regulate flood waters and filter or process pollutants, as well as causing population declines in the species of animal present.109

Storm Water Runoff • A major contributor to water pollution, runoff washes excess nitrogen and phosphorous into waterways, harms aquatic habitats, threatens human health by degrading public drinking water, and can contain abnormally high levels of chemical pesticides and insecticides. Development of a supercenter could result in over twenty acres of field or forest being converted into impervious surfaces.110

Conclusion

Environmental issues are taking their place on the front pages of newspapers across the globe. Scientists are finding that a warmer, CO₂-rich world will be very good news for everything from plants that produce allergenic pollen to mosquitoes carrying tropical diseases such as malaria.111 Pollen counts for allergenic trees and grasses are rising earlier each year, and higher levels of ozone that accompany higher temperatures are increasing the rates of asthma and causing heart and lung damage comparable to living with a cigarette smoker.112 That’s good news for mosquitoes and plants, but bad news for us.

Recently, the Supreme Court even rebuked the White House for refusing to regulate greenhouse gas emissions, siding with environmentalists in Commonwealth of Massachusetts v. Environmental Protection Agency, the Court’s first examination of global warming.113 Former U.S. Vice-President-turned-environmentalist Al Gore denounced a deal by world leaders to curb greenhouse gases at the recent G8 Summit as “a disgrace disguised as an achievement,” after G8 leaders agreed to negotiate a new global climate pact beyond 2012, the first stage of the Kyoto Protocol, but failed to agree on concrete emission reductions commitments.114

The world’s water supply is faring no better than its air. Across the U.S., everyday contaminants are causing some disturbing effects on aquatic wildlife.115 Across the globe, countries such as China and India – not surprisingly the home of factories that supply a large proportion of Wal-Mart’s goods, not to mention a target of expansion for the mega-retailer – face daily life where simple clean water is now a precious commodity.116 In China, the Yangtze River – the third longest river in the world – is so polluted that by 2011, it may no longer be able to sustain aquatic life, much less support human populations.117 The Yellow River in northern China is a mere trickle compared to its former self, and likewise is often unusable for human use.118
We bring up these issues because, while Wal-Mart was barely mentioned in the last three paragraphs, the retail giant affects each and every one of these issues. Its fleet of trucks, massive overseas shipping to import its goods, and the increasing vehicle miles traveled by its consumers all contribute heavily to CO$_2$ emissions and the number of ozone-causing particulates released into the air. Its huge stores and even larger parking lots contribute to the degradation of our water supply, affecting our drinking water and the viability of aquatic life. Its support of anti-environment candidates has helped forward the policies of the current Bush Administration, the same Administration rebuked by the Supreme Court and the former Vice President within the past few months for its handling of environmental policy.

One thing this paper seeks to accomplish, beyond providing counterarguments to Wal-Mart’s celebrated green initiatives, is to point out that tools are available that will allow citizens and state legislators to successfully evaluate the environmental costs of proposed development. New state legislation can highlight the true costs of big box development and provide communities with the tools and informa-
tion to create and maintain vibrant, just, and sustainable local communities and economies.

Appendix A

Wal-Mart's History of Environmental Violations

Connecticut Sues Wal-Mart for Environmental Violations
In May 2000, Connecticut Attorney General Richard Blumenthal announced a lawsuit against Wal-Mart for environmental violations at eleven stores in Connecticut. Multiple inspections by the Connecticut Department of Environmental Protection found that Wal-Mart was illegally discharging storm water without a permit, had failed to develop a required storm water management plan, failed to provide necessary employee training, and failed to maintain water detention basins. The state would later amend the lawsuit to include additional violations – it was found that the retailer was operating without the appropriate permits needed for wastewater and vehicle maintenance activities, in addition to discharged wastewater from several dumpsters and garden centers. The number of stores in violation also doubled to 22.

In August 2005, the Connecticut Department of Environmental Protection and Attorney General’s Office entered into a $1.15 million settlement with Wal-Mart for the above violations. Of the settlement, Attorney General Blumenthal said; “Wal-Mart’s environmental record here seems as low as its prices – proven violations at 22 stores in Connecticut. Big as it is, Wal-Mart failed to get it right…We’re holding Wal-Mart accountable for systemic, repeated violations across the state.”

U.S. Justice Department and EPA Reach Settlement with Wal-Mart
In June 2001, the U.S. Justice Department and U.S. Environmental Protection Agency reached a settlement with Wal-Mart to resolve claims that the retailer violated the Clean Water Act at 17 stores in Massachusetts, Oklahoma, Texas, and New Mexico. It settled the first federal enforcement action against a company for multi-state violations of the Clean Water Act’s storm water provisions in history. The settlement required Wal-Mart to establish a $4.5 million environmental management plan, and also included a $1 million civil penalty. U.S. officials had alleged that Wal-Mart and 10 of its contractors failed to comply with storm water regulations and illegally discharged pollution from several construction sites. In 1998, the EPA identified runoff and storm sewers as leading causes of impaired water quality in the United States.

In May 2004, Wal-Mart settled a second federal lawsuit revolving around similar storm water violations. The $3.1 million settlement involved 24 stores in nine states and was the largest of its type in history. Despite the previous settlement in 2001, follow-up inspections at 24 stores revealed that violations continued, including discharges of sediment into sensitive waterways, failure to install and/or maintain sediment and erosion control devices, and failure to develop and/or implement a storm water pollution prevention plan.

Wal-Mart Under Investigation for Illegally Transporting Hazardous Waste
Environmental violations are clearly ongoing; Wal-Mart is currently the target of criminal, civil and administrative investigations for possible violations of state and federal environmental and transportation laws. Wal-Mart policy is to ship all unsold or returned products to return centers, where prod-
ucts are then sorted out for disposal, and often this involves transporting those products across state lines. The retailer is under investigation for ignoring laws designed to protect the public and the environment from hazardous chemicals that are potentially dangerous if not handled and disposed of correctly.

To this point, it is believed that Wal-Mart has used uncertified trucks to transport potentially hazardous waste originating in California to a return center in Las Vegas, Nevada. This transportation could potentially violate state law in Nevada and California, in addition to federal statutes:

1. **California State law** – California requires companies to pay fees for hazardous waste disposal and use designated hazardous materials trucks to transport it. The California Attorney General’s Office as well as the Los Angeles County State’s Attorney have begun investigations to determine if Wal-Mart has avoided paying disposal fees and unlawfully used its own trucks to transport hazardous waste.

2. **Nevada State law** – Under Nevada law, the Las Vegas Wal-Mart return center is only legally permitted to accept waste originating within Nevada’s boundaries. The Nevada Attorney General is currently investigating whether Wal-Mart violated this law by transporting potentially hazardous waste from California across the border into Nevada to dispose of at the Las Vegas return center.

3. **Federal violations** – The U.S. Attorney for the Central and Northern District of California has notified the company of pending investigations into possible violations of several federal statutes. These include the Resource Conservation and Recovery Act, the Hazardous Materials Transportation Act, and The Clean Water Act.

**California Orders Wal-Mart to Pay Pesticide Fines**

Earlier this year, the California Department of Pesticide Regulation (“DPR”) informed Wal-Mart it must pay more than $1.2 million in fines and fees related to pesticide sales. In 2005, the DPR announced a preliminary investigation of Wal-Mart, and found unlicensed pesticide products and unpaid mill fees. The mill fees are an environmental fee – a 2.1 cent-per-dollar assessment on the first sale of pesticides in the state – that supports pesticide enforcement, health and safety, and other DPR environmental programs. According to the California DPR, Wal-Mart refused to pay mill fees on more than $57 million in pesticide sales.

**Settlement Resolves Ozone-Depletion Violations of the Clean Air Act**

In January 2004, the Justice Department and the EPA announced a settlement with Wal-Mart Stores and Sam’s Club for violations of the Clean Air Act. Wal-Mart agreed to pay $400,000 in civil penalties for selling refrigerants that contained ozone-depleting substances at Sam’s club stores in eleven states. It was alleged that Sam’s Club stores were selling the refrigerants to customers not certified to use or handle such refrigerants.

**Storm Water Violations in Puerto Rico**

Wal-Mart was recently fined $24,000 in penalties for not preventing rain water from washing sediment
and pollution into waterways at a construction site in Caguas, Puerto Rico. Wal-Mart once again violated the Clean Water Act by failing to obtain the appropriate permits, failing to develop a plan to control storm water pollution, and failing to prepare and maintain inspection records. As part of the settlement agreement, Wal-Mart also must provide at least $98,000 for the preservation of land in a threatened region of the San Juan Bay Estuary Watershed, to be maintained as an environmentally protected area.

**Illinois Fines Wal-Mart for Environmental Violations**

Illinois Attorney General Lisa Madigan and the Illinois Environmental Protection Agency announced in February 2006 civil penalties of $75,000 against the retailer for violations during the construction of a supercenter in Antioch, IL. Wal-Mart’s erosion control measures were incapable of containing storm water on the construction site, resulting in overflow that eventually ended in neighboring wetlands and East Loon Lake, both of which are part of the Fox River watershed. It was also alleged that additional water pollution hazards had been created by dirt and silt running into the wetlands from clay building materials, and that Wal-Mart failed to provide the IEPA with reports required under the terms of the National Pollution Discharge Elimination System storm water permit granted prior to construction beginning.

**Georgia Fines Wal-Mart for Contaminating Atlanta Water**

In 2004, the Environmental Protection Division of the Georgia Department of Natural Resources fined Wal-Mart for failing to implement required erosion, sedimentation and pollution control plans. Wal-Mart was found to have violated the Georgia Water Quality Control Act (including Surface Water Allocation) and was fined $160,000.

Issues with Wal-Mart and water quality stretch back nearly a decade. In 1998, the Pennsylvania Department of Environmental Protection levied $100,000 in civil penalties against the company for violating erosion and sedimentation regulations and practices as well as wetlands violations in Wayne County, Pennsylvania. As a result of the Wayne County violations, three separate stop-work orders were issued at the construction site, and a hold was placed on all new permits for Wal-Mart construction sites throughout the Commonwealth of Pennsylvania.

**Storage Tank Violations in Florida**

In 2004, Florida fined Wal-Mart $765,000 for violating petroleum storage tank laws at its auto service centers. In 2003, the Florida Department of Environmental Protection began investigating all of Wal-Mart’s petroleum storage tanks within the state for possible violations. Beginning in 1998, owners of land with above-ground storage tanks were required to register with state environmental inspectors and prove they have the financial resources to clean up any spills or leaks that might occur.

According to the Wal-Mart consent order, the retailer failed to register its above-ground fuel tanks with the state and didn’t install devices that prevent overflows, among other problems. Wal-Mart also did not perform monthly monitoring, lacked current technologies to prevent overflows, blocked state inspectors from reviewing maintenance records, and failed to submit proper insurance documentation.
Appendix B

Additional Links

Center for Clean Air Policy • http://www.ccap.org/
The Cornucopia Institute • http://www.cornucopia.org/
Institute for Local Self Reliance • http://www.ilsr.org/
The New Rules Project • http://www.newrules.org/
Pennsylvania Land Use Coalition • http://www.paluc.org/
The Sierra Club • http://www.sierraclub.org/
Sprawl-Busters • http://www.sprawl-busters.com/
Vermont Natural Resources Council • http://www.vnrc.org/
Vermont Wal-Mart Watch • http://www.vermontwalmartwatch.org/walmart_plan.html
Wal-Mart Action Team • http://www.mercedalliance.org/
Wal-Mart Realty • http://www.walmartrealty.com/

State/Federal Government Links

California Air Resource Board • http://www.arb.ca.gov/homepage.htm
Georgia Department of Natural Resources • http://www.gadnr.org/
Maine Department of Environmental Protection • http://www.maine.gov/dep/index.shtml
Pennsylvania Department of Environmental Protection • http://www.depweb.state.pa.us/dep/site/default.asp
United States Department of Transportation • http://www.dot.gov/
United States Environmental Protection Agency • http://www.epa.gov/

State Legislation

Maine Informed Growth Act • http://www.newrules.org/retail/mirme.html
Vermont Act 250 • http://www.nrb.state.vt.us/lup/index.htm
California Senate Bill 1523 • http://info.sen.ca.gov/cgi-bin/postquery?bill_number=sb_1523&sess=PR EV&house=B&site=sen
Montana House Bill 652 • http://laws.leg.mt.gov/pls/laws07/law0203w$.startup
New Jersey A2701 • http://www.njleg.state.nj.us/
Oregon Senate Bill 542 • http://www.leg.state.or.us/searchmeas.html
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Endnotes

10 Ritchie, supra note 8.
11 Vermont Wal-Mart Watch, supra note 7.
14 Sierra Club, supra note 12.
15 Id.
16 Vermont Wal-Mart Watch, supra note 7.
17 Mitchell, supra note 13.
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19 Mitchell, supra note 4.
20 Big Box Toolkit – Impact of Big Box Stores on Traffic. Online at: www.newrules.org.
21 Center for Clean Air Policy. “A Study of Land Use, Transportation, Air Quality, and Health in King County, WA.” September, 2005.
22 United States Department of Transportation. “National Household Travel Survey.”
24 Id.
25 Id.
27 Id.
30 Id.
Pearce, supra note 28.


Id.


Id.


Stringer, supra note 39.

www.walmartrealty.com (last visited March, 2007)


Bishop, supra note 40.

See Appendix A for a sample of Wal-Mart’s environmental violations.


Id.

Id.


Id.


Id.


Online at: http://www.valueneuwsnetwork.com/blog.cfm?id=42.


Charles Fishman. “How many light bulbs does it take to change the world? One. And you’re

64  Id.
65  Id.
67  Id.
68  Id.
70  Id.
72  Id.
73  Id.
74  Gogoi, supra note 60.
76  Kastel, supra note 62.
77  Id.
78  Id.
79  Zeiss, supra note 45.
80  Mitchell, supra note 23.
81  Id.
83  Mitchell, supra note 23.
84  Mitchell, supra note 4.
85  Id.
86  Fishman, supra note 49.
88  Id.
89  Id.
91  Id.
93  Id.
94  Id.
95  The Maine Department of Environmental Protection’s “Site Law” requires review of developments that may have substantial effect upon the environment. These include projects occupying more than 20 acres of land, oil terminal facilities, and large structures and subdivisions. Online at: [http://www.maine.gov/dep/blwq/docstand/sitelawpage.htm](http://www.maine.gov/dep/blwq/docstand/sitelawpage.htm).
Examples online at: http://www.newrules.org/retail/impact.html.


Oregon Senate Bill 542 (2007), online search available at: http://www.leg.state.or.us/search-meas.html.


“Fifth District Court Finds EIRs Prepared for Two Projects Containing Wal-Mart as Anchor Tenant Inadequate under CEQA.” California Land Use Law & Policy Reporter (February 2005).


F-E-S Associates, APD Engineering, Northern Ecological Associates, supra note 100.


Id.


Id.

Id.


Id.


Id.

Id.

Id.


Id.

Id.

Id.

Id.

26

130 U.S. Environmental Protection Agency, supra note 8.
131 Wal-Mart 2006 Annual Report (p.44).
December 21, 2005.
133 Id.
134 Id.
135 Id.
141 Glenn Brank. “DPR finds $34 million in unreported pesticide sales, receives more than $700,000 in penalties.” CA Department of Pesticide Regulation News Release, July 25, 2006.
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144 Environment News Service. “Wal-Mart penalized for storm water violations in Puerto Rico.” En-
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146 Id.
148 Id.
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157 Id.