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ASSESSING THE ENVIRONMENTAL RISKS OF THE WATER BOTTLING INDUSTRY'S EXTRACTION OF GROUNDWATER

HEARING

BEFORE THE

SUBCOMMITTEE ON DOMESTIC POLICY

OF THE

COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM

HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

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ASSESSING THE ENVIRONMENTAL RISKS OF THE WATER BOTTLING INDUSTRY'S EXTRACTION OF GROUNDWATER

WEDNESDAY, DECEMBER 12, 2007

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON DOMESTIC POLICY,
COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM,
Washington, DC.

The subcommittee met, pursuant to notice, at 2:05 p.m., in room 2154, Rayburn House Office Building, Hon. Dennis J. Kucinich (chairman of the subcommittee) presiding.

Present: Representatives Kucinich, Shays, and Issa.

Also present: Representative Watson.

Staff present: Jaron R. Bourke, staff director; Charles Honig, counsel; Jean Gosa, clerk; Natalie Laber, press secretary, Office of Representative Dennis J. Kucinich; Leneal Scott, information systems manager; Chris Mertens, intern; Alex Cooper, minority professional staff member; Larry Brady, minority senior investigator and policy advisor; and Benjamin Chance, minority clerk.

Mr. KUCINICH. Good afternoon. I am Congressman Dennis Kucinich, chairman of the Domestic Policy Subcommittee of the Committee on Oversight and Government Reform. The committee will now come to order. With me here is the ranking member of the committee, the Honorable Darrell Issa of California. And he and I will be participating in this hearing, examining the environmental issues presented when water bottling plants extract groundwater and spring water from water sources in rural communities.

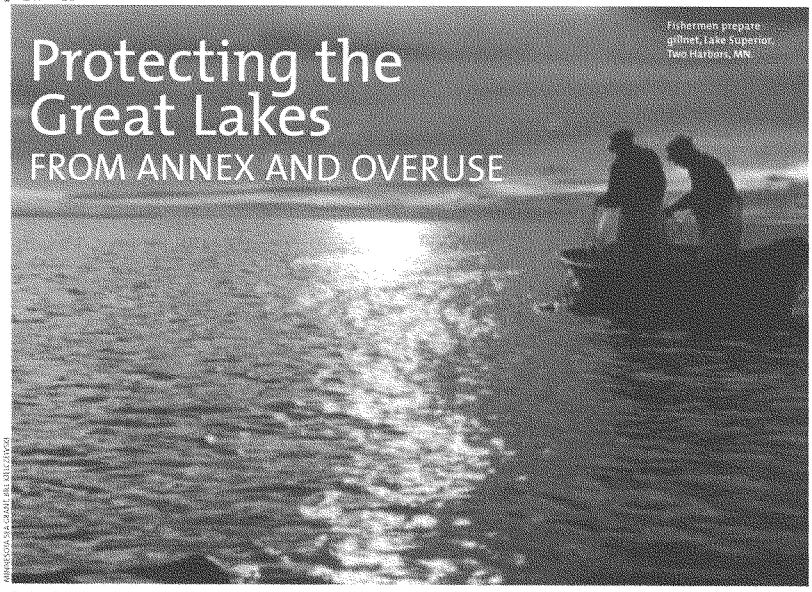
Now, without objection, the Chair and the ranking minority member will have 5 minutes to make opening statements, followed by opening statements not to exceed 3 minutes by any other Member who seeks recognition. And without objection, Members and witnesses may have 5 legislative days to submit a written statement or extraneous materials for the record.

I have long had an interest in issues relating to water and water supplies. As a matter of fact, in a Spring 2006 issue of Waterkeeper Magazine, I wrote a piece explaining my concerns about the annexation and overuse of waters in Lake Erie and the Great Lakes, which is the largest source of fresh water in this country. And without objection, I would like to submit that article for the record.

[The information referred to follows:]

GREAT STAKES

Protecting the Great Lakes
FROM ANNEX AND OVERUSE



Fishermen prepare gillnet, Lake Superior, Two Harbors, MN.

MINNESOTA DEPT. OF NATURAL RESOURCES

By U.S. Representative Dennis J. Kucinich

The Great Lakes inspire a strong connection with the millions of people who live on her shores. Connecting with the Great Lakes is personal as well as collective. In my lifetime, the Great Lakes have been a source of recreation and sustenance, as well as conscience-calling moments. I'm thinking of the shameful chapter in history when the Cuyahoga River, which empties into Lake Erie, caught fire. Our awareness and behavior changed as a result.

Today, a threat that could eclipse the more commonly known threats, like chemical contamination and invasive species, now confronts us. The ongoing challenges of overuse and systematic under-replenishment could now be catastrophically magnified by new trade laws that will exacerbate, not solve, the problem. I am concerned about the future of the Great Lakes.

Maintaining the quantity of water in the Great Lakes is a well-established problem. There are several major diversions and withdrawals already allowed under law, including a diversion of water for the City of Chicago, which pulls two billion gallons per day from Lake Michigan. Urban sprawl has created new demands for water while robbing aquifers of the chance to be replenished (by paving over previously permeable ground). Water supplies that are contaminated or depleted need to be replaced. In 2004, the U.S. Geological Survey found that ground water is now flowing away from Lake Michigan instead of replenishing it.

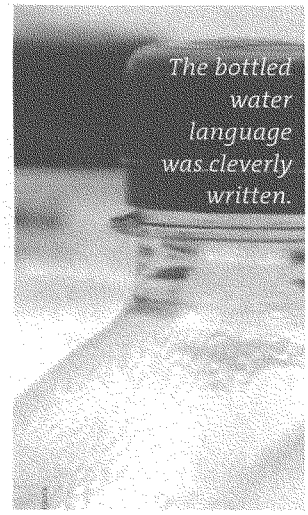
There are good reasons to think the demand for this already strained water source will increase significantly. Most educated guesses say that evaporation resulting from increased temperatures associated with climate change will result in significant water losses. The population in the basin is expected to grow from 34 million to 50 million people in the next 30 years. Many experts fear that the thirsty and rapidly growing southwestern U.S. will need water so desperately that it will soon become financially viable for them to divert it from the Great Lakes. And that region is expected to experience more frequent, prolonged and more severe droughts as a result of climate change.

Finally, and perhaps most perniciously, attempts to privatize Great Lakes water pose an unprecedented threat. Currently, the only way anyone can withdraw or divert water from the Lakes in significant quantities is to get the approval of every governor of all eight states in the Great Lakes basin. Acknowledging that some diversions of water for the public good may be necessary, the eight Great Lakes governors and two Canadian premiers in the Great Lakes basin decided there should be guidelines created to specify the conditions under which an entity can be expected to get approval for a new or increased withdrawal. The negotiations between the Great Lakes Governors and Premiers, which concluded in December of 2005, proposed groundbreaking levels of protection as written in the Annex Implementing Agreements (Annex). Unfortunately, bottled water companies also managed to leave themselves a loophole that could pave the way for a massive privatization and export of Great Lakes water.

The bottled water language was cleverly written. The Annex needed to respond to the widespread desire for a ban on diversions that was exemplified by the public outcry that squashed two recent efforts by companies to privatize Great Lakes water in bulk. "In bulk" is the key. The language

redefines water that is in containers of 5.7 gallons (20 liters) or less as a product, not a natural resource managed by the public for the benefit of the public. It therefore exempts bottled water from the ban on bulk water withdrawals. In other words, in order to export a seemingly indefatigable amount of water and make a handsome profit from it, you need only to put it in bottles instead of trucks or enormous tankers. It is a loophole big enough to float a tanker through.

Once Great Lakes water is legally defined as a commodity instead of a public resource, the door to private gain at the expense of public benefit is pried open a few inches. After that comes the effort to swing it wide open. Laws or regulations that may be designed to protect an essential natural resource like the Great Lakes can be challenged in court by businesses because they are restricting trade. For example, let's say that Ohio decided that excessive withdrawals by a bottled water company were irreparably damaging the Great Lakes and they decided to reduce or stop the withdrawals. The company, knowing the water was a product and not a public resource, would be able to use the Commerce Clause of the Constitution or the North American Free Trade Agreement (NAFTA) to challenge Ohio's efforts to protect the Lakes. In fact, NAFTA gives companies the right to sue governments in situations like this for future profits they might lose. That would have the chilling effect of discouraging all governments from trying to protect the Great Lakes. Indeed, once water is a legal "product," even the part of the Annex that provides worthwhile protection of the Lakes could be challenged. We could be left with private control over much of a life-giving resource.

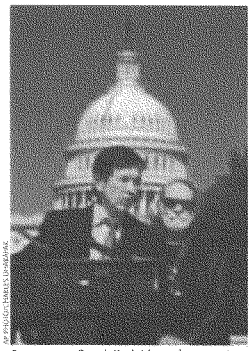


Privatization of a commons is often destabilizing and regressive. The resource becomes less reliably accessible and its quality can decline because public oversight is absent. A formerly free resource can then become too expensive for the most vulnerable to afford. In fact, this is a primary reason that myriad communities in the U.S. and all over the world have fought efforts to privatize water systems.

Furthermore, contrary to what ideological conservatives often espouse, privatization frequently decreases efficiency. For example, the added costs of profit, CEO salaries, marketing and administration can be a strong driver of increased costs. By encouraging Great Lakes water to be shipped in smaller bottles, the privatization loophole in the Annex creates incentives for tremendous waste. The plastic in water bottles is made from petroleum, bringing the social, political and environmental problems that come with it. The manufacturing process creates hazardous and toxic waste like vinyl chloride. Plastic bottles require hundreds of years or more to degrade in a landfill with no light or water to aid in their breakdown. And wherever trash is burned, plastics create highly toxic dioxins that are released into the air, falling down on our soil and roofs. Thanks to countless studies, we now know the toxic waste from the manufacturing and disposal process is disproportionately borne by people of color.

There is another equity component to consider. The Annex rightly contains requirements for the public to reduce its water usage in recognition of the fact that we are already withdrawing more than is sustainable. We will be asked to take shorter showers, install water saving fixtures, load our dishwashers more fully and water our lawns more judiciously. These are low effort, high return behavior modifications that we, as citizens, can do to help take care of the natural world on which we depend for life.

But the Annex puts the water saved by the collective actions of conscientious Great Lakes residents into millions of bottles and ships them out of the Great Lakes basin. Where conservation efforts would normally go to enhancing the public good in the form of restoring flows to the Great Lakes, they would now go to the profits of bottled water companies and their parent companies. It sets into international law the untenable idea that peoples' personal sacrifices benefit corporations rather than the common good. This could be the end of environmental altruism. It is a dangerous precedent to set. As President Franklin Delano Roosevelt said, "The test of our progress is not whether we add more to the abundance of those who have much; it is whether we provide enough for those who have too little."


AP PHOTO/CHARLES DHARAPAK

Congressman Dennis Kucinich speaks as country music legend Willie Nelson looks on during a news conference about the importance of revitalizing family farming on Capitol Hill Wednesday, Oct. 6, 2004. They said that the government must commit all necessary resources to encourage growth in family farming and protect farmers so that they can continue to be economically viable.

The next step for the Annex is that it has to be approved by each of the Great Lakes state and provincial legislatures. If it moves through unchanged, Congress then approves it. If any state amends it, it will have to go through each of the other state and provincial legislatures again. Since it took over five years for the Governors and Premiers to get it to this stage, there will be considerable resistance to making any changes. Fighting the bottled water loophole will not be easy. Powerful corporations will support it (and tout their green "credentials" in the process). But principled organizations like Waterkeeper, along with attentive community groups and elected officials like me are committed to protecting the Great Lakes, our common heritage, from privatization. I hope you will stand with us.

Mr. KUCINICH. Now, if we give any real thought when opening a bottle of spring water, maybe it is to congratulate ourselves on our healthy choice or to dream of a shrinking waistline. But it may come as a surprise that virtually every aspect of the bottling industry's extraction of groundwater, how much water to pump and from where to pump it, the effects of pumping on the surrounding environment and who should have the authority to make pumping decisions, all these things are often hotly contested. For a variety of reasons, bottled water is not like any other commodity. And the protection of our Nation's groundwater, often understood as held in public trust, involves many crucial issues of public interest.

Some of these issues will not be our main focus today, such as concerns about bottled water quality; the profit earned off water even as public water infrastructure is neglected; damage caused by the manufacture and disposal of the bottles; the propriety of transferring water resources out of a region or out of a country. Instead, we will focus on the environmental effects of bottling on local communities.

The domestic bottled water industry, which includes both distilled municipal water and spring water, has seen remarkable growth. Last year, Americans spent more than $10 billion on bottled water, which translates to an average annual consumption of 27 gallons per person, double the amount consumed just 5 years ago. This growth has been a boon to the industry. The largest bottler is Nestle Waters North America, which through rapid industry consolidation now controls 32 percent of the domestic market through its 14 different brands.

Because of the growing market for bottled water, bottlers are constantly looking for untapped watersheds in relatively undeveloped rural communities which disproportionately bear the brunt of pumping's environmental impacts. As our groundwater hydrologists will explain, for every gallon of water pumped out of the groundwater, there is one gallon of water lost to streams in the watershed. If the pumped water is not recharged, there is a real danger of what could be called groundwater mining, which the U.S. Geological Service describes as "a prolonged and progressive decrease in the amount of water stored in a groundwater system." Moreover, high capacity bottled water extraction in headwater locations can cause large percentage reductions in the flow of streams and rivers and the depletion of watersheds.

Bottlers may seek out private land owners or directly contract with a municipality to obtain groundwater rights for years or decades. The issue is complicated by the fact that many rural communities have an interest in the economic activity that has been promised by the water bottlers. And indeed, some communities support the location of bottling plants. Obviously, aside from the pure economic incentives, certain interests of the water bottling industry are aligned with those of the local communities. Both have an interest in protecting the pristine water sources. In other respects, however, these interests of bottlers and communities may diverge, such as the downstream effects on surface waters or the long-term visions of development and conservation.

Today we will hear from representatives of citizens groups that have opposed the location of bottling plants in their communities,

on the slopes of Mount Shasta in California, in Michigan and in rural New Hampshire. They have often been frustrated by a complex patchwork of laws that they believe does not adequately protect the public interest.

Traditionally, the vast majority of groundwater consumption is used for agriculture, mining and nonbottled municipal water. And groundwater use has been mainly regulated by the States. Under common law, groundwater has largely been regarded as a resource that can be extracted by anyone who owns the land above an aquifer or spring. The common law was formulated before modern science understood the connections between groundwater and surface water, and before the advent of large-scale mechanized pumping. As a result, it provides little protection for conservation.

Given the toothless nature of the common law, it is not surprising that States have enacted more comprehensive regulatory systems covering groundwater extraction. These come in a variety of forms. Some States like New Hampshire have enacted comprehensive laws. And we will also hear about new legislation passed in Maine and Michigan. These laws at best address the connection between groundwater and surface waters, mandate participation among those affected by pumping and call for increasing levels of security for larger withdrawals. At worse, State laws are woefully inadequate.

Although groundwater management is mostly a State concern, many of the important decisions about locating a particular plant are local, the Federal Government does have a role. For years, scientists and policymakers have called on better funding for the U.S. Geological Service so they can map and monitor groundwater and its connection to surface water. The Federal Government could, but generally hasn't, taken other steps to prod the States to better groundwater management. There is also the issue of whether Federal agencies adequately enforce Federal protections such as the Clean Water Act, the Wild and Scenic Rivers Act and the Environmental Protection Act, that are triggered when surface waters are imperiled by groundwater extraction. Finally, there is a concern that the Food and Drug Administration's definition of spring water, which purports to ensure water quality, actually creates incentives for pumping at the most environmentally damaging sites. As far as I am aware, this is the first congressional hearing on many of these issues, and it is my hope that the hearing will help the reform process at all levels of government. So thank you.

And at this time I would like to recognize Congressman Issa, the ranking member. Thank you, sir.

[The prepared statement of Hon. Dennis J. Kucinich follows:]

Opening statement
Rep. Dennis J. Kucinich, Chairman
Domestic Policy Subcommittee
Oversight and Government Reform Committee

"Assessing the Environmental Risks of the Water Bottling Industry's Extraction of Groundwater"

Wednesday, December 12, 2007
2154 Rayburn HOB – 2:00 P.M.

If we give any real thought when opening a bottle of spring water, maybe it is to congratulate ourselves on our healthy choice or to dream of a shrinking waistline. But it may come as a surprise that virtually every aspect of the bottling industry's extraction of groundwater—how much water to pump and from where to pump it, the effects of pumping on the surrounding environment, and who should have the authority to make pumping decisions—is often hotly contested.

For a variety of reasons, bottled water is not like any other commodity and the protection of our nation's groundwater, often understood as held in public trust, involves many crucial issues of public interest. Some of these issues will not be our main focus today: such as concerns about bottled water quality, the profit earned off water even as the public water infrastructure is neglected, damage caused by the manufacture and disposal of the bottles, and the propriety of transferring water resources

out of a region or out of the country. Instead, we will focus on the environmental effects of bottling on local communities.

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Mr. ISSA. Thank you, Mr. Chairman. What most of you who aren't here regularly don't know is the chairman and myself have been able to very effectively find issue after issue we agree on. When I say we agree on, we agree on the issues. We do not always agree on the outcome or the view. The chairman and I have been able to work together very well on finding good issues. This is certainly one.

In this case, I find it unfortunate that perhaps we are not looking at the underlying problem of bad potable water coming from our taps. That is probably my greatest concern here today, and we are not going to talk about it. Perhaps ancillarily, over time we will begin working on the issue. For example, here in the District of Columbia, if this water, as I suspect it did, did not come from a bottle, and is simply being disguised by being put into this carafe but in fact came out of the tap, please don't drink it. The amount of lead in our water is such that on a repeated basis each generation is told the previous generation didn't do enough. We have relined. We have done all kinds of things, but at the end of the day, and my staff behind me reminded me, the District of Columbia recently sent Brita filters out to take care of the accumulation of lead you will have if you drink that water. This is a problem in the District of Columbia and around the country.

Earlier, in the previous Congress, we dealt with arsenic. Dealing with arsenic meant essentially the pumps in New Mexico and other places were shut off, and people were forced to bring their water in from other areas. We have a serious problem of delivering quality drinking water, consumable water in this country. To a lesser degree, we have a problem delivering water for nondrinking purposes.

Mr. McFarland, I appreciate the fact you are from Shasta. I am a Southern Californian. It is no surprise that southern California, accused of killing fish and stealing water from the north, might at times recognize that California is, if you will, ground zero for this problem. Northern California has over four times the rain and snowfall that southern California has, while southern California has a majority of the population. Notwithstanding the attempts to build canals and to move water from the north to the south, far greater than all the bottled water that is being taken out of groundwater in California, far greater, and as a result, we could assume that what doesn't go into the ground in northern California and comes through peripheral and other canals doesn't go into the groundwater. California has been having this argument for in excess—well, I came to California—I will be honest—I came to California in the 70's. It was the hot topic then. It is the hot topic today.

Realizing that these problems in California and around the country will not easily be solved, I am an advocate for any system that guarantees healthy drinking water for our citizens. I have questions for today that will not be answered.

And Ms. Paul, I am not letting you off the hook. I still can't figure out why between drinking water and Starbucks coffee, gasoline seems like a deal from OPEC. There is a high cost of delivery of water through little bottles and so on. And I think that is a problem. The chairman pointed out in his opening statement that the

question of disposal of tens of millions of little plastic bottles, not just every year but every month, is a real problem in America; the need to come up with an aggressive recycling plan; the need to, if not regulate, certainly ensure that bottled water and other forms of water delivered around the public systems are at or greater in quality to those that can be received from the tap.

I thank the chairman for his bringing up this point today because it does open a dialog for the first time by this committee and, as far as I know, for the first time recently in Congress, to the fact that safe drinking water, affordable drinking water and sustainable aquifers around the country are in peril. So although I mentioned everything that wasn't in today's committee hearing, you have to begin somewhere. I commend the chairman for beginning the process. I am sure that when we review the notes of today, we will find far more available to us to digest than I am talking about here today. And hopefully, in time, we will hit all of the issues leading to America drinking high quality water.

And in closing, I will note that the chairman and I are both native Clevelanders. So I share the fact that the Great Lakes are the greatest body of fresh water available on the planet and that very much bee need to look at that as a resource that is carefully managed. And I yield back.

Mr. KUCINICH. I want to thank my partner on this committee, Mr. Issa, for his comments.

And in response, I just want you to know that this is a beginning. I would like to be responsive to what you suggest in looking at questions of the potability of water, drinking water, in this country as well as looking at the questions of water quality generally, both for drinking and nondrinking purposes, as well as the issues related to plastic, or bottled drinking water. I also want to say, and I appreciate you mentioning Cleveland, because as I indicated in my opening remarks, the issues relating to Lake Erie and protecting that drinking water and protecting the volume of the water are also, you know, I know of concern to States like California, because the access to water in your State is a serious issue as well. So I want to work with you in making this the first of perhaps many hearings we could have on this issue of water. And I appreciate the gentleman's comments very much.

Mr. ISSA. Thank you, Mr. Chairman.

Mr. KUCINICH. I appreciate it. If there are no additional opening statements, the subcommittee will now receive testimony from the witnesses before us today.

We will hear from Mr. Richard McFarland, who is a founding member of the McCloud Watershed Council, a nonprofit community-based organization providing stewardship and advocacy for the McCloud River watershed in the Mount Shasta region of California. In addition to his advocacy, Mr. McFarland is president of Terra Mai, a pioneer in the green building movement, which uses recycled lumber for its building projects. He has also worked as a professional river guide and an expedition leader.

Next we will hear from Ms. Terry—is it Swier?

Ms. SWIER. Yes.

Mr. KUCINICH. Ms. Swier is the founder and president of the Michigan Citizens for Water Conservation, a nonprofit, grassroots

organization of over 1,900 members. Ms. Swier has helped educate State legislators and Members of Congress on the Nestle water issue, and has raised the public's awareness of the importance of water diversion and export. In addition to her environmental work, Ms. Swier recently retired after 30 years as a university librarian.

Next it will be Mr. Bill McCann. He serves on the board of directors of Save Our Groundwater and is chairman of the organization's Committee on Legislative and Governmental Issues. Founded in 2001 in response to a bottled water company's attempt to draw from a local aquifer, Save our Groundwater is a New Hampshire seacoast area citizens action organization dedicated to protecting water in the public trust. Mr. McCann has also been a New Hampshire State representative, where he served on the Resources, Recreation and Development Committee.

And finally, Ms. Heidi Paul. Ms. Paul has been vice president of corporate affairs for Nestle Waters North America since 2000. Ms. Paul is responsible for all aspects of the company's corporate communications and community relations. Before taking this post in 2000, Ms. Paul was the director of brand management for Nestle Waters. She is also chairwoman of the Project WET, a not-for-profit organization involved with international water education.

I want to thank each of the witnesses for appearing before our subcommittee today. And it is the policy of the Committee on Oversight and Government Reform to swear in all witnesses before they testify. I would ask that you rise and to raise your right hands.

[Witnesses sworn.]

Mr. KUCINICH. Let the record reflect that the witnesses answered in the affirmative.

I ask that each of the witnesses now give a brief summary of their testimony and to keep their summary under 5 minutes in duration. I would like you to bear in mind that your complete written statement will be included in the record of the hearing.

So let us begin with Mr. McFarland, if you would begin your testimony and address the Chair, we appreciate your presence here.

STATEMENTS OF RICHARD MCFARLAND, FOUNDING MEMBER, MCCLOUD WATERSHED COUNCIL; TERRY SWIER, FOUNDER AND PRESIDENT, MICHIGAN CITIZENS FOR WATER CONSERVATION; BILL MCCANN, MEMBER, BOARD OF DIRECTORS, SAVE OUR GROUNDWATER; AND HEIDI PAUL, VICE PRESIDENT OF CORPORATE AFFAIRS, NESTLE WATERS NORTH AMERICA, INC.

STATEMENT OF RICHARD MCFARLAND

Mr. MCFARLAND. Thank you, Chairman Kucinich.

My name is Richard McFarland. My wife, Erika, and I settled in McCloud, CA, 20 years ago. We started a small reclaimed lumber business, which has grown considerably and is currently the largest private employer in our small town of 1,800. We started a family, and our three sons are also growing rapidly.

McCloud sits at the base of 14,000-foot Mount Shasta, a dormant volcano that dominates the landscape in far northern California and draws visitors from around the world. Mount Shasta's glacier and snow melt feed the McCloud River, a hydrogeologically unique,

crystal clear, ice cold stream, well known as a world class trout fishery. It is a major tributary of the Sacramento River, the backbone of California's public water system.

McCloud is a former lumber company town. The McCloud Community Services District provide our de facto city government. We are blessed with a spring-fed municipal water supply that provides exceptional quality, untreated cold spring water to every tap in town.

When I settled here in 1987, McCloud was economically depressed and was in a general state of disrepair. Most of the buildings downtown were dilapidated or boarded up. In the last two decades, there has been significant capital investment in McCloud. One old timer recently told me that the town has never looked better. To the objective visitor, McCloud would appear to be thriving.

In the fall of 2003, during a public meeting, the 100-year contract selling our water to Nestle was both announced and approved. We had assumed that this hearing was going to be the beginning of a public process. In fact, it was the culmination of back room negotiations between Nestle and a few local politicians and public servants. This triggered a series of events: a 3-year lawsuit, which resulted in the contract being thrown out by our county superior court and later reinstated by an appellate court; Nestle serving harassing and intimidating subpoenas on local community members, including myself; a draft environmental impact report, environmental assessment that generated an astounding 4,000 comments, most of them opposed to the project; the development of the Siskiyou County Water Network and the Siskiyou County Protect Our Waters Coalition.

The Mount Shasta area is already home to four other bottling plants already pumping unlimited groundwater. The scale of the proposed Nestle project raises serious concerns about cumulative impacts to Mount Shasta's unique volcanic ground and spring water systems. California lacks comprehensive statewide groundwater legislation. Sound policy requires that groundwater management be based on science.

This is a State and national water policy issue. I respectfully request the following of the subcommittee:

Please consider Federal support for State and local efforts to protect community water resources. Specifically helpful would be U.S. Geological Survey scientific inquiry to monitor and characterize Mount Shasta's ground and surface water resources. This is especially important in the face of potential climate change impacts on California's water supply.

Please ensure that the U.S. Forest Service completes an environmental impact statement for the Nestle project in McCloud. The pipelines for the project travel through several miles of U.S. Forest Service land on public easements intended for municipal use.

Please consider investigating the practices and impacts of Nestle and other large water bottlers in McCloud and other small rural communities around our country. Please consider enacting legislation or policies that protect the significant investment that taxpayers and ratepayers have made in our public water supply infrastructure from corporate exploitation.

And finally, please consider investigating the negotiation process that led to the contract between the McCloud Community Services District and Nestle Waters North America. Thank you very much for hearing my testimony today.

[The prepared statement of Mr. McFarland follows:]

Richard McFarland Testimony December 12, 2007 2pm
"Assessing the Environmental Risks of the Water Bottling Industry's Extraction of Groundwater"

My name is Richard McFarland. My wife, Erika Carpenter, and I settled in McCloud, California 20 years ago. We started a small business, which has grown considerably and is now the largest employer in our small town of 1800 people. We also started a family and our three sons are also growing rapidly.

McCloud sits at the base of 14,000' Mt. Shasta, a dormant volcano that dominates the landscape of far Northern California. The area is very scenic, abounds with both winter and summer recreational opportunities and draws many visitors from the larger urban areas to the south. It has become a preferred vacation destination over the more congested and upscale resorts of the Lake Tahoe basin and the Sierra Nevada Mountains.

McCloud is a former lumber "company town". Until the 1960's, the McCloud River Lumber Company, a.k.a., "Mother McCloud", owned the entire place. In the 60's, the homes and other real estate were sold to the employees and the timberlands and mill were sold to Champion International. Champion cut 100 years worth of timber in a decade and closed up shop in 1979. Since then, there was one small sawmill in operation until 2005, when it too closed.

When I settled here in 1987, many of the downtown commercial buildings were boarded up and many of the homes lacked foundations and were in a state of serious disrepair. In fact, the reason my wife and I were able to purchase a home here was that property values were far below the rest of the California market and, as first time homebuyers, we were able to afford to become homeowners. In the past two decades, there has been significant capital investment in McCloud. One "old timer" recently told me that the town has "never looked better". Most of the old mill homes have been restored. The historic McCloud Hotel has been renovated. The McCloud Mercantile building, the centerpiece of our downtown was recently rescued from disrepair and is a commercial center for a number of shops and restaurants. Many of the homes have been purchased as vacation and retirement homes. Property values have dramatically increased and to the objective visitor, McCloud would appear to be thriving.

McCloud is unincorporated. We have no City Council. The McCloud Community Services District (MCSD), a California Special District provides our de-facto city government. A five member, elected, Board of Directors, governs them. A General Manager oversees day-to-day operations. They are chartered to provide basic services such as water, sewer, trash collection, alley plowing, etc. to our community. Economic development is not part of their charter.

McCloud is blessed with a spring-fed municipal water supply that provides exceptional quality, untreated, cold spring water to every tap in town.

In the fall of 2003, our community was given the requisite notice of a Public Hearing regarding a proposal to sell municipal water to Nestle Waters of North America (NWNA), who proposed to build a bottling plant in McCloud. The Public hearing was held to a standing room only crowd in our Elementary School Gym. Our community was introduced for the first time to the NWNA representative, Mr. Dave Palais, who presented a very slick Power Point presentation touting the benefits of the proposed contract (which had been available to the public for only about 48 hours) to our community. He promised jobs and revenue for the always-struggling MCSD. After an hour or so of questions and concerns from the public, the MCSD, voted to approve the contract between MCSD and NWNA. The audience was shocked. We had assumed that this hearing was going to be the beginning of a public process. In fact, it was the

culmination of a back room negotiation between NWNA and a few local politicians and public servants. The "negotiating committee" for the MCSD consisted of three significantly under-qualified locals, while NWNA had the best legal and business resources that money can buy on their team. It was not a fair match.

As the details of contract began to emerge, community concern over the terms of the deal increased. The contract is egregiously one sided. It gives NWNA access to both spring water and groundwater. The MCSD is getting far below market rates for unlimited quantities of some of the best fresh water on the planet (compare $26 per acre-foot vs. $80 per acre-foot average lease price in California in 2004 dollars). The terms of the 100-year contract contain no provisions for inflation or for the increase in the value of the resource over the life of the contract. Indeed, total payments to the District are projected to be less that 1/10th of 1% of the proposed bottling plants "wholesale revenues." The MCSD is left with all of the potential risks and NWNA with the benefits.

Concerns over the contract and proposed project grew. Nestle and the MCSD launched a PR campaign around the promise of jobs and economic growth.

In 2004, Concerned McCloud Citizens (CMC) filed a lawsuit challenging the contract. In March 2005 Siskiyou County Superior Court ruled in favor of the plaintiff and declared it "an abuse of discretion" for the MCSD to have approved the contract—ruling it "null and void." January 2nd 2007 the Third District Court of Appeals reinstated the contract. In March 2007 Concerned McCloud Citizens appealed to the California Supreme Court and in May 2007 the Supreme Court declined a review of the case. Thus the contract stands today.

Local business owners and citizens founded the McCloud Watershed Council (MWC) in 2004 to provide stewardship and advocacy for the McCloud River Watershed.

The McCloud River is a hydro-geologically unique, spring fed river. It's crystal clear, ice-cold waters are well known as a world-class trout stream. The McCloud was home to the first fish hatchery in California. Rainbow trout from the McCloud River have provided the genetic stock for most of the Rainbow trout hatcheries all over the world. It is a major tributary of the Sacramento River, the backbone of California's public water system.

The proposed Nestle project, with a contract that allows them to pump unlimited groundwater, will tap into the springs and groundwater system at the headwaters of the McCloud River. At a proposed one million square feet, this would be the largest bottling plant in North America. The MWC is publicly opposed to this project as it is currently proposed.

In January 2005, I, along with other members of the MWC, CMC and the Mount Shasta Bioregional Ecology Center was served with a subpoena from Nestle attorneys. The subpoenas demanded, among other things, personal financial information and documents pertaining to the Nestle controversy. It was a tactic that, in hindsight, was designed to harass and intimidate. A local judge ruled that the subpoenas were overreaching and had no merit.

A Draft Environmental Impact Report (DEIR) released in August 2006 generated over 4,000 comments, most of them expressing opposition to the proposed project (See MWC comments at www.mccloudwatershedcouncil.org and California Trout and Trout Unlimited comments at www.protectourwaters.org) A key area of concern is the lack of available baseline data on the area's hydrogeology upon which to make a credible

scientific assessment of the projects potential impacts. One scientist characterized the DEIR as "Swiss cheese", voluminous, but lacking substance. In August of this year, Nestle withdrew the DEIR and, presumably, is planning to revise it and re-release it in the future. It is important to note that an EIS was not completed.

We have seen how Nestle has behaved in other rural communities around the country and are very wary of their intentions. They came into our community and negotiated an egregiously unfair contract behind closed doors. They have meddled with, and influenced local politics, engaged in an aggressive and misleading Public Relations campaign that has divided our community and cost our community dearly in time spent on the issue. Certainly their "Good Neighbor Policy" is not working for them in McCloud.

The Mt. Shasta area is already home to four other bottling plants. We feel that there is a need to conduct good science, understand the water balance in the system and protect the area from a mass proliferation of bottling plants exploiting an invaluable public resource. California does not have any comprehensive, statewide groundwater legislation and, therefore, leaves open the possibility of serious misuse...such as allowing Nestle to have unlimited pumping for 100 years.

In light of the aforementioned, I would make the following request of the sub-committee:

- Consider federal support and/or assistance for state and local efforts to protect community water resources. Specifically helpful would be support for USGS scientific inquiry, especially USGS efforts to monitor and characterize ground and surface water resources, particularly in the face of climate change impacts on California's water supply (Mount Shasta being a key headwater region for the Central Valley Project this is especially important).
- Ensure that the USFS completes an EIS for the Nestle project in McCloud. The pipelines for the project travel through several miles of Forest Service land on public easements intended for municipal use.
- Investigate the practices and impacts of Nestle and other large water bottlers in McCloud and other small rural communities.
- Consider enacting legislation or polices that protect tax/rate payers large investment in Public Water Supply infrastructure from corporate exploitation.

Thank you very much for hearing my testimony.

Sincerely,

Richard McFarland
Board of Directors of the McCloud Watershed Council

Mr. KUCINICH. Thank you, Mr. McFarland.
Ms. Swier.

STATEMENT OF TERRY SWIER

Ms. SWIER. Yes. Thank you.

It has been 7 years since the residents of Mecosta County, MI, were made aware of Nestle's plan to pump over 250 million gallons of spring water per year from a private hunting preserve, divert it through a 12-mile pipeline that crosses streams and wetlands to its plant, bottle it, and then truck it outside the Muskegon River watershed and the Great Lakes basin under the brand name Ice Mountain.

As Nestle moved into Michigan to privatize our water for its own profit, it announced that there would be no adverse resource impact to the natural resources. Then, in December 2000, about a hundred citizens met, and Michigan Citizens for Water Conservation [MCWC], a nonprofit, grassroots corporation, was formed.

MCWC's mission is and has been to conserve, preserve and protect the waters and natural resources and public trust in those resources of Michigan and the Great Lakes. MCWC has grown to over 1,900 members and continues to work on water preservation and conservation issues with other organizations.

MCWC began at the local level, asking our elected township officials to place a moratorium on the Nestle project to give us time to investigate and evaluate a proposal of this magnitude for the potential impact on neighboring wells, lakes, streams, wetlands, wildlife and the community's quality of life. Elected officials did not hear or listen to our voices. This eventually led MCWC to three petition drives on rezoning ordinances, and to three courts, the Mecosta County Circuit Court, the Michigan Court of Appeals and the Michigan Supreme Court.

The findings of harm from Nestle's pumping remain intact and unaffected in all three courts. MCWC believed then, and it now has been proven, that irreparable harm would occur to the waterways due to pumping by Nestle at the Sanctuary Spring site. Nestle's pumping has caused harm to the Dead Stream by reducing the flow and level, narrowing the stream, exposing mud flats and restricting the enjoyment of many of the members of MCWC, and the public for fishing, boating and kayaking on the stream. The findings of fact are in the court records that Nestle's pumping has created and will continue into the future to create adverse impacts to riparian uses and rights.

What will this ancient marsh watershed area, including Thompson Lake, be like for future generations? The lives of the 1,900 members, including the plaintiffs, those who live on the Tri-Lakes, and mine, have changed since Nestle came to Michigan. The issue has pitted neighbor against neighbor, friendships have been severed, and Nestle has violated our lives either directly or indirectly with telephone polling, private investigators, the FBI coming to our homes, and a potential Strategic Lawsuit Against Public Participation, a SLAPP suit, against my son.

MCWC has spent nearly a million dollars on the lawsuit against Nestle. We continue to hold fundraisers, such as bake sales and garage sales, to continue to pay our legal and environmental bills.

Nestle has affected families emotionally, physically, mentally and financially. MCWC believes much of what it has done and stands for is supported by a majority of Michigan citizens.

Michigan purports to be a good neighbor company to our area, yet it continued to pump at high rates during a low period of low participation and lower recharge. Even when bottom land and other dramatic impacts and damages to the Dead Stream, Thompson Lake and wetlands have occurred, Nestle has continued to pump. Nestle was cautioned by the trial judge that it proceed at its own risk in building its plant in Stanwood. True to form, Nestle pushed ahead in building its plant and continued to use the possible loss of jobs as ways to push through with its lobbyists in Lansing to get to the Governor and her staff and legislators to side with an international company and not the citizens.

Water grabbers like Nestle undermine the interests of our sixth-generation residents who live on the lakes and streams; the public that fishes, boats, swims and enjoys our lakes and streams; farmers who rely on our groundwater; and industry and our economy that are so dependent on our water. Water is our heritage and our culture. It must be protected for our future generations. Thank you.

[The prepared statement of Ms. Swier follows:]

Congress of the United States

House of Representatives

Committee on Oversight and Government Reform

Assessing the Environmental Risks of the Water Bottling Industry's Extraction of Groundwater

Written Testimony of Terrill (Terry) Swier

On Behalf of

Michigan Citizens for Water Conservation

December 12, 2007

I appreciate the opportunity to testify today concerning the environmental risks of the water bottling industry's extraction of groundwater. I am president of the grassroots group Michigan Citizens for Water Conservation. I have held this position for seven years. Before retirement in 1999 and moving back to land that has been in my family for three generations, I was a reference librarian at University of Michigan Flint.

It has been seven years since the residents of Mecosta County, Michigan were made aware of Nestlé's plans to pump over 210 million gallons of spring water per year from a private hunting preserve, divert it through a 12 mile pipeline that crosses streams and wetlands to its plant, bottle it, and then truck it outside the Great Lakes Basin under the brand name Ice Mountain. As Nestlé moved into Michigan to privatize our water for its own profit, it announced there would be no adverse resource impact to the natural resources.

In December 2000, about 100 citizens met at an elementary school and Michigan Citizens for Water Conservation ("MCWC"), a non-profit corporation was formed. MCWC's mission is to conserve, preserve, and protect the waters and natural resources and public trust in those resources of Michigan and the Great Lakes. MCWC has grown to over 1,900 members, but works on water preservation and conservation issues with other organizations.

MCWC began at the local level, asking our elected township officials to place a moratorium on the Nestlé project to give us time to investigate and evaluate a proposal of this magnitude for the potential impact on neighboring wells, lakes, streams, wetlands, wildlife, and the community's quality of life. Elected officials did not hear or listen to our voices. This eventually led MCWC to three petition drives on rezoning ordinances and to three courts: the Mecosta County District Court, the Michigan Court of Appeals, and the Michigan Supreme Court. The findings of harm from Nestlé's pumping remain intact and unaffected in all three courts.

In early 2001, MCWC persuaded Nestlé Waters North America Inc. (then Perrier Group of North America) to release its complete hydrogeological assessment on its proposed 400 gallons per minute water pumping, pipeline, and water bottling operation near Big Rapids, Michigan. MCWC organized a public hearing with the Michigan Department of Environmental Quality

("MDEQ"), in which the citizens overwhelmingly opposed the Nestlé operation. MCWC organized a countywide petition drive and vote that opposed the project by a 2:1 margin. With the help of hired environmental experts, MCWC submitted comments to the MDEQ showing that Nestlé's assessment and modeling was flawed.

MCWC petitioned then Attorney General Jennifer Granholm to ban diversions and exports under the Federal Water Resources Development Act ("WRDA"). After hearing arguments from MCWC and Nestlé, Attorney General Granholm issued a letter of opinion to Governor Engler and the Legislature that the Nestlé proposal violated WRDA. Even after this, the MDEQ issued a safe-drinking water permit to Nestlé for pumping 400 gallons per minute in late summer of 2001.

In 2002, MCWC filed a lawsuit in Mecosta County Circuit Court. The issues in the case were:

- Who owns and controls Michigan's water?
- What are the limitations on diversion and export of water under the common law of property and water?
- What is the standing of citizens under the public trust doctrine and the Michigan Environmental Protection Act to protect water resources from harm?

On November 25, 2003, after 19 days of trial spanning three months, Judge Lawrence Root issued a landmark ruling. In his 60-page opinion, Judge Root found:

- Nestlé's assessment and model were not reliable
- Nestlé's extraction of water at *any rate* was unreasonable use of groundwater because the groundwater and spring formed Osprey Lake and Dead Stream
- Removal of groundwater would divert and diminish the flow of the stream by at least 27%
- The level of the stream and two lakes would be lowered by 4 to 6 inches
- The effects of pumping would impair the stream, lakes, and wetlands located on Nestlé's well field property or downstream on some of the plaintiffs' property
- The Court applied a common law rule that if water diverted or removed from a watershed diminished the flow or level of a lake or stream, it was unlawful or an unreasonable use
- Judge Root ordered Nestlé's operations to cease

Nestlé appealed to the Michigan Court of Appeals. With the help of the DEQ, Nestlé was granted a partial stay of the Judge Root's order. Nestlé was allowed to pump up to 250 gpm during the appeal. In November 2005, the Court of Appeals affirmed the trial court's findings on scientific facts and unreasonable harm and unreasonable use. However, the Court adopted a new "balancing test" that shifted water and property law to allow the diversion and export of water out of watersheds. The Court seems to have ruled that if there is surplus water and the benefits outweigh the harm, even if significant, water may be diverted or exported.

The Court of Appeals reduced the maximum pumping limit to 200 gallons per minute and remanded the case back to the trial court to (1) establish what level Nestlé could pump under its new "balancing test" and (2) finding an impairment in violation of the MEPA. As a result of the Court of Appeals ruling, MCWC and Nestlé met and set a schedule of pumping limits of 218 gallons per minute average in higher precipitation months and to around 125 gallons per minute from June 1 through October 1 each year. The limits are based on the flows and levels monitored in the stream. The remand order allows either MCWC or Nestlé to request the circuit court to reevaluate the pumping limits by written notice to the other party and the Circuit Court for the 20 years. This was done so both sides could appeal to the Michigan Supreme Court.

In early 2006, MCWC appealed to the Supreme Court arguing that the Court of Appeals' "balancing test" would open the door for anyone outside the Great Lakes Basin to divert and export water as long as the benefit of exporting surplus water outweighs the harm. The balancing test would also imply that Michigan's water is for sale in the context of economic benefits outweighing harm or efforts to restrict water for future use.

Nestlé cross-appealed asking the Supreme Court to reverse the Court of Appeals decision under the MEPA. Nestlé argued that MCWC or citizens do not have standing to protect wetlands and a lake on the property where Nestlé's high capacity wells are located.

In February 2006, Michigan passed a weak water law that regulates withdrawals under limited impact standards, applies only to 2 million a gallons a day withdrawals, and exempts water packaged in containers smaller than 5.7 gallons.

In 2007, the Supreme Court heard oral arguments from both sides but only on the question of standing under the MEPA raised by Nestlé. On July 25, 2007, the Supreme Court ruled 4:3 that even thought MCWC and plaintiffs had interests that were impaired and had standing under the MEPA as to the Dead Stream, Thompson Lake, and adjacent wetlands, they did not have standing to prevent harm to three wetlands and Osprey Lake located on Nestlé's property. The Court let stand the remaining part of the Court of Appeals decision and remanded to the circuit court.

MCWC requested a rehearing because Osprey Lake and the three wetlands are in the same area affected by Nestlé's pumping in which plaintiffs owned or used and enjoyed property. On September 28, 2007, the Michigan Supreme Court denied MCWC's motion for rehearing in another 4:3 order. This ruling does not affect MCWC's monumental victory under Michigan water law and the MEPA. The ruling does cripple the rights of citizens to file suits under the MEPA to protect the environment. We feel we have been denied individual liberty granted by the legislature in the Michigan Constitution. Citizens will have to address this problem through new legislation or constitutional amendments.

MCWC has won three court decisions. Judge Root's findings of harm from the pumping in the Circuit Court and the Court of Appeals agreement with his ruling remain intact and unaffected by the Supreme Court decision. However, the Michigan Supreme Court has issued a remand order. If mediation fails, the issues not resolved are then referred to the circuit court for a

hearing and decision under the remand order, the existing trial record and Judge Root's findings, and relevant new data or facts that have become evident in the past two years. Flows and levels have been lower than expected, and for longer periods. MCWC believes that Nestlé's pumping limit should be lowered in the summer months and extended to other low flow months, especially during May and June.

MCWC believed then and it now has been proven that irreparable harm would occur and does occur to the waterways due to pumping by Nestlé at the Sanctuary Spring site. Nestlé's pumping has caused harm to the Dead Stream by reducing the flow and level, narrowing the stream, exposing mud flats, and restricting the enjoyment of many of the members of MCWC for fishing, boating, and kayaking on the stream. The findings of facts are in the court records that Nestlé pumping has created and will continue into the future to create adverse impacts to the riparian uses and rights. What will the area, including Thompson Lake, be like for future generations?

The lives of the 1,900 members, including the plaintiffs, those who live on the Tri-Lakes, and mine have changed since Nestlé came to Michigan. The issue has pitted neighbor against neighbor, friendships have been severed, and Nestlé has violated our lives either directly or indirectly with telephone polling, private investigators, the FBI coming to our homes, and a potential Strategic Lawsuit Against Public Participation (SLAPP suit) against my son. MCWC has spent nearly a million dollars on the lawsuit against Nestlé. We continue to hold fundraisers such as bake sales and garage sales to continue to pay our legal and environmental bills; Nestlé has affected families – emotionally, physically, financially, and mentally. This has spilled over into a statewide issue, and MCWC believes much of what it has done and stands for is supported by a majority of Michigan's citizens.

Since 2000, Nestlé has continued to actively pursue other spring and groundwater sources in Michigan. Nestlé is now trucking spring water in bulk from the City of Evart's municipal well for a fraction of a penny per gallon to its plant in Stanwood. Evart is located 20 miles to the north of Mecosta.

Nestlé purports to being a "good neighbor" company to our area, yet it continued to pump at high rates during a long period of low precipitation and lower recharge. Even when bottomland and other dramatic impacts and damage to the Dead Stream, Thompson Lake, and wetlands have occurred, Nestlé has continued to pump. Nestlé was cautioned by the trial judge that it proceed at it's own risk in building it's plant in Stanwood. True to form, Nestlé pushed ahead in building its plant and continued to use the possible loss of jobs as ways to push through with it's lobbyists in Lansing to get to the Governor and her staff and legislators to side with an international company and not the citizens.

MCWC has won three court decisions. Now the Michigan Supreme Court has issued a remand order. If mediation fails after 45 days, the issues are again referred to the circuit court for a hearing and decision.

MCWC would like to see:

- ***No*** pumping by Nestle, including the pumping in Evart that causes harm to the environment where it diminishes the flow or level or impairs any lake or stream
- ***No*** diversion of spring water for export by Nestlé outside of the Michigan's watersheds. Spring water by definition is directly connected to lakes and streams.
- State laws passed to protect against diversions of water, including exports in bottles less than 5.7 liters.
- A license required from the legislature or an agency delegated with the power to license for water bottlers like Nestlé to withdraw and divert the waters for export, subject to strict public trust conditions. The state must always retain the right to revoke a license and stop a use that is not primarily in the public interest and/or causes adverse impacts to the water, air, and/or land.
- All water bottlers must meet standards to be set by the courts and state law.
- National laws or rules that require bottled water to meet all standards prescribed for public tap water, including frequency of testing, contaminants tested for and public information advisories.

Water grabbers, like Nestlé, undermine the interests of our sixth generation residents who live on the lakes and streams; the public that fishes, boats, swims, and enjoys our lakes and streams; farmers who rely on our groundwater; and industry and our economy that are so dependent on our water. Our water is our heritage and our culture. It must be protected for our future generations.

Mr. KUCINICH. Thank you very much.
Mr. McCann.

STATEMENT OF BILL MCCANN

Mr. MCCANN. Thank you, Mr. Chairman.

Good afternoon. My name is Bill McCann, and I am a member of the Board of Directors of Save Our Groundwater, which is located in Barrington, NH. I am a resident of the adjoining city of Dover, the seventh oldest settlement in the United States, having been settled in 1623. And I am also a member of the Conservation Commission in Dover, as well as a former State representative.

Last spring I submitted to this committee a document entitled an Analysis of the New Hampshire Department of Environmental Services Reversal from its previous denials of the Large Groundwater Permit for USA Springs on behalf of both Save Our Groundwater and a spin-off group called Neighborhood Guardians. I trust that at some point that will be entered into the record and the members of the committee will have an opportunity to review it. What transpired in Barrington was a private corporation coming into the community with the goal of extracting over 400,000 gallons of water a day. What transpired, and I can speak to this as someone who was involved when we passed New Hampshire's law, was the first implementation of RSA 485-C, which was New Hampshire's Groundwater Protection Act. And this was by far the largest withdrawal that came under the jurisdiction of this law. And I and other citizens in the area watched very carefully to see what was happening, because we thought the groundwater would be protected. What we saw was our State government and some Federal agencies not implement what we had anticipated. We had expected that there would be protections for the environment, protections for prime wetlands, protections for the people who live in the area.

Barrington and Nottingham are located in the southeast portion of New Hampshire equal distance from Concord and Portsmouth. All of their households rely on private wells for all their potable water. There is no town water system. These communities, like Dover, are old. Both were settled around 1719 to 1722. They have a rural nature. They try to work hard to protect their citizens. A total of about 11,000 people live in the two communities. What happened in this instance was a failure by State government and Federal agencies to protect the groundwater.

This company, as I said, a privately held company whose business plan said they are going to bottle this water and ship it overseas—in other words, take it out of the aquifer, have no impact, there will be no recharge in New Hampshire. It will have a definite impact on the quality of surface waters. The Lamprey River, which is nearby, is a federally protected water basin.

So we anticipated that between our State government and our Federal Government that steps would be taken to protect. At first it seemed to work. The permit was denied in 2003. It was denied a second time later in 2003. But then they reapplied for a new permit at the end of 2003, and 6 months later, the permit was conditionally approved. I can tell you from firsthand experience, a lot of people in the area of the southeastern portion of New Hampshire became very disenfranchised with what government was doing to

protect their precious water resource. They expect, and they still do expect that the State government or the Federal Government or some combination of the two will work to protect the aquifer and the water resources in our State, and hopefully in other States, because I am sure, as we have heard from these other witnesses, we are not the only ones impacted.

We are impacted because we don't know right now when this plant will start operation. There are people who are concerned that when that plant starts to operate, they are going to get up in the morning and find they don't have water. They don't have any reassurance from our Department of Environmental Services or from the Army Corps of Engineers or any other Federal agency like EPA that there is protection in place for this possibility. So they are very concerned that this particular situation with USA Springs, as I said, a privately held company, we don't know what will transpire once the plant is built. They are in the process of doing it. They are building the plant even though they have not received final approvals on their wetlands permits and there are appeals pending. The only thing they have used for their basis to continue moving forward is they did get a Supreme Court case to go their way in 2006.

But when the State issued the permit, there were 10 conditions. They haven't been met yet. And I hope that this committee can take a look at the situation and maybe be able to assist the people of New Hampshire, as well as the rest of the country, from having problems like this in the future. Thank you.

[The prepared statement of Mr. McCann follows:]

Statement before Domestic Policy Committee

Good afternoon Mr. Chairman and members of the sub-committee. My name is Bill McCann and I am a member of the Board of Directors of Save Our Groundwater [SOG], which is located in Barrington NH…I am a resident of the adjoining City, Dover NH the seventh oldest settlement in the United States being settled in 1623, I am a member of the Dover Conservation Commission and a former NH State Representative.

Last spring I prepared for this Committee a document entitled *Analysis of The NH Department of Environmental Services Reversal from its previous denials of the Large Groundwater Permit for USA Springs, Inc* .on behalf of the Neighborhood Guardians outlining the reversal of New Hampshire Department of Environmental Services [NH DES] in the granting of a 'conditional' permit for the Large Groundwater Withdrawal of more than 307,000 gallons of water per day to be bottled and shipped overseas.

I hope you all have had an opportunity to review that document.

Barrington and Nottingham are located in Southeastern New Hampshire about equal distance from Concord and Portsmouth. Households in both communities rely on private wells located on the property. There are no Town operated water systems. Both communities were settled within one hundred years of Dover between 1719 and 1722. The combined population of both Towns is 11,000.

When the permit was denied in 2003 there were more than 25 scientific reason or issues given by NHDES for its decision.
I will not review each of these in my presentation today. I would like to concentrate on the wetlands issue and the contamination, which were allegedly 'discovered' following the pump test of the fall of 2002.

The record on the contamination is confusing and vague at best. On page 38 of my submission you will find a record of a *Water Advisory Committee Meeting Monday April 5, 2004*. This record was prepared by William Kyle, based on a compilation of notes from several people present.

I was one of the people present at the meeting and I believe the record as found on page 38 and up to and including page 42 is accurate. Present at the

meeting were 3 NH State Senators, 2 NH State Representatives, the Executive Director of the Strafford Regional Planning Commission, one of the Selectman from the Town of Nottingham, 3 members of the Board of Directors of Save Our Groundwater, including myself, Anthony Giunta, Administrator Waste Water Div. of NHDES and 3 citizens including Mr. Kyle who prepared the record. As you can see there was discussion and questions about the contamination issue and Mr. Giunta provided information to the group.

Unfortunately, as it turned out, the information provided did not reflect the realality of the situation. For example, Mr. Giunta stated "There will be a pump test with both sites running before a permit is issued". [i] Mr. Giunta is referring to the USA Springs Inc. site and the former Harnum site, now known as Just Cause Realty. As of today no simultaneous pump test has been done. What has been learned recently is that NHDES closed its file on the contamination issue *prior* to May 20, 2002.[ii] This becomes confusing when one reviews documents provided by the NH Department of Justice [NHDOJ], which allege that USA Springs Inc. was made aware of *potential* contamination on five different dates ***prior*** to NHDES closing its file on the matter. [iii]

Are we to believe that after more than a year of NHDES inaction on the potential contamination that in September 2003 they [DES] suddenly decided that the threat is real and they are going to protect the welfare of the communities impacted? This issue was raised by one of the State Senators at the April 5, 2004 meeting when Mr. Giunta was asked, "contamination issue was denied and now they're getting what they wanted on the same information?''

The response was "new information". Asked about the credibility of the information Guinta replied, "we denied the extension and permit". He also said, "stuff done after the fact". He did not respond when asked about Governor's influence. He then told the group, " Information has come in at the last minute. If they walk out. ...These contaminated sites linger for 10 – 20 years. People ask when are you [DES] going to clean it up? This company is going to clean up, at the cost of 1 mil to 1-½ mil dollars. It's a win win situation."

Later in the meeting Giunta stated, "Contamination did migrate over to USA Springs".

Just prior to the end of the meeting Giunta said, " never saw any other project move through DES as fast as this project has been going". [iv]

WETLANDS

In October 2002 NHDES Wetlands Bureau ordered USA Springs Inc. to restore the wetlands violations affected by the construction of roads and the drilling of wells in the locations where work had already been conducted *without permits*[v].

On October 5, 2001 NHDES issued a letter of Deficiency WET 2001-65 to Garrison Place Real Estate Investment Trust/ Francesco Rotondo, trustee, also d/b/a USA Springs Inc. This was followed up by Administrative Order WD 02-31 to force the owner to do the restoration necessary. In addition as a result of the Pump Test done in November 2002 NHDES issued a second letter of Deficiency WET 2003-11 regarding an illegal weir that was installed on the David Harvey property in Barrington during the Pump Test, skewing the findings.

In both instances it has been acknowledged by NHDES that these two cases remain open as of November 1, 2007, [see page 7 of 7] some two years and

four months after Permit #2001 – 65 was issued by the NHDES. During this twenty-eight month period New Hampshire Governor John Lynch has asked the Army Corps of Engineers to review the wetlands permitting issue.

On August 5 2005 Governor Lynch requested the Army Corps of Engineers to complete an individual permit review. Instead on July 19 2006 the Army Corp issued to the applicant an authorization under NH State Program Grant Permit No. 52.

So both NHDES and ACE have issued permits for the projects to proceed even though two letters of Deficiency [WET 2001-65, + WET 2003-11] remains open and apparently unresolved. You can see why citizens in Southeastern New Hampshire are upset with the State and Federal Government's utter failure to protect the natural resources of our region

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[i] Page 39 of prior submission
[ii] See Memo of Cheryl McGary, NHDES to Gary Lynn and John Regan, NHDES.
[iii] See page 3 of prior submission
[iv] See pages 41 + 42 of prior submission.
[v] Page 92 of Inside the Bottle by Tony Clarke

Mr. KUCINICH. Thank you very much, Mr. McCann.
Ms. Paul.

STATEMENT OF HEIDI PAUL

Ms. PAUL. Hello, Chairman Kucinich. Thank you for the opportunity to appear before the subcommittee today. My name is Heidi Paul. I am vice president of corporate affairs of Nestle Waters North America.

Nestle Waters bottles and sells 15 regional brands of bottled water, including Deer Park and Poland Spring. We employ 9,000 employees in North America, and we have plants in 21 communities in the United States and two in Canada. We have been invited today to testify about the environmental effects of bottled water on groundwater and our operations in communities. Bottled water represents 0.02 percent of groundwater used. As a company, our use is sensitive to the environment and very efficient. We bottle a very healthy beverage. Not including bottled water, there are close to 75,000 different types and sizes of containerized beverages for sale in America. Most have calories, coloring, chemicals, alcohol or caffeine. In 2006 alone, Americans avoided 356 billion calories because they switched from soft drinks to bottled water.

Today Americans consume twice the amount of calories from beverages as they did a generation ago. Childhood obesity is up 370 percent in the last 30 years. And at this rate, 25 percent of our children and 75 percent of our adults will be overweight or obese by 2015. Part of the solution to this epidemic is to drink more water, tap or bottled.

And bottled water has another important social role. For those who have ever lived through a natural disaster or other interruption of water service, including the hurricanes in Florida, ice storms in Maine, 9/11, Katrina, wildfires in California, floods in the Midwest, bottled water is the safety net to the most critical need of all, potable drinking water. Bottled water is also easier on the environment than any of these other beverages. It uses less water, and it uses less plastic.

And when it comes to collecting and bottling spring water, Nestle Waters has an inherent interest in being a steward of a healthy environment at our spring sites. Our spring sources and the facilities that use them represent our most valuable investment. And using springs in a responsible manner today is the only way to ensure our continued success. Moreover, we select only those sites with a safe and sustainable yield, measuring any effects of our withdrawal, and understanding the cumulative impacts of all water users and a shared supply.

It is appropriate that communities would have questions and concerns about our water use and other impacts on the community's quality of life, both in terms of opportunities, like jobs, and challenges, like truck traffic. For example, in Michigan, there are concerns about the water use impact. In fact, it went to court, as Ms. Swier mentioned. Michigan courts ruled that bottled water is a proper and beneficial use of water in Michigan, and the company has the right to withdraw water at an appropriate rate determined under the State's reasonable use balancing test. Following the Court of Appeals ruling, the company and project opponents en-

gaged in mediated negotiations to determine the allowable rate of water use. Data reflects that this is a very safe level.

In McCloud, CA, we are in the middle of a comprehensive environmental and community-based regulatory process. In response to concerns, we are engaged with environmental groups, concerned citizens, together with third-party science experts in biology and hydrology from the University of California, Davis. The goal is to get increased information on the sustainable and safe water use levels for the project. There remain open questions on the economic benefits to the town and other impacts. There are materials provided that address some of these concerns. We plan to meet with all stakeholders to discuss the economic reports that have just come out, and gain a greater understanding of concerns and different points of view. We respect differences and try to address concerns through a variety of actions, but there are also times when we have not been as successful. And we are learning in those places and are open to work with stakeholders to do this in a better way that is open and transparent.

We also have a responsibility to the environment. My company has supported and will continue to support comprehensive science-based laws and policies regulating water withdrawals. The goals must be long-term sustainability, fairness for all water users, openness to public input in order to provide a responsible framework for decisionmaking. For example, in Maine, New Hampshire and Michigan, we have supported recent legislation that meets these standards. Thank you for your time and attention.

[The prepared statement of Ms. Paul follows:]

Testimony of
Heidi J. Paul
Vice President, Corporate Affairs
Nestlé Waters North America
Before the
House Oversight and Government Reform
Domestic Policy Subcommittee

December 12, 2007

Chairman Kucinich, Ranking Member Issa, and members of the Subcommittee, my name is Heidi Paul. I am Vice-President of Corporate Affairs at Nestlé Waters North America. My office is in Greenwich, Connecticut. Thank you for the opportunity to present this written testimony.

First, I'd like to offer a note of personal perspective. When I joined the company in 1992, bottled water was not nearly as prevalent as it now. Back then the nonalcoholic drink of choice was soda. Remarkably, soda passed tap water in per capita consumption in the mid 1980s. Today soft drinks still outsell bottled water almost two to one, but the growth of bottled water reflects consumers seeking healthier beverage choices. Three quarters of Americans drink bottled water.

We are a company known to most Americans by our brands, such as Arrowhead®, Deer Park®, Ice Mountain® and Poland Spring®. But we are known to our host communities by how we operate as a corporate citizen and neighbor. Part of my responsibility is to help shape the company's involvement in the communities in which we operate.

Our company is committed to success. We define success as producing healthful products and bringing good paying jobs to each of our operational locations, as well as being a good neighbor and protecting the springs we rely on. The company is committed to improving its performance in these areas. No one and no company is perfect, but I truly believe this company consistently tries to be fair, respectful and operate with integrity.

More than ten years ago, we began to actively lighten our environmental footprint. We know there is room for improvement and it is our responsibility to progress toward sustainability in every sense of the word.

Company background
Nestlé Waters North America Inc. and its affiliate, Nestlé Waters Canada, manage both U.S. and Canadian bottled water operations. Nestlé Waters North America Inc., with 9,000 employees, is based in Greenwich, Connecticut and is an affiliate of Paris-based Nestlé Waters, whose parent company is Nestlé S.A. of Vevey, Switzerland. Bottled waters are the only products produced by Nestlé Waters North America Inc., with 15 bottled water brands sold to consumers across the U.S. and Canada.

History
Our company history starts in 1976. At that time we were a small US-based business known as Great Waters of France, Inc., later to be The Perrier Group of America, Inc. We sold one brand, Perrier® Sparkling Natural Mineral Water, with a

handful of employees. Perrier was the beginning of a shift in Americans' beverage habits—bottled water was a socially acceptable alternative to alcohol and the drink of choice for active, health-minded individuals.

In 1980 we acquired our first domestic spring water brand, Poland Spring® Brand Natural Spring Water. We embraced its local heritage, nourished its growth and built it into a leading brand. We have done this with every brand we acquired since. Arrowhead® Brand Mountain Spring Water, Ozarka® Brand Natural Spring Water, Deer Park® Brand Natural Spring Water, Zephyrhills® Brand Natural Spring Water and Ice Mountain® Brand Natural Spring Water all started out as little-known brands with distinctive regional heritages and natural spring sources. Today these are our six core spring water brands, each a leader within its respective region of distribution.

Fast forward to 1992: Nestlé, the world's largest food and beverage company, purchased Source Perrier and acquired our company, then known as The Perrier Group of America. After joining Nestlé's global family of 72 bottled water brands, we became Nestlé Waters North America Inc. As part of Nestlé we have the corporate resources to expertly source, bottle and deliver exceptional water products. This strong and solid backing will continue to support our business and our employees in the U.S. and Canada.

Employment

Nestlé Waters currently has plant operations in 21 communities across the U.S. and 2 in Canada.

- Maine: 2
- Massachusetts: 1
- Pennsylvania: 2
- Florida: 2
- Texas: 3
- Michigan 1

Illinois:1
California: 5
Tennessee:1
Virginia: 1
Ohio: 1
Colorado:1
Canada: 2

We employ 9,000 people (3,400 work in our plants) with a total payroll of $561 million. Our employment taxes total $20 million, and we've invested $1.7 billion dollars in capital in the last 5 years. These operations have the following tax benefits: local property taxes of $29 million, state sales taxes of $21 million, state income taxes of $27 million, and federal income taxes of $125 million.

Corporate citizenship

In addition to economic benefits, Nestle Waters North America provides an invaluable product and service during times of disaster. In 2007 alone, we have donated to our partners Red Cross, AmeriCares, and to local emergency agencies well over 1,600,000 bottles of water to communities in times of need.

We also have contributed millions of dollars and hundreds of hours of volunteer time to support national and local efforts to protect watersheds, improve water education, help kids at risk, and particularly to partner with our local communities on projects and initiatives of local importance: parks, fire trucks, scholarships, beach clean ups, and hospitals to name but a few.

Having enumerated these benefits, we also acknowledge our impacts on the environment and society. While we have done much to address these impacts over the years, we need and want to do more. Our goal is to work with stakeholders to

operate in an economically, socially and environmentally sustainable manner, and to be transparent and accountable for our actions.

Siting new facilities
Every community has different priorities and circumstances—and different zoning and development regulations— to which we must be attentive. NWNA adjusts its siting activities to comply with a particular community's process. And in each community, we aspire to live by the same set of principles; these are called our Good Neighbor Policy.

The ten points of our Good Neighbor Policy include: 1. Open communication; 2. Environmental excellence; 3. Responsible spring water resource management; 4. Water resource relations; 5. Sustainable land use; 6. Traffic mitigation; 7. Exemplary employee practices; 8. Water education; 9. Emergency relief; and 10. Giving back.

We have many examples of this policy in action. In new communities, we post a website that provides information about the project and the process; we also participate in town meetings, and other gatherings to discuss the projects.

In general, we have done this well, and encourage you to contact our existing communities to investigate for yourself. In the handful of examples where we have not been as successful, we are learning. And pledge to continue working with stakeholders to do this better, in a way that is open, transparent, and empowering for local communities.

To demonstrate these efforts, please refer to case studies about our projects in Michigan and McCloud, CA, following my testimony.

Rural economic opportunity
Many of our bottling operations are located in more rural areas of the country. And, for good reason: Natural spring water is the core resource for our primary product. Spring water sources that are naturally clean and protected tend to be located in rural areas. In our experience, most of these communities welcome clean industry, like the kind Nestlé Waters offers. Our manufacturing jobs pay in the top half of comparable jobs and come with healthcare insurance and 401K benefits.

Small water user
- Bottled water is an obvious and visible user of water. In reality, bottled water actually uses only 0.02% of groundwater and 0.001% of freshwater used in the U.S., representing a tiny portion of our nation's overall water use.
- For another perspective, on average each year our plants each use about the same amount of water applied annually to keep a golf course green in Arizona.

Efficient water user
- Of all packaged beverages, bottled water uses the least amount of water to produce. Why? Because there are no ingredients to grow or process.
    - For each gallon of packaged spring water, we use 1.37 gallons, including all water used in manufacturing.
    - By comparison, soft drinks use three gallons of water to produce each gallon of product. Beer uses five gallons of water just to package one gallon of beer, not including the water to grow and process the ingredients (which requires the vast majority of water).

Spring water resource management
Nestlé Waters North America has an inherent interest in being a steward of a healthy environment at our spring sites. Our spring sources and the facilities that use them represent our most valuable investment, and using them in a responsible manner today is the only way to ensure our continued success.

Spring water is a renewable resource, and we carefully select springs that are continuously replenished by precipitation and the movement of groundwater.

Our operations are specifically managed for long-term sustainability. That means our water withdrawals are dictated by what the spring and surrounding watershed can provide within its natural cycle and that of the surrounding groundwater system. To accomplish this, we rely on an environmental and geological monitoring program, collection of data and scientific analysis of that data.

This program is administered by a team of 11 on-staff professional geologists and hydrogeologists, together with third-party technical consultants throughout the US and Canada. As part of science-based and on-going resource management, these experts use instrumentation to measure, if applicable, stream flows, wetland water levels, and water table variations, assess the plant life and other biologic habitats of the site and monitor precipitation.

This level of science is considered by Nestlé Waters North America to be a requirement. It maintains our spring water sources, the surrounding environment, our neighbor's water supplies, and our company's investment. We hold ourselves to a standard of continuous improvement. We aim to have an exemplary record for sustainable water resources management through collecting and evaluating hydrologic and environmental information.

Impact of using spring water or groundwater for bottled water
Every withdrawal of groundwater – whether for potable supplies for our communities, crop irrigation, manufacturing, or any other purpose, including bottled water - has an effect on the flow or discharge of groundwater to surface water. We know there are complex interrelationships between surface water and groundwater. We employ our ongoing monitoring and management programs to ensure, to the best we can, that we understand the impacts, if any, from our operations.

By virtue of our practices, Nestlé's spring water operations are environmentally conservative. We select only those sites with a safe and sustainable yield, measuring any impacts of our withdrawals and understanding the cumulative impacts associated with other parties' use.

As well, the permitting process we undertake for each of our projects typically include extensive regulatory oversight. As applicable, agencies are responsible for assessing the effects of our spring water withdrawals and imposing on-going mitigation policies. Indeed, many jurisdictions impose "no impact" requirements. Thus, our operations are permitted within the context that they will create no adverse resource impacts.

Summary
Mr. Chairman, members of the Subcommittee, bottled water issues are more often in the spotlight in state capitals than here in the nation's capital. From Maine to Michigan, my company and other water bottlers—as you'll hear later from IBWA President Joe Doss—have, and will continue, to support comprehensive laws and

policies that regulate water withdrawals based on protecting the resource and ensuring long-term sustainability.

We are proud to have helped bring about what one Maine state legislator called one of the "few pleasant surprises" of the 2007 legislative session, by finding common ground on groundwater resources.

Maine's new state law establishes a consistent, integrated and scientifically sound state policy that ensures the withdrawal of groundwater does not have an undue adverse effect on waters of the state. This new law will have a lasting impact on groundwater protection in Maine. We were only one of several participants in crafting that law, and you'll hear from another participant, Mr. James Wilfong, the leader of H2O for Maine, in the second panel.

In Michigan, we supported landmark bipartisan legislation in 2006 that strengthened state water use laws, clarified permitting processes for all large quantity users of water, protected water resources and sensitive habitats, and enshrined in state law the prevention of wholesale diversions of water from the Great Lakes Basin.

These are two of the most recent cases that brought together people who had been adversaries, but, when all was said and done, shared a common commitment and concern for water resource sustainability. People of good will may still disagree over competing uses of water, but laws like these provide the framework for fair, resource-based, decision-making that is informed by sound science.

As you examine the regulatory structure of the environmental issues presented this afternoon, it is our hope that this discussion today will have a similarly constructive result, and we look forward to working with all of you toward that end.

Thank you.

Heidi J. Paul

Michigan Case Study

Nestlé Waters chose to expand its nationwide family of regionally based bottled water production facilities in Michigan in 2000. The company's Midwest Ice Mountain brand — previously produced at a Pennsylvania facility – was experiencing marketplace growth as consumers increasingly chose healthier bottled water products over other packaged beverage products.

A multi-year site reconnaissance effort by company officials and scientists considered several hundred potential locations in Michigan and the Midwest. During the process, Nestlé scientists concentrated the site search in west Michigan for several reasons important to the company's primary product line of natural spring waters, including:

- The region's reliable and abundant precipitation (34 inches annual average), important for recharging – replenishing – groundwater systems
- Regional geology of sand and gravel aquifer systems, which provide efficient recharge of the groundwater systems, and which produce high quality and naturally good tasting water

The region presented other factors attractive to a major employer like Nestlé, including:

- Major market truck lane access and proximity to key Midwest markets
- Available workforce with production experience
- An area that appeared open to new business development leading to economic and job-base diversification
- Access to higher education institutions with technology training and other business and production management programs

Working with respected conservation organizations such as the Michigan Chapter of Trout Unlimited, Michigan United Conservation Clubs and others recognized for their mission to protect resources and habitats, Nestlé narrowed its site selection efforts to three prospective sites, two in southern Mecosta County and another in southern Osceola County. The counties abut one another, and adjoin four other counties that comprise a region centering on the City of Big Rapids as the largest urban area.

Plant site and spring water source selection process

Nestlé undertook a comprehensive site selection process that included community outreach and communications, scientific assessment of potential spring water sources and their environments, plant siting, governmental and regulatory agency interfacing, and permitting.

Plant Site Selection — In May 2001, Nestlé announced it would build its $150 million bottling facility in Stanwood (since then, the actual investment has grown to approximately $200 million), a community located in southern Mecosta County, eight miles south of the City of Big Rapids. The plant site was chosen because it provided close access (less than one mile) to major north/south truck route U.S. 131, thereby allowing Nestlé to address truck traffic, one of the leading concerns expressed by

local residents relative to future operations. The plant location significantly limited truck traffic impact on surface streets and neighbors.

Spring water source study, permitting — The company's team of scientists had identified a potential spring water source approximately 12 miles from the plant site. Nestlé negotiated an agreement with the landowner that allowed scientists to conduct a series spanning several years required by Nestlé to support investment in the project and to ensure long-term sustainability of water supply and environmental protection. These studies also supported applications to the State for permits required for public water suppliers, which include the state's water bottlers.

Getting to know a community, community relations and communications – Strong community relations were integral to the Michigan project development, as well as an open approach to communications with neighbors, community leaders, and project opponents. The company believes trust is one of the key factors behind the successful development of the Michigan project.

Relationships built starting in 2000 continue today, serving as a strong tie binding the company and community. Nestlé enjoys positive relationships with business, civic, philanthropic and elected leaders throughout the area. These relationships are important as the company works to address questions and concerns about its operations and practices, act as a responsible corporate citizen of the area, and manage day-to-day business challenges.

Every community is unique. While there are many aspects of project development that are consistent community to community, the company seeks to appreciate each community's own character, priorities and needs. In Michigan, the company aimed to communicate with openness, accuracy and timeliness on every aspect of its project development, recognizing the community's interest in having a say about project features. Beyond project features, benefits and considerations, Nestlé also provided information about the water cycle, scientific assessment processes, the experience of other communities where Nestlé was located, long term environmental protections, and responses to issues raised throughout the project development phase.

Ice Mountain today in Michigan

Today, nearly six years since operations started at Nestlé's Stanwood bottling facility, the Ice Mountain bottling facility stands as a major regional employer committed to the area. Ice Mountain is a good neighbor, contributing to the well being of the community and a wide range of organizations and efforts; a good steward of the environment; and a catalyst for economic activity benefiting other businesses in the area.

Economic impact

A summary of the economic impact of the Ice Mountain facility in Michigan includes:

- Employment of approximately 277 people
- Indirect, or spin-off, employment of 609
- Annual payroll of $16.8 million, creating a total payroll impact of nearly $40 million annually

- Average employee wage of $60,000, adjusted for overtime pay, far above county wage and gross earning averages
- A benefits package including paid vacation and sick leave, medical, dental and vision insurance; retirement savings plans and profit sharing. Ice Mountain pays 80 percent of these benefits.
- Approximately 450 Michigan vendors service the Ice Mountain plant

It is important to note that Ice Mountain jobs are coveted. Evidence of this includes the volume of applications received relative to the number of jobs posted by Ice Mountain. Initially Ice Mountain announced the plant would open with 45 jobs. A job fair resulted in more than 4,000 applications submitted. As plant employment has grown since 2002, the ratio of applications submitted to positions available has remained high. For example, in 2005, 2,000 applicants applied for 30 positions; 1,000 applicants applied for 60 positions in 2006; and in 2007, 900 applicants sought 30 open positions. Also evidence of the quality of jobs Ice Mountain provides is the low employee turnover rate at the Stanwood facility. Voluntary turnover at Ice Mountain is 4.4 percent, significantly below U.S. Bureau of Labor Statistics data, which shows turnover of 13 percent regionally.

Construction of the now $200 million facility has generated an estimated 1,250 contractor jobs.

It is common knowledge that Michigan continues to experience difficult economic times, primarily due to the loss of automotive manufacturing jobs, and the sequential loss of the thousands of jobs that previously were created by spin-off spending by the automotive industry. The west central region has not been spared.

According to government statistics, unemployment in Mecosta County was 7.4 percent during October 2007. The national rate for 2006 was 4.6%. Clearly, the state and region need the jobs made possible by NWNA.

Environmental Stewardship

LEED™ Certification — The Stanwood Ice Mountain plant was Nestlé Waters' first plant to be built for certification by the U.S. Green Building Council's LEED™ program (Leadership in Energy and Environmental Design), and also the nation's first food and beverage facility to meet LEED™ certification. The facility incorporates a number of resource conservation measures, including xeriscaping, low energy demand and motion sensitive lighting, daylighting, construction materials made of recycled material, and others. Nestlé now has six LEED™ certified bottling plants in the U.S., and is committed that any future facilities be LEED™ certified.

Water resource sustainability management — An extensive network of monitoring points in the area of Nestlé's wells provide an on-going record of water table measurements; wetland and stream levels; stream flows, and other environmental measures. Additionally, biologists periodically visit to the site to collect observations regarding the health of wetlands, streams and fisheries. Ice Mountain's natural resource manager utilizes the information in stewardship of the water resources and the environment. Ice Mountain provides this data to the MDEQ, which conducts

independent measures of these resources; the company also provides a quarterly report to local township officials and other interested parties.

Importantly, the monitoring record spanning seven years now, shows the water table, other water resources, and reliant ecosystems are not detrimentally affected by Nestlé's water withdrawals.

Reduce, reuse, recycle — Nestlé is committed to key conservation principles of reducing raw material and natural resource use, reusing materials whenever possible and encouraging recycling. Nearly every raw material used by Ice Mountain is recycled, including retail product pallets, corrugate, plastics and other materials. An efficient user of water, Nestle bottling plants use, on average, just 1.3 gallons of water for every gallon of product produced.

Ice Mountain joined other Nestlé brands this past summer in launching "lightweighted" bottles. Ice Mountain bottles are among the lightest in the market, using 30 percent less plastic than other bottles. The result is less demand on energy and less waste. All of Ice Mountain's bottles are recyclable.

Ice Mountain Environmental Stewardship Fund — Founded in 2002 by Nestlé Waters, the Ice Mountain Environmental Stewardship Fund is an endowment fund managed by the Fremont Area Community Foundation. The Fund provides grant monies to local organizations working to enhance or protect the Muskegon River watershed and its ecosystems. Ice Mountain has made annual contributions to the fund, part of which has been endowed for perpetual giving. A community-based advisory board that reports to the Fremont Foundation board of director assists the Fund. To date the fund has supported dozens of efforts, including fishery habitat restoration, research projects, and pollution prevention and education.

Support to others for the greater good and community involvement
Ice Mountain and its employees appreciate opportunities to support organizations throughout west Michigan, and beyond, through product donations, volunteerism and direct financial donations. In 2007 Ice Mountain will have contributed by year-end approximately 2 million bottles of water to 225 organizations. The plant will have also donated nearly $60,000 in direct financial support of charitable and community organizations.

Support is given to a wide range of needs, including health, seniors, recreation and environmental stewardship. Some highlights of Ice Mountain's support include:

- Assistance to area hospitals in emergency preparedness planning
- Support for the Michigan United Conservation Clubs' youth conservation education magazine, "Tracks"
- Partnership with Americares and the American Red Cross for hurricane (including Katrina) and other emergency relief
- Donation of nearly one half million bottles to Detroit in response to an extended electrical power blackout in summer 2003
- Five semi-loads of bottled water product donated to the Michigan Food Bank System in anticipation of the 2007/2008 need

- Sponsorship as the official bottled water for the Fifth Third Riverbank Run in Grand Rapids
- Purchase of 4-H program livestock (donated to area food pantries)
- Funding for firefighting and other emergency response needs throughout the community
- Financial support of the Green River dam removal project in west Michigan

Ice Mountain people are also personally involved in a number of organizations that work for the betterment of the community and state, including the Mecosta and Evart Chambers of Commerce, Evart's annual 4-H and FFA Fair, Michigan Chamber of Commerce, Michigan Grocers Association and others.

Appropriate resolution of legal issues
Litigation brought in 2001 against Ice Mountain has largely been resolved by Michigan courts in Nestlé's favor. The original case involved several legal issues arising under Michigan groundwater and public trust law, as well as the Michigan Environmental Protection Act ("MEPA").

Key rulings by the Michigan courts have included:
- Bottled water is a proper and beneficial use of water in Michigan – in other words, water may lawfully be used for bottling as bottled water. Water bottling is part of the state's economic industrial base.
- Ice Mountain has the right to withdraw water at an appropriate rate determined under the state's reasonable use balancing test that considers numerous factors including competing uses of the water. This "common sense" common law has proved to be effective in allowing water use for a variety of purposes that society has chosen, and also in balancing of competing uses. Recent legislation in Michigan has implemented a regulatory and permitting system that supplements common law for the purpose of resource protection.
- Following a Court of Appeals ruling, the parties mutually agreed to a stipulation on Ice Mountain's allowable rate of water use, which they stipulated was reasonable and would not harm the environment. The agreement provides both parties the opportunity to seek adjustment of the water use amount in the future, based on the monitoring data and science.

Introduction to Evart
A relationship between Nestlé Waters North America and the west central Michigan community of Evart is a very good example of how corporate and community interests can work together to achieve objectives that benefit both. For Nestlé, this is an important element of its presence in any community, and represents the company's commitment to all aspects of the Sustainable Development platform: long-term economic, social and environmental performance.

History of a relationship
Beginning in 2005, Nestlé started purchasing spring water from the City of Evart, located approximately 35 miles north of the company's Stanwood bottling plant. Water is purchased on contract with rates based on the City's published rate schedule for industrial/commercial customers. Water is piped to a Nestlé-owned tanker fill station in Evart and then transported by tanker truck to the bottling facility.

The relationship between Nestlé Waters and the Evart community is long-standing, friendly and beneficial to both. It reaches back to 2000 when Nestlé first initiated its site selection process for a potential bottling facility in Michigan. While Nestlé eventually would choose Stanwood in which to make its first investment in Michigan, Evart remained an attractive location to Nestlé. A close and cooperative relationship between Nestlé and Evart has ensued ever since.

Nestlé began purchasing spring water from Evart in 2005 as a result of an invitation in 2004 from City administration and leadership. The City's waterworks department had identified surplus water capacity as an issue, as one of the largest industrial water customers announced it anticipated substantially reduced annual water purchases in coming years.

Following a period of extensive investigation and due diligence on the part of the City, Nestlé and other community groups, agreements were entered into between the parties. These agreements provided for a multi-million dollar investment to be made by Nestlé in the community to enhance groundwater protection for the City's Twin Creek well field, including water supply infrastructure within the city. The effort centered on important land use considerations to ensure long-term groundwater quality. Substantial land use changes were undertaken, which resulted in providing new and upgraded recreation and athletic facilities for city residents, the Evart schools, and the Osceola County 4-H and FFA Fair, an important economic asset to the community. These facilities are all better located to enhance groundwater protection to the City's Twin Creek well field.

In developing a water purchase agreement with Nestlé, the City carefully examined potential impacts to the quality or quantity of waters and water-dependent resources in the area as a result of the proposed arrangements between the City and Nestle. The City also structured the water purchase agreement with Nestlé so that future water withdrawals from the well field would not exceed historical levels, thus assuring no increased demand on the resources. The agreement gives the City's water supply priority, including a provision that allows any well used for Nestle supply to be redirected to the City's distribution system in the event this becomes necessary in order to serve the City's other customers.

Nestlé benefits / Community benefits

Nestlé agreed to purchase water from designated wells owned by the City and built facilities in the community for this purpose. Nestlé's Ice Mountain Evart Station serves as a tanker truck depot, generating tens of thousands of water purchase and property tax revenues to the City. Nestlé's water purchases are based on the City's published rate schedule, paid in addition to the $200,000 infrastructure fee paid to the City. The Evart Station adds to Nestlé's investment in Michigan has allowed the company to grow employment in west central Michigan and supports the company's growing business. It also stands to serve as a catalyst for potential additional investment by Nestlé in the community.

Important to the City, Nestlé added to the diversification of commercial and industrial water customers, a goal the City had determined was needed to keep both

residential and business costs for water affordable, and to generate revenues needed to maintain water delivery infrastructure.

The City upgraded its groundwater protection program on a faster timeline than the City could have afforded to make such improvements without the involvement of Nestlé. These upgrades included, among others: removing certain existing infrastructure that posed contamination risk to the recharge area of the City's well field, implementing land use restrictions to improve groundwater protection and preserving undeveloped land in the area. The City also moved forward with long-term plans to diversify its water source assets by installing an additional well in a separate aquifer system, which ensures water capacity and quality protections.

While all of the groundwater protection measures undertaken by the City are of long-term importance to the City and its residents, the partnership also resulted in greatly enhancing several community and school-related resources that provide recreation and athletic enjoyment by residents, students and visitors. These resources are located now to allow valuable, low impact use of the land to protect groundwater quality.

Recreational and athletic infrastructure improvements funded and facilitated by Nestlé include the following, among others:

- Land acquisition and construction of a new community softball and tennis complex, with signage and parking;
- Land acquisition and construction of new athletic facilities for the Evart Schools, including two baseball fields, two softball fields, a utility/concession/restroom pavilion, a practice football field, a storage building, and parking area;
- Land acquisition and funding for new fairground camping infrastructure and improvements in fairground infrastructure.

These recreation and athletic infrastructure improvements will not only improve the quality of life, but also will have a significant economic benefit due to the several million dollars of construction investment, increased attendance at fairground events and the attraction of new events and visitors to the area for events such as the annual dulcimer festival, which are a major focus of cultural and social life in the community.

Potential for future investment

As popularity of bottled water products and Nestlé's market share in providing these products continues to grow, Nestlé may seek another location for an Ice Mountain brand bottling facility in the Midwest. The City and its economic development personnel have moved aggressively to lay into place key elements designed to attract Nestlé to select the City's industrial park as home for a second Ice Mountain brand bottling facility in Michigan as early as 2010. This effort by the City has included, among other things, the approval of a city charter amendment by voters related to water contract duration, and the execution of a purchase option agreement for 50 acres of industrial park property.

The Evart community would very much like to secure this prospective investment by Nestlé in a Midwest bottling plant in Evart. The investment would top $150 million, spur the area's economy, create hundreds of local construction and operational jobs, and add another significant employer to the area.

McCloud, CA Case Study

The town of McCloud, located in Siskiyou County, California was built by a timber company in the late 1800s and remained a company-owned town through the early 1960s. As the timber industry reduced its presence, the company sold all of the houses to individuals and created the McCloud Community Services District to provide water, sewer and other local utility services to the residents. The timber mill located in McCloud changed ownership several times during the 1980s and 1990s, eventually closing for good in 2002. Nestlé Waters purchased the mill property in January 2006.

Today, McCloud and the surrounding Siskiyou County face serious economic challenges. The local unemployment is two to five percentage points higher than the California average. The median household income also stagnates, 30% lower than the state average. The county has fewer private-sector jobs than it did 10 years ago. Many families have had to leave McCloud to find work. The local schools are at the lowest enrollment levels ever -- the local high school, with a facility built to accommodate around 250, has a total enrollment of 8 students. The community's volunteer emergency services continues to lose staff as people move out of the area for other jobs and currently there is no one to staff the ambulance during the day for emergencies.

History of a relationship
The relationship between Nestlé Waters and the town of McCloud began in 1998 when the McCloud Community Services District (MCSD) contacted Nestlé Waters. MCSD had been pursuing several spring water bottling companies, offering to sell local spring water and a location to site a new water bottling facility. The McCloud community uses less than 20 percent of the approximately 10,000 acre-feet/year of the spring water flow generated locally. For over a decade, MCSD had been analyzing opportunities to use its surplus spring water capacity to generate added revenue to support community services and provide new light industrial jobs. In the mid-1990s MCSD began actively pursuing a spring water bottling deal and approached Nestlé Waters after negotiations with several other bottled water companies did not result in an agreement.

Nestle Waters was not looking to site a factory in the northern part of California in 1998 but became interested in late 2002 and early 2003. In mid-2003, after preliminary investigations, due diligence and public discussions conducted at MCSD public meetings, an agreement was entered into between the parties. Subject to this agreement, Nestle would purchase spring water as an MCSD customer and make a multi-million dollar investment in the McCloud community, resulting in a steady, guaranteed revenue stream to support district operations.

Nestlé benefits / Community benefits
Nestlé Waters has agreed to build a new LEED-certified bottling facility on the former mill property. It will bottle spring water purchased as a commercial customer of MCSD, just like any other business in town.

As documented by the Center for Economic Development at California State Chico, the proposed project would create up to 240 positions at full build out, and spur the creation of 240 secondary jobs. The University's analysis also found that at full build out Nestlé's project will bring at least $23 million in income to residents and businesses in Siskiyou County each year. In McCloud, Nestlé's payments to MCSD

will increase District revenues by nearly 30% by the time the factory is built out. Those funds can be used to support all of the District's services including fire and ambulance, trash collection, snow removal, water and sewer services and street lighting.

The proposed plant will be the seed for economic development not just in McCloud but throughout the region, providing as much as $1 million in annual property tax revenue. The communities in Siskiyou County, like many rural counties, are interdependent and so employment opportunities in McCloud will benefit the entire region. The support of business and civic groups throughout the region demonstrates county-wide support for the project.

Environmental stewardship
Before the project can be built, it must undergo extensive environmental review under the Californian Environmental Quality Act (see below). This analysis is in addition to Nestlé's traditional site selection and monitoring program.

Comprehensive Environmental Review Process (CEQA/NEPA)—The McCloud project proposal is subject to full environmental review under both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), under the supervision of Siskiyou County and the United States Forest Service. Begun in 2004, this multi-year environmental review is ongoing and the resulting Environmental Impact Report (EIR)/Environmental Assessment (EA) will evaluate the proposed project's potential impacts on every relevant environmental issue, including traffic and noise levels, historical resources, air quality, biologic resources, water quality and quantity and many other environmental resource areas.

The CEQA/NEPA process is widely regarded as one of the most stringent environmental reviews in the world. Before Nestlé Waters can built its plant and begin purchasing any water from MCSD, the County's EIR/EA must be completed and any potential impacts that are deemed "significant" must be addressed through adequate, appropriate and enforceable mitigation measures.

Compliance with CEQA and NEPA includes multiple opportunities for public input, review and comment. CEQA and NEPA's public participation requirements ensure that all relevant community concerns are addressed before the project can be approved. In response to concerns raised during the initial public comment period on the Draft EIR/EA, the County agreed to revise and recirculate its draft environmental impact studies to allow for additional public review and comment. This process is still ongoing.

LEED™ Certified Facility—The McCloud facility will be built to meet the U.S. Green Building Council's LEED™ (Leadership in Energy and Environmental Design) standards for green buildings. The environmental benefits of LEED™-certified buildings include significant water conservation, energy conservation, criteria and greenhouse gas emissions reduction, waste reduction, healthy workplaces, open space preservation, native plantings, constructed wetlands, among others.

As with all Nestlé Waters' facilities, the McCloud project will include an extensive long-term spring water and natural resource monitoring program to ensure the health of McCloud's spring sources and surrounding environment.

Nestle is a committed community partner
Strong community relations, ongoing stakeholder engagement and an open approach to communications with neighbors, community leaders, and project

opponents are an integral part of the McCloud project. In McCloud, as in all of our spring communities, we continue to work to maintain open communication and be an active and contributing community member.

The company has been working with MCSD, the residents of McCloud and the greater community of Siskiyou County for more than four years in evaluating the proposed local bottling plant. Over this period, the company has met numerous times with community members, seeking input and answering questions about the proposed project and anticipated operations. MCSD has also provided multiple opportunities for the public to give input into the planning and ongoing operations of the proposed project.

Nestlé Waters' is also in an ongoing dialogue with respected conservation organizations such as California Trout and Trout Unlimited, as well as with the McCloud Watershed Council, a local group, to ensure that their concerns are addressed in the final project proposal.

Appropriate resolution of legal issues
Immediately after Nestle completed its agreement with the McCloud Community Services District (before any of the required environmental review was completed or the project was presented to Siskiyou County for permitting), a small group of community members sued the County, MCSD and Nestle. This lawsuit has been fully resolved in Nestlé's favor, and the environmental review and community outreach process continues as planned.

Local support for the proposed water bottling plant
While the siting of any light industrial facility is not without controversy, the proposed McCloud project has the support of the majority of the McCloud Community. This support was demonstrated by the election of three pro-project candidates to the MCSD Board of Directors in November 2006. This election was widely regarded as a referendum on the bottling plant project and confirmed that the majority of McCloud residents support the proposed project.

Support for the Nestlé project has coalesced in the formation of the McCloud Grassroots Committee, made up of many life-long McCloud residents who are working together to help ensure that there are jobs and other vital community services available for full-time McCloud residents now and into the future. The Grassroots Committee support for the McCloud project and the high quality jobs and other benefits it provides is shared by many other Siskiyou County residents who have signed a petition supporting the project.

At the same time, Nestle continues to communicate with environmental groups (primarily Cal Trout and Trout Unlimited), and the McCloud Watershed Council, to address their concerns over the project.

We believe the company continues to build its positive relationship with the McCloud community and improve its outreach with other interested stakeholders including business, civic, philanthropic and elected leaders throughout the area. These relationships are important as the company works to address questions and concerns about the project, future operations and practices, and act as a responsible corporate citizen of the area.

Nestlé Waters North America

Corporate Citizenship Vision And Commitment

Nestlé Waters NORTH AMERICA

Our vision of corporate citizenship is focused on the waters and lands that support our business, along with the well-being of our neighbors, consumers and employees.

We aspire to be a leader in corporate citizenship by collaborating with stakeholders to operate in an economically, socially and environmentally sustainable manner, and to be transparent and accountable for our actions.

Nestlé Waters North America is committed to:

- Promoting healthy hydration
- Managing water resources for long-term sustainability
- Reducing our environmental footprint
- Supporting the 3Rs: Reduce, reuse, recycle
- Providing a safe source of water when otherwise unavailable
- Being a good neighbor in our communities

Promoting Healthy Hydration

What does water do for you?

Our bodies require water to function properly. In fact, while the amount varies with age, at maturity the human body generally contains between 65% and 70% water.

Counting Calories

Average calories for a 12-ounce beverage

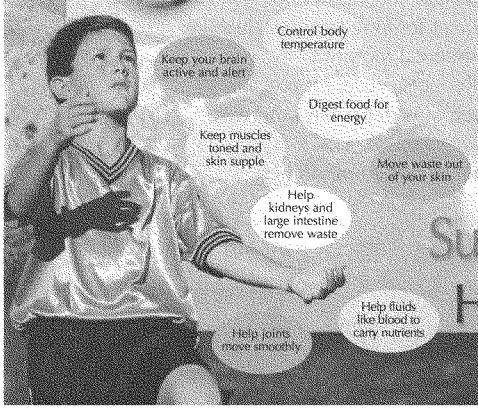
	Calories	Teaspoons of Sugar
Bottled water	**0**	**0**
Sports drinks	110	6
Sweetened teas	130	7
Lemonade	140	9
Soft drinks	150	10
Fruit punch/"drinks"	180	11

Water saves calories

Water provides hydration without adding sugar, caffeine or artificial ingredients.

- People are drinking 225 more calories every day than they did 10 years ago[1]
- In 2006, people switching to bottled water avoided consuming 356 billion calories
- All told, that's an estimated savings of 110 million pounds

YOUR BODY NEEDS WATER TO…



Consider these facts:

- There has been a 370% increase in childhood obesity in the last 30 years.[2]
- Two-thirds of U.S. adults are obese or overweight.[1]
- If this continues, by 2015, 75% of adults and 23% of children will be overweight or obese.[4]
- By switching from one carbonated soft drink a day to one a week, you can skim 50,000 calories and 65 cups of sugar a year from your diet.

NWNA's commitment to research and education

1) Nestlé continues to fund health research. Current hydration studies include:
   - Effects of water on diabetes, lipids and cholesterol
   - Effects of water on children and mental acuity
2) As a a founding sponsor of the Project WET Foundation, a non-profit water science and education program, we help support the training of over 400,000 teachers and millions of children in water stewardship and water for health. Today, Project WET is in 29 countries and on 5 continents.

FYI:

- **Your brain is 75% water.**
- **You exhale carbon dioxide and water.**

Supporting A Healthier Lifestyle

Managing Water Resources for Long-Term Sustainability

The key to harvesting water sustainably is the science used to select the spring sources, and the ongoing monitoring of the springs and their immediate watersheds.

Selecting our sources:

- We look for healthy ecosystems and abundant water supplies
  - Spring sources must satisfy strict quality and regulatory criteria, as well as unique taste profiles
- Extensive hydrogeological studies and groundwater modeling are used to assess sustainability of the water source
- We also test for water quality, including mineral content, chemical analysis and taste profile

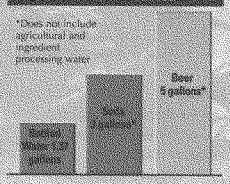
Monitoring our sources:

- We collect data, both manually and electronically, to manage our spring resources, balancing over the long-term water withdrawal and natural recharge through rain and snowmelt. (See schematic below.)

A small, but careful user

Although bottled water is an obvious user of water, it is actually a very small user. Of the total renewable fresh water used annually in the United States, NWNA is a small consumer, using less than 1/1000 of 1%.

Gallons of Water Used per Gallon of Product Produced

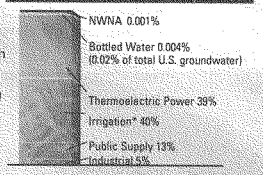


An efficient user

Bottled water requires less water to produce than any other bottled beverage. A gallon of bottled water takes just 1.37 gallons of water* to produce – this includes water in the product and water used for production, in addition to all activities within the plant.

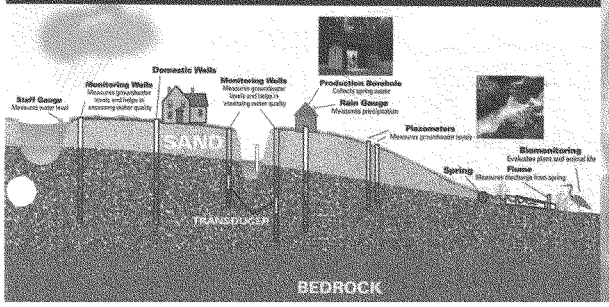
*NWNA 2006 water usage

Percentage of Total U.S Renewable Fresh Water Annually



*If you exclude thermoelectric power, irrigation represents 85% of freshwater withdrawals annually.
Source: http://water.usgs.gov

Long-term monitoring schematic of Maine spring



Reducing Our Environmental Footprint

Environmentally responsible manufacturing

NWNA is reducing use of all raw materials and energy in its manufacturing plants.

Using less packaging

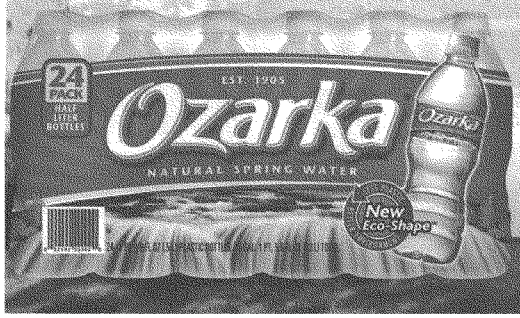
- NWNA reduced the shrink-wrapping on half-liter cases by 11% over the last three years, a significant savings of plastic
- In the last 9 years, reduced the size and weight of labels, saving millions of pounds of paper
- Within the last 10 years, eliminated millions of pounds of corrugated cardboard

Greening our buildings

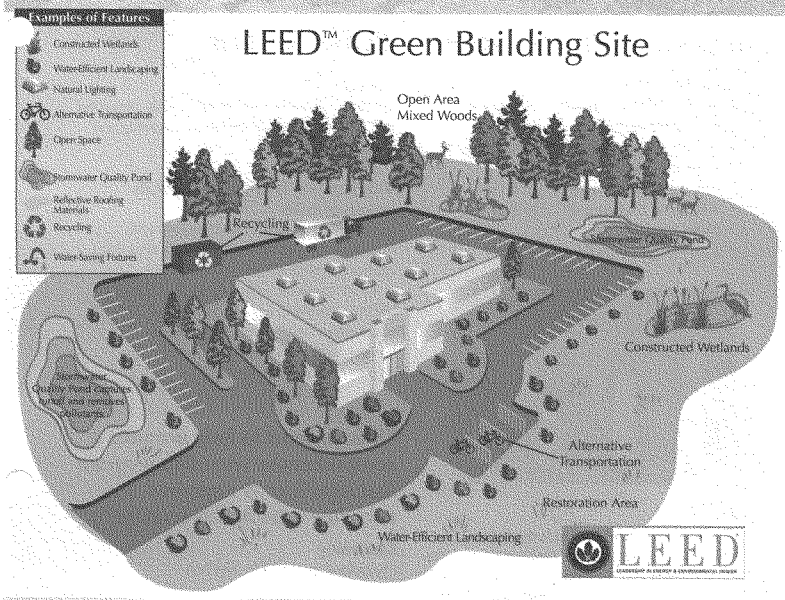
Our first LEED (Leadership in Energy and Environmental Design) certified plant also was the first in the food and beverage industry. Today, we have 6 manufacturing plants, and over 2.5 million square feet designed and built to meet LEED certification.

- Stanwood, Michigan (full LEED Certification) – One of the first U.S. industrial plants to earn award
- Cabazon, California (Silver rating) – First U.S. food manufacturing facility to earn silver
- Hawkins, Texas (Silver rating)
- Red Boiling Springs, Tennessee (Silver rating)
- Madison County, Florida (Silver rating)
- Allentown, Pennsylvania (East Bottling Plant registered with the U.S. Green Building Commission pending LEED Silver Certification)

Like our existing LEED plants, every new Nestlé Waters North America green field site will be designed to achieve LEED certification – that is several sites over the next five years.



Lighter Packaging Green Buildings



Environmentally friendlier transportation and logistics

Nestlé Waters North America has also developed more efficient processes to save transportation energy.

Transportation	
NWNA Action	**Results**
Produce 98% of our own single-serve PET* bottles in our plants	Eliminates the need to truck 160,000 loads of empty bottles into our plants – saving 6.6 million gallons of fuel per year
Increase the volume of product in each truck traveling to retail locations	Reduces trucks on the road, miles traveled and fuel consumption
Testing the use of bio-fuel with Poland Spring tanker trucks	Could reduce greenhouse gases by 20% or over 21 tons per year Fuel is domestically produced from renewable resources
Route redesign	Reduced fleet size by approximately 10% by increasing efficiency of deliveries

*Polyethylene terephthalate

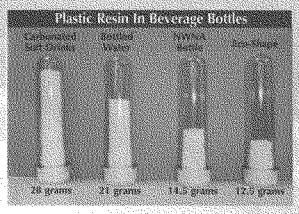
1 Hearst Op Ed & Popkins, Barry M., L. Armstrong, G.M. Bray, B. Caballero, B. Frei, and WC Willett. (2006) A new proposed guidance system for beverage consumption in the United States. American Journal of Clinical Nutrition 83: 529-542.
2 Obesity and Overweight: CDC NHANES data for various age groups, beginning with NHANES I (1971-1974) and ending with NHANES 2003-2004
3 Fourth annual report from the Trust for America's Health
4 Wang et al. The Obesity Epidemic in the United States – Gender, Age, Socioeconomic, Racial/Ethnic and Geographic Characteristics: A Systematic Review and Meta-Regression Analysis. Study supported by grants from the Johns Hopkins Bloomberg School of Public Health, the National Institute of Diabetes and Digestive and Kidney Diseases/National Institutes of Health and the U.S. Department of Agriculture. 2007.
5 NAPCOR, Oct.29, 2007, "2006 Rate Report Shows PET Container Recycling Rate Up For Third Year At 23.3%."

Supporting The 3Rs: Reduce, Reuse, Recycle

Reduce

New Eco-Shape™ bottle: 12.5 grams of plastic on average!

- The lightest half-liter PET plastic beverage bottle ever produced in the U.S.
- 30% lighter than average water bottles
- 50% lighter than average carbonated soft drink containers
- 65 million pounds of plastic to be saved in 2008



Reuse

Our Home & Office division is the largest returnable bottled beverage company in America.

- 3-gallon and 5-gallon containers are each reused about 35 times
- When they are no longer useable, 3-gallon and 5-gallon containers are recycled, becoming automobile parts, playground equipment, lawn furniture and other products

Recycle

100% of NWNA bottles are recyclable. Recycled PET is in high demand for fabric, carpeting and other consumer goods.

But recycling is falling short of its potential in the U.S.

Like most Americans, Nestlé Waters North America is concerned about water bottles that are not recycled and end up in landfills. The U.S. PET container recycling rate is 23.5%[2]. NWNA is working with environmental stakeholders and industry colleagues to support a comprehensive 21st-century recycling solution for America.

"It is our goal to help promote a comprehensive recycling program that significantly improves recycling rates in this country."

Kim Jeffery
President and CEO, NWNA

Providing a Safe Source of Water When Otherwise Unavailable

There when you need it most!

In partnership with the American Red Cross, AmeriCares and other organizations, Nestlé Waters North America has responded to natural disasters hundreds of times over the last 30 years, providing a safe, clean source of water for victims, first responders and volunteers.

Committed community partner

California fires (2007)

- Working with the American Red Cross, Federal Emergency Management Agency and other organizations, NWNA donated over 1 million bottles of Arrowhead spring water.
- We coordinated, through our retail partners, the movement of 3 million bottles to rescue workers, evacuees and residents affected by the Southern California wildfires.

"The American Red Cross is very grateful for the generous donations that Nestlé is making in support of our Southern California wildfires relief efforts. Access to safe, clean drinking water and food products is essential during natural disasters. We applaud the company's longstanding, continuous support and fast response in times of need." – **Kathleen Loehr, Interim Sr. VP of Development, American Red Cross**

"Million bottle reserve"

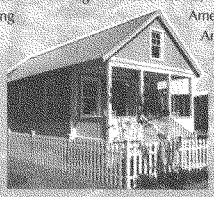
AmeriCares 2006

NWNA donated 1 million bottles of water to AmeriCares in advance of the 2006 hurricane season to allow bottled water staging in areas that may be in need of disaster assistance.

Quenching a thirst for Gulf Coast housing

Hurricane Katrina 2005

- When public water supplies were interrupted during Hurricane Katrina, Nestlé Waters North America, through the American Red Cross and AmeriCares, donated more than 1.5 million bottles to storm victims.
- Nestlé Waters North America partnered with Lowe's and donated bottled water to the workers building "Katrina" Cottages, like the one pictured here.



Center of relief

Hurricanes Francis and Jeanne 2004

- Nestlé Waters North America Florida bottling facilities suffered through hurricanes Francis and Jeanne in 2004 and then became central to the relief efforts as hundreds of thousands of residents were suddenly without drinking water.
- NWNA provided more than 700,000 bottles of water to relief agencies for distribution.
- NWNA employees, dealing with their own hardships due to the storms, continued to keep needed water supply going to customers and consumers.

A day to remember

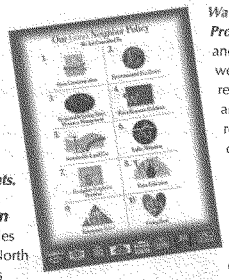
September 11, 2001

Every American was touched in some way by the events of September 11, 2001. In addition to donating large quantities of water, Nestlé Waters North America is proud to have had hundreds of employees contribute to the relief efforts.

Responding To Disasters

Being a Good Neighbor in Our Communities

The Nestlé Waters North America Good Neighbor Policy, established to show our commitment to the communities in which we work and live, and the environments that support us, has 10 points.



Our policy in action

There are many examples of how Nestlé Waters North America implements this policy by supporting environmental, community, education, health and fitness programs, and events locally and nationally, including:

Open Communication

Project Websites: Beyond participating in town meetings, communicating with officials and neighbors, Nestlé Waters also activates a community website for ongoing communication. This ensures that a new community receives information about our company and the NWNA project within the community. It also enhances community dialogue with plant leadership.

Sustainable Land Use

Preserving open space: NWNA typically leases or purchases large tracts of land around our spring sources and leaves most of the land undeveloped, providing watershed protection, as well as good habitat for local plant and animal life. To date, NWNA has over 14,000 acres around its spring sources, as natural lands and open space.

The Nature Conservancy: Since 1999, Nestlé Waters North America has supported the visionary work of The Nature Conservancy in directly protecting 426,000 acres of land and water across the U.S.

Water Education

Project WET: Providing training and materials, and connecting educators worldwide, this program reaches children, teachers and communities with water resource education, including water conservation, watershed protection, health, hydration and sanitation.

Crystal Springs Preserve: On November 19, 2004, Crystal Springs – source for Zephyrhills spring water – completed its transformation to world-class environmental education center.

Emergency Relief

American Red Cross: Nestlé Waters North America has worked with the American Red Cross since 1989, both locally and nationally.

Giving Back

Supporting Local Causes: Within plant and spring communities, Nestlé Waters North America strives to be a good neighbor by supporting local causes, such as school and scholarship programs, watershed protection and open space preservation.

High School Baseball Field Complex: As part of NWNA's Good Neighbor Policy, Ice Mountain brand sponsored construction of a baseball field complex for Evart (Michigan) High School, as part of the "Evart Vision." The ceremonial first pitch will be thrown in spring of 2008. Evart Public Schools Superintendent watched with other local VIPs as Evart teammates broke ground.

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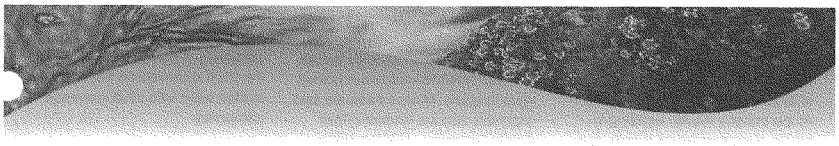


Nestlé Waters North America

At A Glance

Bottled Water Leader For Two Decades

Nestlé Waters North America Inc. was formed in 1976 with just one brand, Perrier® Sparkling Natural Mineral Water. Today, we sell 15 of Europe's and North America's pre-eminent bottled water brands to our loyal consumers across the U.S.

Our Credo

"Respect for each other, respect for the environment and respect for community." These simple words are brought to life every day by our team of employees and are reflected in a dynamic and positive work setting, the provision of high-quality products, a dedicated environmental protection program, and cooperative efforts with communities.

Our Nestlé Family

Nestlé Waters North America and its affiliate, Nestlé Waters Canada, manage both the U.S. and Canadian bottled water operations. Nestlé Waters North America is related to Nestlé Waters, which is based in Paris, France. Nestlé Waters is the world's leading bottled water company.

Nestlé Waters is a division of Nestlé S.A., headquartered in Vevey, Switzerland. Founded by Henri Nestlé in 1866, Nestlé S.A. is the leading food and beverage company in the world, with more than 260,000 employees. Consumers know Nestlé best for its respected brands, including Nestlé chocolate, Nescafé coffee and Coffee-mate, Stouffer's and Lean Cuisine frozen foods, and Purina pet products.

Nestlé aspires to become the world's leading nutrition, health and wellness company. Its desire to provide consumers with "the very best" food throughout their lives is reflected in the famous Nestlé logo depicting a mother bird feeding her young in the nest. This design is also inspired by the coat of arms of the Nestlé family name, which means "little nest."

As part of Nestlé, we have the corporate resources to expertly source, bottle and deliver exceptional water products. This strong and solid backing will support our position as a leader in the U.S. bottled water industry well into the future.

Percent of World Market Share	19*
Number of Brands	72
Number of Countries	130
Number of Employees	32,000

*estimated

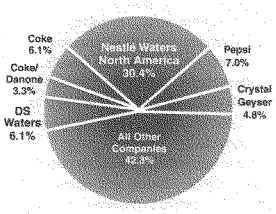
Our Business

Nestlé Waters North America is unique in the bottled water industry because of its comprehensive water portfolio. As the industry leader, we bring to market a great variety of brands and package sizes.

Sales	$3.846 billion
U.S. Market	$3.567 billion
Canada Market	$279 million USD
U.S. Market Share	32.4 percent ($)

Top 6 Companies

Leading U.S. bottled water companies; 2006 volume share (all channels)



Source: Beverage Marketing Corporation

Employees	9,000
Bottling facilities	23
Home Delivery customers	720,000

Water Used by NWNA: 0.001 Percent of Total U.S. Renewable Fresh Water Annually

Our Brands

Nestlé Waters North America bottles and distributes15 well-known bottled water brands. Most of these are sold regionally and are leaders in their distribution areas. NWNA's North American brand, Nestlé® Pure Life®, is sold throughout the U.S. and Canada. Non-sparkling water represents more than 90 percent of sales. Each brand has its own distinctive character, water source and story.

From grocery stores, restaurants and convenience stores, to vending machines, concession stands at stadiums and school cafeterias, our brands are widely distributed.

To suit versatile needs, we provide package sizes ranging from single-serve plastic bottles, to one-gallon jugs, to five-gallon containers delivered to people's kitchens and offices.

Bottled Water Customer Profile:

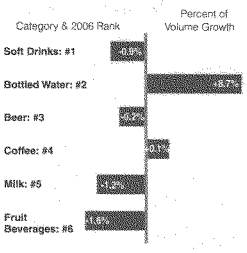
- All Ages
- Active People
- 82 percent of adults, ages 18-59, consume bottled water; 70 percent consume at least one bottle per week.*

Our Industry

Bottled water is a simple refresher, free of calories and additives. With its convenient packaging, clean taste and reliable quality, bottled water is second only to soft drinks in popularity.

- To fully appreciate the growing popularity of bottled water, compare the 2006 sales volume trends of bottled water with other beverage categories:

2006 U.S. Sales Volume Trends**



- In 2006, per capita consumption of bottled water reached 27.6 gallons, growing from only 13 gallons a decade ago. And, it is gaining all the time.**

- Bottled water wholesale dollar sales in 2006 were $10.9 billion in the U.S., an increase of 8.5 percent. Total volume reached 8.25 billion gallons.**

- Packaged in single-serve PET containers, bottled water is convenient and a favorite alternative beverage. In 2006, PET accounted for 64.1 percent of bottled water sales and for almost two-thirds of industry revenue.

*Source: FRC Research, an Internet survey of 7,622 adults across the U.S., February to August 2005 (margin of error +/- 1.3%)
**Source: Beverage Marketing Corporation

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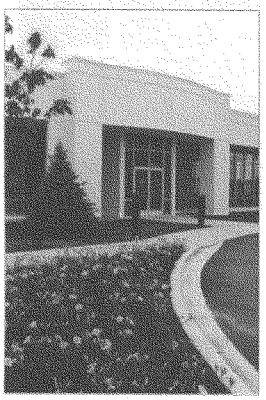
Revised: 7/07, for 2006 results

A Response To Important Questions About Ice Mountain Bottled Water

NORTH AMERICA

November 2007

The Issue



Bottled water is an obvious user of water. Because of this, bottled water has been thrust square into the middle of an increasingly contentious public discourse about a broad array of water resource issues, including questions about environmental impacts, sustainability, and the allocation of water across a spectrum of competing needs and uses. These issues are highlighted as a result of the current dialogue among the Great Lakes states relative to the enactment of the Great Lakes Compact and policies aimed at protecting against diversion of Great Lakes water to non-basin destinations. While bottled water is a small user of water compared with agriculture and other industries, it has become the icon for movements calling attention to water issues and a need by leaders to take action. Well-known packaged beverage companies, like Nestlé Waters, are being targeted and asked to take meaningful roles in helping to bring appropriate solutions.

In Michigan, where Nestlé Waters North America operates a water bottling plant for its Midwest Ice Mountain brand, groups have used Ice Mountain bottled water as a vehicle for focusing public attention on questions such as the use of local water resources by corporations, the distribution of water beyond the watershed from which the water originates and potential environmental impacts resulting from water withdrawals. While the Ice Mountain bottling facility has been operating successfully since early 2002, and legal and public policy efforts have largely resolved certain issues, this public discourse continues.

Water Use By Ice Mountain

Perceptions held about the amount of water used by Ice Mountain and other water bottlers would suggest they are large water users; in reality, water bottlers use approximately one third the amount of water per gallon of product than producers of carbonated soft drinks, most of which contain 95 percent or more water content.

Ice Mountain is one of 15 regional brands of bottled water owned by Nestlé Waters North America. The Ice Mountain brand is the company's Midwest U.S. brand — primarily marketed within those states that comprise the Great Lakes region.

Ice Mountain spring water bottled at the Stanwood, Michigan facility is sourced from two locations, using a total of approximately 800,000 gallons per day (yearly average). This compares with other local water users including:

- Pepsi Cola (Howell, Mich), using approximately 351,000 gallons per day,
- Coca-Cola (Paw Paw, Mich), using approximately 739,000 gallons per day, and
- Dr. Pepper/7 Up (Holland, Mich), using 953,000 gallons per day, according to Michigan Department of Environmental Quality records.

Many other uses in Michigan, including agriculture, manufacturing, golf course irrigation, and others use similar, and in many cases, substantially more water than Ice Mountain. Hundreds of Michigan products containing water are exported daily across the nation and around the world.

Scientists who have studied Ice Mountain's water withdrawals in Michigan agree that they are not significant enough to cause an effect on the Great Lakes, the Muskegon River watershed or local water systems.

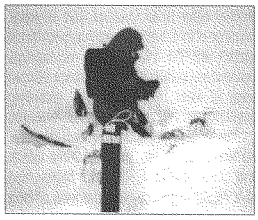
Ice Mountain's Commitment To And Record Of Conservation And Environmentalism

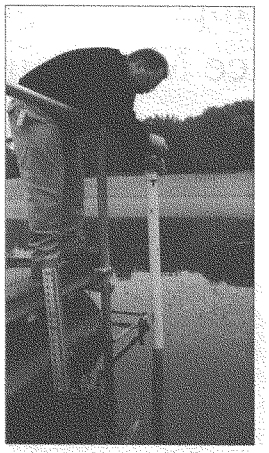
A close look at Ice Mountain reveals a conservation-conscious operation. In 2003, the Stanwood plant became the first food and beverage manufacturing facility in the U.S. to earn the U.S. Green Building Council's LEED™ (Leadership in Environment and Engineering Design) for its green design and operational features. These include extensive use of recycled material throughout the building, low energy demand lighting, low domestic water use restroom facilities, native landscaping requiring no irrigation and other features consistent with environmental sustainability. The company mandates recycling of all raw materials used in production at the facility.

Because the long term sustainability of the water resources and their ecosystems it supports are at the very heart of Ice Mountain's business, a science-based program of environmental and ecologic monitoring is also at the heart of the business. Before deciding on whether a specific water resource might be appropriate as a source of natural spring water for bottling, an extensive series of hydrogeologic and ecologic studies are conducted over 12 – 18 months to assure that a proposed water withdrawal will be safe. These studies are done before a decision is made to apply for state water withdrawal permits. This scientific work is conducted in preparation for the installation of wells permitted by Michigan regulators for Ice Mountain's use.

Regular monitoring of the environment and ecology of the well-site areas ensures access to needed environmental and resource data. This information, shared regularly with regulators, provides scientists with the ability to manage water withdrawals responsibly. Monitoring data gathered from the site prior to the start of Ice Mountain's production at the Sanctuary Springs site in May 2002 through today show a continuing healthy and vital water resource and ecology in the area. At another source in Evart, Michigan, where Ice Mountain purchases water from the City, data are monitored on an ongoing basis to assure that overall withdrawals do not exceed historic levels before Ice Mountain became a customer.

Water is precious; hence Ice Mountain uses as little as possible for production — a mere 1.3 gallons of water per one gallon of finished product. Very little waste occurs, though a small amount is not bottled, but used for sanitation before being returned to the environment.





Appropriate Resolution Of Legal Issues

Litigation brought in 2001 against Ice Mountain has largely been resolved by Michigan courts in Nestlé's favor. The original case involved several legal issues arising under Michigan groundwater and public trust law, as well as the Michigan Environmental Protection Act ("MEPA").

Key rulings by the Michigan courts have included:

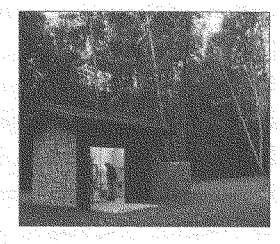
- Bottled water is a proper and beneficial use of water in Michigan – in other words, water may lawfully be used for bottling as bottled water. Water bottling is part of the state's economic industries.
- Ice Mountain has the right to withdraw water at an appropriate rate determined under the state's reasonable use balancing test that considers numerous factors including competing uses of the water. This "common sense" common law has proved to be effective in allowing water use for all of the purposes that society has chosen and also in balancing of competing uses. Recent legislation in Michigan has implemented a regulatory and permitting system, in addition to common law, for the purpose of resource protection.
- Following a Court of Appeals ruling, the parties mutually agreed to a stipulation on Ice Mountain's allowable rate of water use. The agreement provides both parties the opportunity to seek adjustment of the water use amount in the future, based on the monitoring data and science.

Michigan's Newly Enacted Groundwater Use Law

Michigan has recently taken a lead among Great Lakes states in forging strong groundwater use laws, aimed at water resource and reliant ecosystem protections. This law, signed by Gov. Granholm in spring 2006, was the culmination of a lengthy broad-based effort by public-minded citizens to address water resource protection needs.

This law prohibits large uses that would cause an adverse resource impact and it requires permitting for new or increased large uses of water. To obtain a permit, an applicant must demonstrate through science that the withdrawal will not cause an adverse resource impact. A key feature of the law is that the withdrawal cannot impair characteristic fish habitats related to area surface waters.

Ice Mountain supported passage of this law; its operations are consistent with the resource protection the law creates.



Public Dialogue Questions, Answers And Our Perspectives

Who owns water resources and how does our use of the resource fit within this construct?

This is a question that has generated great interest and presents interrelated legal and philosophical considerations. Nestlé Waters North America and its Ice Mountain operation must and does comply with the spirit and letter of all laws, including the law in Michigan governing water use rights.

According to Michigan law, no one owns the water resources. Ownership of property provides for the right to use water, but it does not provide for ownership of the water. Water use is one of the bundle of rights that come with property ownership. Water use must be made reasonably and responsibly, and with respect to other water users and the environment.

On the larger philosophical question of water rights, Nestlé Waters North America recognizes the right of every human being to safe drinking water. As a company, we are working to play our appropriate role in addressing this important issue and the need of people around the world for this basic human necessity.

Is it appropriate to withdraw water from one location and use it in another location?

The reality is that water is withdrawn every day in particular locations, put to use in manufacturing, food production, or other uses, and then transported for use elsewhere. This activity is evident when recognizing the many water-based products imported to the U.S. for our consumption: wines from around the world, bottled water from around the world (Evian, Fiji, San Pellegrino, and many others), along with a host of products that may less obviously be water based, but which utilize water resources originating from many places on the planet.

Not only is the movement of water from one watershed to another a reality of human activity, but it is also a natural phenomenon. The water cycle is the result of weather patterns that are global, where evaporation, precipitation and surface and groundwater systems move water according to the forces of nature.

What are the benefits of Ice Mountain bottled water?

Nestlé Waters North America believes that our use of water in a particular watershed should bring benefits to the communities of that watershed. At Ice Mountain, 275 employees provide a living for their families ($16.5 million annual payroll) as a result of this regional employer; several hundred more families rely on business relationships with Ice Mountain; tax revenues of more than $2 million annually help support local public services and local community, civic and charitable organizations gain additional financial and volunteer support as a result of Ice Mountain's presence.

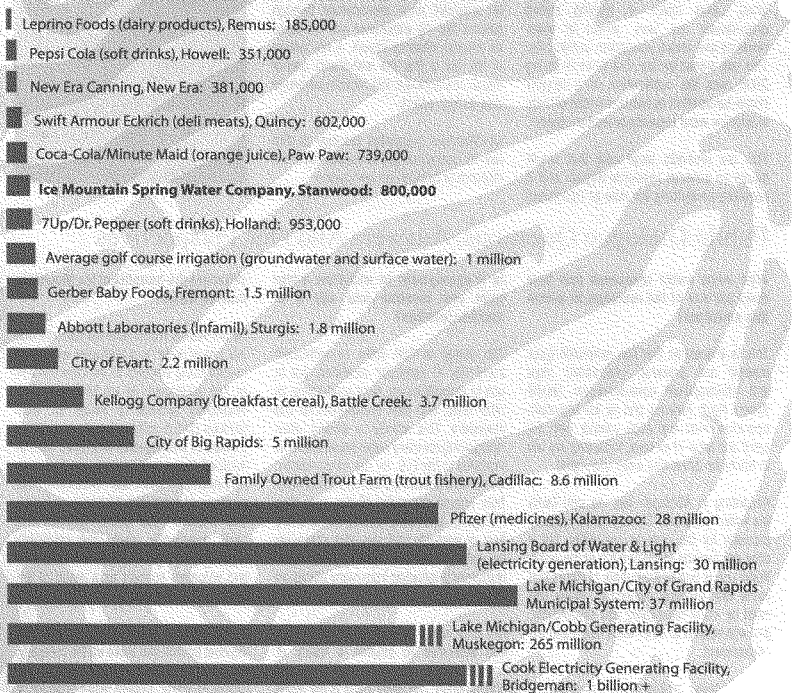
Nestlé Waters North America and the regional brands that make up the company are proud to provide a healthy product for people to enjoy. Bottled water provides a convenient alternative to other packaged beverages containing sugar, calories, or caffeine that many are trying to moderate consumption of to improve their health and well-being.

Meeting the need for safe, clean drinking water in times of disaster or other situations in which drinking water is threatened is also an important and critical role Nestlé Waters North America plays as part of the nation's overall public drinking water supply.

Thank you for the opportunity to provide our perspective. It is our hope that this helps address some of the issues that are raised about bottled water and Ice Mountain, specifically. If additional information about Ice Mountain is of interest, please contact Deborah Muchmore at 517-372-4400.

Just for Comparison...

Gallons of Groundwater (wells) or Surface Water Used in Michigan per Day:



Sources: MDEQ Self-Supplied Industrial Water Withdrawals in Michigan, 2000 (last available record); Witness Testimony; User Provided Data

How Much Water...

- Does it take to make one gallon of bottled water? 1.3 gallons
- Does it take to make one gallon of beer? 42 gallons
- Does it take to make one gallon of soft drink beverage? 3 gallons
- Does it take to make a single car? 39,000 gallons
- Do you get per acre when it rains just one inch? 27,000 gallons
- Does the average residence use each year? 107,000 gallons
- Does an Olympic size pool hold? 1 million gallons

Source: EPA

THE PIONEER
IC RAPIDS, MICHIGAN
W/C:IRC 5,500
DEC 26, 2002

Ice Mountain — a good neighbor to the Morley Stanwood students!

LINDA MYERS

Morley Stanwood Superintendent

As you drive out Eight Mile Road to the U.S. 131 Expressway in our Morley Stanwood district, you are sure to notice a huge white building on the south side of the road. It is called Ice Mountain, our newest industry in the community. The Nestle Waters North America, Inc. or Ice Mountain purchased more than 100 acres of land from the Lane family several years ago and constructed a state-of-the-art spring water bottling facility in our own Mecosta Township. It opened in 2001 and since that time the representatives of the industry have been very generous with the school district.

The latest surprise from them arrived just last week in the form of a check for $25,000. Additional technology projects at all the grade levels will now be possible. As the residents of the district are aware, upgrading nology was one of the board of educa- goals for this year. Also, when an employee and father of students at MSCS made Ice Mountain aware mouse pads for our elementary buildings' technology labs were needed for the first day of school, they quickly had some made and provided them for the classrooms.

Ice Mountain's Plant Administrator Pam Willard and Plant Manager Brendan O'Rourke have had several conversations with district personnel concerning cooperative ventures over the last school year. They have worked with our teachers, provided instructional materials and even hosted students from the school at the plant.

Last spring, as one middle school student's mother dropped off her child, she heard the school's water to all the drinking fountains would be shut off for a repair project and custodians were preparing to transport water in from other buildings for the children to drink. When she arrived at work at Ice Mountain, she passed the news along and within hours Custodial Supervisor Ken O'Neil received word that Ice Mountain had a skid of bottled water for the middle school, no cost. They also have provided water for the carnival, pig roast and many other school functions at no charge.

Teachers across the Mecosta-Osceola Intermediate School District were invited last summer to a two-day water education workshop. Eight to 10 different speakers presented on a number of different water-associated topics. Examples of a few of the presenters were: a Michigan State University representative, a speaker from the American Ground Water Trust, which is a non-profit organization; someone from a survey company and an expert on laws and legal issues of ground water. These representatives provided teachers with practical water information they could take back to their classrooms. Ice Mountain was asked to host this teacher training and they did, providing not only a physical site for the workshop but also allowing the participants the opportunity to visit their spring site, wells and their plant. Teaching staff who trained were: Holly Sharp and Sally Grochowalski, elementary level; middle school, Pat Arndt; and high school, Melissa Greenfield and Maribeth Tronson.

This fall just after school began, the third graders from our district were invited to Ice Mountain for the purpose of expanding their knowledge about water. Ruth Gullekson, one of our new teachers, coordinated the event with Mary Emerson, Ice Mountain's Project WET coordinator (WET stands for Water Education for Teachers). The third-graders from our two elementary buildings had discussed in their classes the value of water and from where it comes. During their day at Ice Mountain they were taught about various water systems, water cycles, ground water, pollution and the scarcity of fresh water on earth.

Then with a tour of the Ice Mountain plant, students learned about transporting, testing and bottling water. The children were treated to "real-life experiences" and provided meaningful visuals by the employees of the company. Back at school, students have continued the water unit by trying various experiments and drafting writing assignments. A small group of the Morley students came to a board of education meeting with their teachers, Doug Cain and Carol Vanhaelemeersch, and shared with the board what they had learned from their tour and "hands-on-work."

The drama club at the high school under the direction of Linda Lincoln, drama coach, was invited to work with employees in a recycling project. hey agreed to this minimal volunteer job and funds, that otherwise would not be available for the students who are interested in acting, are now earned on a regular basis.

Besides the obvious donations, tours, educational units, funds from recycling and teacher trainings, the water company also is one of the district's largest taxpayers. Even though they were awarded abatement on their plant for a 10-year period, school taxes are still collected on the 100-plus acres surrounding the facility and their equipment, which is taxed at an industrial rate. In addition, taxes are collected for the school buildings' debt retirement.

Quite obviously the school district's students have benefited in many ways from the addition of this industry in our community. The educational resources have been enriched.

THE PIONEER OSCEOLA EDITION
FRONT PAGE
JUNE 7, 2006

Ice Mountain continues to fulfill Evart commitment

JIM CREES
OSCEOLA EDITION EDITOR

EVART – When officials with Nestle Waters North America's Ice Mountain water bottling plant in Stanwood entered into a water purchase agreement with the city of Evart last year, it set in motion a wide-ranging and expansive set of local development projects interlaced one with the other.

A series of property exchange agreements were put into motion.

Athletic facilities were to be shifted and moved. Campgrounds were to be eliminated ...and created.

Buildings were to be knocked down. Others constructed.

The development agreements involved both private and public entities and reach across political and administrative borders and boundaries.

And all with an eye to protecting water resources – both for commercial and residential use.

With the start of work at what will be new athletic fields north of Evart High School the development agreements really take on a more public face.

A lot has been going on already but much of what has been carried out in facilitating the development agreements has been a little less than obvious.

Now, with land moving equipment on site, the multi-million dollar projects can be seen to be 'real.'

"The start of construction of the new athletic fields is one of many commitments we at Ice Mountain have made with the Evart community," pointed out Tim Gratto, the water bottler's Stanwood plant manager.

"We will continue to fulfill our commitments with the city of Evart and the community. We always have.

"We want to be, and will be a good

See ICE MOUNTAIN Page 5

ICE MOUNTAIN from 1

neighbor.

"It's exciting to see what will actually be accomplished for this community when projects start coming to completion as things move ahead."

Gratto is enthusiastic about the continuing business relationship between his company and the city.

High quality Evart water is being bottled for consumption after being shipped to the Stanwood plant by a fleet of trucks.

"We aren't taking out the maximum amount of water we could be at this point," said Gratto.

"We have plenty of water to draw here but we haven't needed to make full use of all that is allowed us yet.

"We are getting into our busy season now so we may peak and be using more water in months ahead.

"As we continue to expand in Stanwood and complete our last production line, (which will be starting up in three weeks), our water use will go up a little bit.

"Drawing water from the Kalkaska site and Evart we are no longer needing to bring in water from out of state to supply our operation."

Gratto reported that sales for his company's product are good and growing.

"Ice Mountain as a brand and Nestle Waters products as a whole continue to grow in popularity," he said.

"We turn out a good product. People appreciate it and respond with sales."

Ice Mountain's commitment to the Evart area may be even greater in the future.

It's no secret that the company has expressed an active interest in possibly developing a second Midwest water bottling plant in the Evart area – a sister plant to the present Stanwood facility which already makes use of Evart water.

While pen hasn't been put to paper just yet, Evart is still strong in the running as a future Ice Mountain plant site.

But ...there are other candidates.

While Evart is still a strong forerunner, the company has been looking elsewhere as well.

"We have been looking at sites in Indiana and in other places," said Gratto.

"I can tell you, however, Evart is a prime candidate.

"We are building a long term relationship with this community. We are fulfilling our commitments. We plan on being here a long time with some form of business relationship or the other.

"A second plant is going to happen.

"We simply haven't, at this point, nailed a date or a site down.

"That is based on sales.

"We are projecting that sometime in 2009 we will have Plant Two operational.

"But people need to realize time frames can change and fluctuate. This is a business like any other. A spike in sales could speed things up. There are factors that might slow things down a little.

"It's going to happen, but it's going to take time.

"Again, I think it's a very fair statement to say Evart is a prime candidate for our second plant site."

OSCEOLA PIONEER
REED CITY, MI
CIRC 2,416
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72

Booher: Evart water station opening quenches economic thirst

LANSING - State Rep. Darwin Booher applauded last Thursday's opening of Ice Mountain's Evart load station, the 65 new jobs it creates and the additional economic benefits it brings to the Evart community and surrounding region.

"This is a dream come true for our community," said Booher, R-Evart.

"The unfortunate thing is that it took a natural disaster down south to make the governor change her mind about providing a solution to the hard times we're experiencing here in northern Michigan.

"Hopefully this effort will show the administration the folly of the governor's moratorium and this local humanitarian and economic boost can continue for many years to come.

"I will be working with local and state officials to keep the station open so emergency response organizations have access to a water supply when needed, not weeks or months after it really could have been used, as in this case."

The Evart Station is located on the west side of Evart and houses equipment necessary for loading water purchased from the city for transport to Ice Mountain's water bottling operation in nearby Stanwood.

The governor earlier this year prohibited the station from being used to produce bottled water that would be sent out of the Great Lakes watershed.

The governor lifted her moratorium in the weeks following Hurricane Katrina as disaster relief efforts continued in the U.S. Gulf Coast region so the Evart Station could take a role in insuring an ample supply of safe drinking water is available in times of need.

Ice Mountain and its parent company, Nestle Waters North America, maintain relationships with the American Red Cross, Americares and other emergency and disaster relief agencies to ensure preparedness for safe drinking water supplies in the event of disaster.

Some of the benefits of allowing the Evart station to operate include:

· The hiring of 50 employees at Ice Mountain, bringing the total number of employees at the facility to approximately 220, with an annual payroll of more than $13 million;

· Fifteen new transportation personnel jobs, in addition to the new hires at the bottling plant;

· Increased revenue to the Evart water department and property tax revenue to the City of Evart, Evart Schools and other taxing authorities;

· Enhanced recreation and athletic facilities for Evart Schools, Osceola 4-H and FFA Fairgrounds and the city; and

· Enhancements to Evart's wellhead protection program aimed at ensuring long term water quality protection for all municipal water customers.

"Michigan has been struggling to create jobs and stimulate an economic recovery at the state and local levels for several years now," Booher said.

"Here is a piece of that solution that's been right in front of us and it's finally being allowed to go forward.

"We need to show this shouldn't be a temporary measure so the governor doesn't let these jobs and the potential future growth go down the drain."

McCloud Arrowhead Project Myths and Facts

(March 2007)

Abbreviations and Definitions Used:

CEQA – California Environmental Quality Act
NEPA – National Environmental Policy Act
EIR – Environmental Impact Report
EA – Environmental Assessment
NWNA – Nestlé Waters North America
MCSD – McCloud Community Services District
USFS – United States Forest Service
MSBEC – Mt. Shasta Bioregional Ecology Center
MWC - McCloud Watershed Council

Myth ***If this contract is allowed to stand, under a variety of local, state and federal laws, and international trade agreements, it could effectively prevent local control or protection of McCloud's water for the next 100 years ...Once we give our town to Nestlé, we will never get it back.***

Fact MCSD owns and retains all water rights to McCloud's water. NWNA will simply be a customer of the District.

Myth ***The contract with Nestlé puts no limit on the amount of water it can take from McCloud's aquifer. Drilling into lava-tube aquifers is a greedy attempt to remove the "unlimited" groundwater that the contract entitles NWNA to. This could result in significant damage to the fisheries and McCloud's tourist dollars.***

Fact Through the contract, as subject to the completion of the review under CEQA, MCSD will have the authority to impose an enforceable usage limit (up to 1,600 acre-feet/year) for all water NWNA wishes to purchase from MCSD (spring water and/or well water). MCSD also has the authority to require NWNA to meet all other rules and regulations that apply to all other businesses in McCloud.

Myth ***The contract gives Nestlé a superior claim to McCloud's water over the town's other customers. According to the contract, for the next 100 years, regardless of drought or other shortage, Nestlé can continue to take its maximum water draw.***

Fact NWNA will be a customer of MCSD and NWNA has no more right to water than any MCSD water customer. In fact, there are no public water rights being conveyed to NWNA. NWNA will be treated like any other customer of MCSD.

For example, in the event of a drought and the implementation of water conservation measures by MCSD, NWNA's usage would be curtailed, just like any other commercial MCSD customer. There is nothing in MCSD's contract or any local or state law that exempts NWNA from complying with drought mitigation measures.

Myth ***We can't depend on CEQA or other state law to protect us. The community must work with our county government to make its wishes known and to ensure that those wished are respected.***

Fact CEQA is the most stringent environmental siting statute in the United States and has been successfully addressing environmental and community interests throughout California since 1970.

The statute requires public agency decision makers (Siskiyou County and MCSD, in this case) to evaluate the potential environmental impacts of any proposed project. Environmental impacts in this context include impacts to the "human environment" such as traffic, cultural resources, and aesthetics, among others. All potential impacts associated with the proposed bottling plant are being evaluated under CEQA.

CEQA requires extensive public participation. This provides an opportunity for local residents, state agencies and others to express their concerns and comments to the County and the District. The public comment period on the Draft EIR began on July 14, 2006 and was extended 15 days past the original closing date so that it ended on September 12, 2006. The County is in the process of reviewing and responding to the comments received on the Draft EIR/EA to compile a Final EIR/EA. The agencies must respond to all formal comments before making a final decision on the proposed project. Additionally, parts of the proposed project are undergoing review through NEPA.

Myth ***There was absolutely no research done on the impacts of Nestlé's water draw on the fishery before the contract was signed.***

Fact MCSD has required that all impacts of the proposed project, including the impacts on the watershed and fish populations,

be thoroughly evaluated under CEQA before any water is sold to NWNA. CEQA requires that an extensive evaluation be conducted by certified hydrogeologists and biologists to determine any potential impacts on water resources or aquatic life. Finally, MCSD can't provide any water to NWNA until the CEQA analysis of the "water draw" has been completed.

Myth ***Nestlé will drain the McCloud River.***

Fact Nestlé will not drain the McCloud River; we will be a paying customer of the McCloud Community Services District and will have an annual cap of 1,600 acre-feet of water per year.

A 1,600 acre-foot withdrawal for bottling, should it come directly from the McCloud River (which will not happen with our project), would represent about 0.5% of the historic low flow from the river. It would be even a smaller percentage when compared to average annual flows. There are also no public water rights being conveyed to NWNA; the company will be treated like any other customer of the District. Potential impacts to the watershed and fish populations will be extensively evaluated through the environmental review process before any water is sold to NWNA.

Myth ***MCSD rushed the negotiation process with Nestlé and did not allow for adequate public input ...The process used to approve the contract was hurried and allowed for no effective or measurable public input.***

Fact MCSD spent almost a decade evaluating the possibility of bottling some of its water for retail sale. This evaluation included commissioning a report which concluded that the most economical option would be to partner with an existing bottled water company, rather than constructing and operating its own water bottling plant. MCSD also had experience evaluating proposed contracts with potential bottlers since they had been approached by and evaluated contracts from several other bottling companies prior to NWNA.

Throughout this multi-year process, MCSD held multiple public meetings, solicited input from the McCloud community and pursued discussions with a number of different bottled water companies to evaluate the market for its water.

Once MCSD began negotiations with NWNA and the potential terms of that contract were under consideration, MCSD conducted a series of public meetings informing the community about the progress of the negotiations with

NWNA. Subsequently, another public meeting was held in September 2003 and there was public discussion for two hours after which the MCSD Board approved the final contract.

Myth ***The public should have voted on the contract before it was signed.***

Fact There is no requirement for a public vote to authorize MCSD to provide services to any customer. Public input was gathered at the MCSD meetings before the Board of Directors voted to approve the contract.

Myth ***Eager to avoid meaningful scrutiny of its outrageous contract, Nestlé appealed the Siskiyou County Superior Court ruling. Since Nestlé is well-acquainted with California law, it is clear they made an assumption that the people of McCloud would be inexperienced enough to let the process of environmental review slip by ...The truth is that Nestlé has a long corporate history of being ruthlessly profit driven, putting profits ahead of public well being and using unenforceable verbal promises to distract from the worst aspects of its signed contracts.***

Fact The contract between NWNA and MCSD clearly contained a provision requiring CEQA review prior to project implementation. NWNA appealed the Trial Court's ruling that held that MCSD should have completed an environmental review of the proposed bottling project *prior to signing the contract* with NWNA. In January 2007, the California Court of Appeals, 3rd Appellate District, ruled in favor of MCSD and NWNA, reinstating their contract for the sale of spring water. The Appellate Court reversed the Trial Court's decision made in March 2005 and ordered the Trial Court to enter a new order denying Concerned McCloud Citizens' original petition and invalidating their claim that the contract was null and void until the environmental reviews were completed. As written, the contract between MCSD and NWNA is contingent on the completion of the CEQA analysis.

Myth ***This is a sweetheart deal for Nestlé. The town of McCloud will receive $300,000 annually for 99 years, with no hope of an increase, while the infrastructure costs generated by Nestle would skyrocket.***

Fact As written in the contract NWNA will increase its payment to MCSD over the term of the contract.

NWNA's payments to MCSD start at approximately $300,000 per year and increase to approximately $400,000 per year in Year 10. NWNA is required to increase its payments to MCSD based on the District's changes in its rate structure for water. In addition, NWNA has already paid the District almost $200,000 in non-refundable contingency payments and has reimbursed MCSD for another approximately $200,000 for staff time and legal fees incurred by MCSD related to the NWNA project. At the plant start up, NWNA will also pay the District water connection and sewer connection fees which will amount to over $260,000.

Myth ***Nestlé's offer of abundant jobs is insulting and unrealistic. The inflated figures . . . appear to include temporary construction jobs and out-of-area trucking jobs that do nothing for the local economy. Most jobs that are created will not be living wage. Throughout the water bottling industry the average worker gets paid less than a shift manager at McDonald's and has far fewer benefits... No hiring preferences given to locals and that the jobs will be advertised throughout the state. Nestlé's actual employment policies contradict their claims that the bottling operation would bring meaningful employment opportunities to McCloud.***

Fact State and Federal Equal Opportunity laws prohibit NWNA or any other employer from any sort of preferential hiring based on where an applicant lives. Qualified individuals who live in McCloud will be encouraged to apply and, like any other candidate; will be evaluated for certain positions based on their overall qualifications. The full time employment estimates we have provided (about 60 at start-up and about 240 at full build-out) are consistent with NWNA's current full-time employment at our other comparable factories. For example, our bottling facility in Cabazon, California, built in 2002, and which serves as a model for the proposed McCloud project in size and scope, employs 214 people and is not yet at full build-out. In Texas, our Ozarka Spring Water factory employs almost 250 people. Throughout California, NWNA employs over 1,600 people.

NWNA has made a commitment to McCloud and Siskiyou County at this early stage to set its minimum wage for employment at the proposed factory to be no less than $10.00 per hour plus full benefits. Final starting wages will be determined by a wage survey conducted closer to the time the plant is expected to open. This wage survey will be conducted to fulfill NWNA's commitment to paying wages in the upper 50 percentile of comparable positions regionally.

Individuals with specific job experience and other qualifications will start at higher wages.

In addition, according to a report prepared for the Siskiyou County Economic Development Council by the Center for Economic Development/Small Business Development Center Partnership at California State University, Chico, the facility will create an additional 249 indirect jobs--bringing the total job impact of the project to nearly 500.

Myth ***Nestlé's low estimate is that 300 additional trucks will be traveling to and from the plant every day over Highway 89. This actually represents 600 trips over Highway 89 every day, all day and night.***

Fact Truck traffic is evaluated in the Draft EIR/EA using the accepted CALTRANS modeling and widely accepted approaches. The traffic estimates for the proposed project are not based on a 365-day period, but rather represent estimates for peak operations (normally in the mid-summer months). This means that regular truck traffic would be much lighter for most of the year.

All impacts related to truck traffic are being analyzed through the CEQA/NEPA environmental reviews currently being conducted. If traffic impacts are found to be potentially significant the County and State will impose enforceable mitigation measures on NWNA. NWNA bears all infrastructure responsibility and we will be paving and maintaining a one-mile private access road that diverts all truck traffic around the town so that we do not disturb traffic going through town.

Myth ***[The proposed NWNA plant] is so large that every existing building in McCloud could fit under the plant's roof. The plant will be four times bigger than Siskiyou County's other water bottling plants and even larger than the colossal Wal-Mart distribution center southeast of Red Bluff. The Nestlé plant would immediately become the largest building in Northern California. It would kill beneficial development on the northeast edge of town and cause serious decline in property values for nearby residents.***

Fact The properties adjacent to the old mill site are already next to or near existing industrial property. The proposed plant will be cleaner and quieter than any previous industry that has occupied this site. As for size, the proposed NWNA plant will be approximately 300,000 square feet growing over time to an estimated 1,000,000 square feet, situated on nearly

250 acres. This will not be the largest building in Northern California as claimed. In fact, according to the Tehama County Assessor's Office, the Wal-Mart distribution center warehouse near Red Bluff, currently at 1,100,000 million square feet, is already larger than the proposed McCloud facility when fully built out.

Myth ***The Nestlé plant will require infrastructure and community resources that we have no money to provide, and it will have wide-ranging, unknown impacts on our sewage ponds, water, fire service, roads, utilities, etc. Nestlé does not have a good reputation when it comes to contributing directly to infrastructure needs beyond their specific contractual obligations. These types of infrastructural problems and needs usually cost from hundreds of thousand to millions of dollars to address.***

Fact The agreement with MCSD requires NWNA to pay for the cost of all infrastructure that will be provided to the site by MCSD. MCSD will not have to incur any extraordinary expenses to provide service to the proposed NWNA bottling facility.

In McCloud, NWNA has secured access to a private road that NWNA will pay to improve to county standards so that truck traffic may be diverted from going through the town of McCloud. This will eliminate noise and traffic hazards on the main streets of the community. Additionally, NWNA will further improve components of MCSD's water supply system as part of the project implementation.

The MCSD/NWNA contract also requires NWNA to pay for the maintenance and upkeep of the infrastructure that serves the project. This provides MCSD with a mechanism to monitor NWNA's activities and helps pay to keep district employees employed. Additionally, NWNA's upgrades to the water system will save the McCloud taxpayers from having to pay for these infrastructure improvements, which would be necessary in the coming years with or without the NWNA project.

Myth ***Nestlé uses legal means to intimidate opponents. This is exactly what the company was doing when it subpoenaed the private financial records of private citizens.***

Fact After the Superior Court judge overturned the contract between NWNA and MCSD, Concerned McCloud Citizens demanded that NWNA pay their attorneys' fees. The legal system allows the defendants some latitude to assess who

has been paying for the legal fees of the attorneys suing Nestlé.

During depositions, NWNA was informed of the link between Concerned McCloud Citizens, Mt. Shasta Bioregional Ecology Center and the McCloud Watershed Council. We worked within the legal system to request subpoenas for financial records of the MWC and the MSBEC. The judge denied our requests when MWC and MSBEC objected to our subpoena request. That was the end of the issue - there was no intimidation.

Economic Impact of Nestle Waters North America on the Siskiyou County Economy

Effects of Water Bottling Plant Operations

11/17/2007

Center for Economic Development
Dr. David E. Gallo

Introduction

Report Purpose and Scope

This report has been prepared by Dr. David Gallo of the Center for Economic Development (CED) at California State University, Chico. It replaces a report previously completed by CED, with this version involving a more detailed analysis of the available data. The estimates presented here do not differ substantially from those contained in the earlier report. Although this analysis concludes that the income impacts are greater, the employment effects in the earlier report are in the middle of the range estimated here.

The scope of the report is limited to an assessment of the economic impact of the Nestle water bottling plant, proposed for a site in McCloud, California, on the Level of economic activity in Siskiyou County. It does not address any potential adverse effects associated with plant operations. The impact estimates are limited to the effect at full capacity and exclude any potential economic activity generated by construction of the plant. [1]

Summary and Conclusions

It is estimated that the water bottling plant proposed by Nestle for the McCloud site will, when it reaches full capacity, generate additional income of $23 to $31 million to residents and businesses in Siskiyou County. That additional income is the sum of direct payroll at the Nestle plant, the secondary impact of input purchases by Nestle from local suppliers (indirect), and the effect of the additional spending on the income of employees and owners of local businesses (induced). The estimated employment impact is between 477 and 502 full and part-time jobs. That includes the direct employment of 236 individuals at the bottling plant; 169 additional employees at businesses supplying goods and services to the bottling operation, and between 72 and 97 new employees in businesses selling to households.

Limitations of the Study

The purpose of this report is to quantify the gross effects of plant operation on Siskiyou County income and employment. If the presence and operation of the facility were to have any adverse impacts on local economic activity, those impacts would need to be deducted from the gross measure in order to arrive at an estimate of the net effect.

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[1] Plant construction cost is estimated to be $31million in 2004 dollars. While is unlikely that the contract for plant construction will be awarded to a local firm, there will probably be some local employment generated during the construction phase. Grading, paving, and concrete work are likely to done, in part, by local labor. In addition, some materials such as fill and sand and gravel will probably be purchased within the county, creating additional economic activity. Nevertheless, no local income or employment are attributed to plant construction.

Role of CED and the Report Author
The Center for Economic Development and the author of this document wish to make it clear that, in preparing this report, they are not endorsing the project. This study was funded by the Siskiyou County Economic Development Commission and its purpose is limited to providing the best possible information regarding the direct economic impact of the project on the county economy. We recognize that there is opposition to the project within the community, but hopefully, residents will find the information contained in this report useful in coming to a decision regarding whether or not to support its going forward. This component of the economic impact is clearly not the only factor in this decision.

Methodology

Data Sources
The data used in the analysis was provided by Nestle. Direct employment estimates (236 jobs) for the plant were based on their operations at their Mecosta plant and the provided data included a detailed breakdown of jobs and salary scale. Total operating cost was estimated to be just over $80 million annually, with employee compensation of $9.5 million.

IMPLAN
IMPLAN is an input-output model (I-O) that separates the economy into 509 industrial sectors, classifying each according to the primary product or service it provides. The transaction matrix is the model that estimates impacts. The transaction matrix contains the purchases and sales that occur among the various sectors. The column entries are the purchases made by a particular sector from all other sectors included in the model. The row elements are the industry destinations of the sector's sales. The I-O model permits assessment of the total impact of an initial change in income or expenditures. (MIG 2007)

The total impact is the sum of the direct, indirect, and induced impacts. The indirect impacts are the result of purchases (by the sectors directly affected) from local industries supplying inputs. The induced effects are due to the spending of additional income earned through the enhanced business activity and added income generated by the direct impacts. The model output includes estimated impacts on output, income, employment and state and local taxes.

Application of the Model
Typically, estimation of the total economic impact of a new industry is accomplished by entering gross sales (direct output) into the IMPLAN model. The model then estimates indirect, induced, and total output. These estimates then provide the basis for the local income and employment impacts.

In this case, the usual approach cannot be used since Nestle provided data for direct employment and operating expenses, but not for gross sales. Entering the 236 direct jobs into the soft drink and ice manufacturing sector (sector 85) of the model yields estimated gross revenues of $127.5 million and direct employee compensation of $16.1 million. However, employee compensation data provided by Nestle implies a total payroll of $9.5 million. Thus some adjustment to the model output is necessary.

Estimated employee compensation in the IMPLAN model is based on the cost structure of other water bottling plants located in Siskiyou County. Existing operations provide employment and wages per dollar of sales that may not be identical to what can be expected at the Nestle plant. The larger size of the plant may result in economies of scale, allowing the bottling of more water with fewer employees. While this difference doesn't affect direct and indirect income and employment, it does affect the induced components.

Local Income and Employment Impacts

For the purpose of this study, the local income impact is defined as direct employee compensation plus indirect and induced value added (total income). Direct income impacts are limited to employee compensation since, as a corporation owned by outside stockholders, the other components of income are likely to accrue to non-residents. The IMPLAN model provides estimates of induced income and employment of $6.6 million and 122 jobs, respectively. With 236 direct and 169 indirect jobs, that brings the total employment impact to 527. Removing the non-wage component of direct income from the spending stream reduces the induced employment estimate to 97 jobs, and total employment to 502 jobs. The estimated induced component of income is $5.3 million and total local income is $30.9 million

If the data provided by Nestle is used in place of the IMPLAN estimate for direct employee compensation, then the induced components of employment and income are reduced further. Using the Nestle data, estimated induced income and employment are reduced to $3.9 million and 72 jobs respectively. The estimated total employment impact is 477 jobs, while the effect on local income is estimated to total $23.0 million.

Table 1 includes the income and employment impacts for the three cases presented here: Case 1, the unaltered IMPLAN estimates; Case 2, the estimates limiting direct income impacts to the IMPLAN model's employee compensation figures; and Case 3, those using the payroll estimates from Nestle.

Table 1: Direct, Indirect, Induced, and Total Impacts on

Siskiyou County Income and Employment

	Direct	*Indirect*	*Induced*	*Total*
Income (Millions of 2004 Dollars)				
Case 1	$22.74	$9.57	$6.63	$38.94
Case 2	$16.06	$9.57	$5.26	$30.89
Case 3	$9.50	$9.57	$3.91	$22.98
Employment				
Case 1	236	169	122	527
Case 2	236	169	97	502
Case 3	236	169	72	477

Conclusions

Economic Impact vs. Resident Benefits

It is important that the reader not confuse the total economic impact of the Nestle facility with the economic benefit received by existing residents. Economic impact and resident economic benefits are equivalent only in the case where all new jobs and income accrue to existing residents. In order to illustrate this point, assume that all of the in plant jobs go to individuals initially residing outside of the county. Then, for case 2, resident employment and income are increased by no more than 266 jobs and $14.83 million, respectively.[2]

However that does not include the added impact of the government services required by new residents. Adding this effect to the IMPLAN model increases the induced component of the local impact by 104 jobs and $5.7 million in income. Thus, if all plant jobs are taken by non-residents, the Siskiyou County employment and income impacts (and resident economic benefits) are estimated to be 370 jobs and $20.52 million, respectively.

Any New Water Bottling Plant in Siskiyou County vs. the Nestle Plant at the McCloud Site

It must also be understood by the reader that the economic impacts assessed in this report are estimates of the increased jobs and income that will result from building and operating a water bottling plant, of the scale proposed by Nestle, within Siskiyou County. The impact estimates are not specific to the proposed site and would be the same no matter where in the county the plant was constructed and the source of

[2] The maximum employment and income impact is based on the implicit assumption that all indirect and induced jobs and income go to existing Siskiyou County residents.

water obtained. It is the impact of this plant only if there are no alternative sites with sufficient water resources available within the county.

Geographic Scope of the Analysis

The impact analysis completed for this report is for Siskiyou County as a whole. If the analysis was done for the town of McCloud, the location of the bottling plant, the conclusions might be very different. As is the case with any large facility, there are those who gain and those who lose. The operation of the plant will generate a certain amount of noise and traffic, adversely affecting those who moved to the area for the peace and tranquility the town offers.

On the other hand, plant operation will provide economic benefits in the form of increased spending at existing local businesses, and will likely lead to the establishment of new ones as the level of local economic activity increases. Even if few plant employees live in the town, some will buy lunch, coffee, or other items, leading to added income for local business. Certainly, the increase in local income will be small relative to the estimated total employment and income impacts for Siskiyou County as a whole, but it will not be trivial.

Nestlé Waters North America[1]

Corrections, Clarifications, and Commentary
To
ECONorthwest Economic Impact Report on the proposed Nestle Waters Bottling Plant, McCloud, CA
October 2007

Commissioned by McCloud Watershed Council
In collaboration with California Trout and Trout Unlimited
Funded by the Bella Vista Foundation

Item	Page	ECONorthwest Economic Impact Report Claim	Corrections, Clarifications, or Commentary
1	5	"Most positions at the proposed Nestlé facility would likely be filled by people who do not currently live in McCloud. Given the wage level and experiences at other facilities, the majority of these positions would not attract new residents."	While we have not started to interview, it is likely that there are many former mill workers who are very qualified to work in a bottled water plant and still live in McCloud. They are waiting for the Nestle plant to open so that they have an opportunity to resume working in their community. In addition to McCloud residents working at the proposed facility, any other qualified people from other parts of Siskiyou County and beyond are expected to seek employment at the water bottling facility. The communities in Siskiyou County, like many rural counties, are interdependent and so employment opportunities in McCloud will benefit the entire region.[2] The support of the business groups in the region such as the Yreka Chamber of Commerce and the Dunsmuir Chamber of Commerce demonstrate county wide support for the project.
2	5	"The projected employment at the facility would amount to approximately one-half of one percent of all employment in the county."	There is no reference in the report where this estimate comes from and it appears to be incorrect. 2006 statistics indicate the Siskiyou County total labor force consisted of 18,400 residents.[3] A Nestle labor force of approximately 240 jobs represents 1.3% of the total projected labor force in Siskiyou County, almost three times that quoted by ECONorthwest and a significant number when one considers this is just one employer.

3	5	"The facility would likely displace current employment at existing firms and employment that would have materialized in the future."	There is no explanation or justification for this statement. There is no evidence that the proposed Nestle project would stifle other local job creation. In fact, a separate and independent economic analysis[4] indicates that in addition to the 240 approximate Nestle jobs at full build-out that the facility will create more than 240 additional indirect jobs. The report also found that at full build out Nestle's project will bring at least $23 million in income to residents and businesses in Siskiyou County each year.
4	5	"Demographic changes in McCloud reflect strong national trends, and the jobs and revenues from the proposed Nestlé facility are unlikely to reverse these trends."	According to the Siskiyou County 2007 Economic and Demographic Profile "analysis of the population by age reveals that in Siskiyou County, like many Northern California mountain counties, a considerable percentage of the population aged 30-39 is leaving the area. The out-migration may be caused by the pull of employment opportunities in more urbanized areas. Further analysis indicates that since 2002, many people who leave the area at this age do not return, leaving the region with a loss of college-aged and college-educated workers."[5] The ECONorthwest report fails to acknowledge that the changing demographic resulting from the flight of the younger population may be directly related to the absence of sustainable employment in McCloud and in the Siskiyou County area as a whole.
5	5	"Recent growth in McCloud indicates that the natural amenities of the area are important economic assets, as they attract people and firms."	Nestle's facility will not adversely impact "natural amenities of the area" or tourism. The project is undergoing a comprehensive environmental review under CEQA and NEPA and will be located on an existing industrially-zoned parcel within McCloud, previously occupied by a high-impact lumber mill. The full-time jobs provided at the facility would not detract from part-time seasonal tourism jobs. In the ECONorthwest report there is no explanation of what type of "recent growth" leads one to the conclusion that "natural amenities of the area are important economic assets, as they attract people and firms."
6	5	"Depending on the eventual assessed value of a water bottling facility, it might generate over $1 million in property taxes annually. Studies, suggest, however, that large facilities may cause losses of other jobs, firms, and residents in the county—and therefore, the accompanying property taxes."	It is correct that Nestle will be paying approximately $1 million in annual property taxes to the County. However the assertion that Nestle's job creation will prevent other job creation is unsupported. As other economic impact studies have shown, the proposed Nestle project in McCloud will not cause a loss of jobs but rather will be the seed for significant job growth in McCloud and Siskiyou County as a whole. In addition to the direct employment at the bottling plant there will be an estimated 169 additional employees at businesses supplying goods and services to the bottling operation, and an estimate of between 72 and 97 new employees in businesses selling to households.[6]

7	5	"Should periods of prolonged drought arise in the next 50 to 100 years, MCSD, its ratepayers, and nearby landowners may bear the costs of acquiring new water supplies, including deepening wells or drilling new wells."	This will be the case whether Nestle's project proceeds or not. Nestle will be a paying customer of MCSD and will be limited in the amount of water it can purchase. As one of MCSD's ratepayers Nestle will be subject to any drought restrictions or implications placed on the District's customers. The Nestle project is undergoing a comprehensive environmental review under CEQA and NEPA and part of the environmental review must help McCloud prepare for potential droughts by having Nestle and MCSD develop a water contingency program. These contingency plans will be fully disclosed and discussed as the environmental review process proceeds. The logical conclusion of the ECONorthwest statement is that McCloud should prohibit ANY new development because any development will require water use above existing levels. Water bottling uses significantly less water than many other industries. For example it takes 1.3 gallons of water to bottle 1 gallon of Nestle spring water whereas it takes 42 gallons of water to bottle one gallon of beer.[7]
8	5-6	"Heavy truck traffic on SR-89 would approximately double at full build-out of the proposed Nestlé facility, and it would be difficult to exclude all truck traffic from traveling through town. Hidden costs of truck traffic include traffic accidents, congestion, air pollution, negative health effects, increased road maintenance, and possibly the need for additional law-enforcement services."	Contrary to the statement made in the ECONorthwest report, trucks will not be traveling through town as they had when the mill was operating. Nestle has secured an easement to a private road that would allow truck traffic to be routed around the perimeter of the town, thereby eliminating any need to trucks to travel through town. The statement that "[h]eavy truck traffic on SR-89 would approximately double at full build-out" is incorrect. Based on the traffic study presented in the Draft EIR/EA, the proposed Nestle plant at full-build-out would only increase the number of trucks on Highway 89 by less than 25%. This is equivalent to the number of trucks that previously were on Highway 89 during the peak operations of the McCloud lumber mill. Additionally, Nestle, as a large property tax payer to the county, will be contributing to road maintenance and law enforcement costs through it is estimated $1 million annual property tax payments.
9	6	"The proposed Nestlé facility would generate wastewater. If Nestlé elects to send the wastewater to the MCSD treatment system, it would consume approximately one-twelfth of the remaining capacity of the system. If Nestlé treats the wastewater on its own site, it may pose a risk of contamination to the area's groundwater."	According to the contract with MCSD, if Nestle chooses to send its wastewater to the McCloud treatment system "Purchaser (Nestle) shall reimburse District for the capital costs incurred by District to upgrade and/or expand District's waste collection and treatment facilities to accommodate the increased waste stream caused by District's handling of the process waste water from the Bottling Facility."[8] If Nestle treats its wastewater on-site, Nestle is required to ensure that doing so will no cause a significant environmental impact and is required to obtain all the required permits to do so.

10	6	"Although Nestlé would reimburse MCSD for the direct costs MCSD would incur in providing services to Nestlé, other communities have found that a large facility occupies the time of public officials and consumes public resources, which usually are not reimbursed."	Nestle has reimbursed MCSD for all costs it has incurred related to the proposed Nestle project including staff time and legal expenses. Nestle's contract with MCSD has provisions to reimburse the District for project costs related to CEQA, litigation, and operations and maintenance.
11	32	The ECONorthwest Report claims that Nestle will be paying MCSD only $26.40 per acre-foot of water.	The "per-acre-foot" value stated by ECONorthwest neglects to factor in all of the annual payments that Nestle will make to McCloud (and documented in the ECONorthwest report in Table 3). When factoring in Nestle's $100,000 a year payment to the McCloud Arrowhead Community Enhancement Program and the exclusivity payments, which start at $150,000 a year and grow to $250,000 by the plant's 10th year, Nestle's minimum estimated per-acre-foot payment to MCSD is in excess of $187/ac-ft. Because of California Proposition 218, water agencies like MCSD may only apply revenues earned from water-payments to maintenance and improvements to their water system infrastructure. Nestle and MCSD specifically structured the annual payments so that the majority of the revenue did not occur as a water payment, but rather as other payments that could be applied to the MCSD General Fund. This allows most of MCSD's annual revenue from Nestle to be applied to general community service infrastructure upgrades and maintenance rather than being solely restricted to the water-system infrastructure.
12	33	"The average lease price in California was $80 per acre-foot, and the average sale price in California was $1,207 per acre-foot (in 2004 dollars). The average lease price across western U.S. was $86 per acre-foot and the average sale price was $1,299 per acre-foot (in 2004 dollars)." [9]	Nestle will be a paying customer of MCSD and MCSD will retain all of its existing water rights. The average sale prices quoted in the ECONorthwest report refer to one-time payments that result in a final sale and transfer of water rights from one entity to another. MCSD made it clear during negotiations that they would not sell any of their water rights to Nestle. As a result, Nestle and MCSD negotiated a pricing structure that reflected a customer relationship in which Nestle will be a ratepayer of the District making ongoing payments to MCSD, not a one time payment.

[1] Nestle – Nestle Waters North America; MCSD – McCloud Community Services District; CEQA – California Environmental Quality Act; NEPA – National Environmental Policy Act; EIR/EA – Environmental Impact Report/Environmental Assessment.
[2] Siskiyou County Economic Development Council
[3] Siskiyou County 2007 Economic and Demographic Profile, Center for Economic Development, Chico, CA, Page 38.
[4] Economic Impact of Nestle North America on the Siskiyou County Economy Effects of water Bottling Plant Operations, 11/17/2007, Center for Economic Development, Dr. David E. Gallo
[5] Siskiyou County 2007 Economic and Demographic Profile, Center for Economic Development, Chico, CA, Page 1
[6] Economic Impact of Nestle North America on the Siskiyou County Economy Effects of water Bottling Plant Operations, 11/17/2007, Center for Economic Development, Dr. David E. Gallo
[7] Eshleman, K., Drinking Water Research Foundation study summary; Coca-Cola Company; Environmental Protection Agency (EPA)
[8] Section 6.3.2(iii) of the contract between Nestle Waters North America and MCSD
[9] Howitt, R. and K. Hansen. 2005. "The Evolving Western Water Markets." Choices. 20:1 (1st Quarter), pp. 59-63. Retrieved June 29, 2007, from http://www.choicesmagazine.org/2005-1/environment/2005-1-12.pdf

Your Record Searchlight Online
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Redding Record Searchlight Editorial: 'Amenities' are the wrong path to prosperity

November 25, 2007

Our view: *A study commissioned by opponents of a water-bottling plant in McCloud recycles the dubious argument that the most valuable use of natural resources is to leave them alone. The record of low incomes and high unemployment in rural areas shows just how well that philosophy works.*

If we could grow rich off of our cool rivers and scenic vistas, north state residents would make up a healthy share of the Forbes 400 billionaires.

Alas, it hasn't happened yet.

And despite boosters' claims that tourism could be the economic engine for the region, the fickle trickle of visitors -- while valuable -- has never matched the timber industry's old horsepower.

But the paradoxical argument that the most valuable use of natural resources is to leave them alone is being recycled, and the latest version comes from a report commissioned by opponents of the proposed water-bottling in McCloud.

The analysis from Eugene, Ore.-based ECONorthwest argues that "quality-of-life amenities" draw both new residents and new companies, as well as visitors hooked by fishing and other recreational opportunities. "These water-related amenities are increasingly valuable assets," the report adds.

And not just for McCloud. The study continues: "From the recreational opportunities on Shasta Lake to water for urban and agricultural uses in the Sacramento Basin and San Joaquin Valley, the water flowing from McCloud helps support the region's quality of life."

The implication seems to be that Nestle's bottling operation would drain Lake Shasta and parch the orange groves of Tulare County. It won't. The plant's 1,600 acre-feet capacity would be less than one-thousandth of Lake Shasta's storage. In any case, it would be mysterious if Siskiyou County residents were interested in sacrificing their own prosperity for the benefit of irrigators hundreds of miles away.

As for the effects on McCloud and Siskiyou County, they are certainly worth assessing. Nobody wants to wreck the wonders of far Northern California.

But there's no reason to believe the bottling plant would do that. Siskiyou County covers more than 6,000 square miles, and more than half the land is publicly owned. The county includes all or

part of half a dozen strictly protected federal wilderness areas, plus one national monument. Its natural amenities are among the most carefully conserved in the United States.

And while the glorious rivers and mountains do attract anglers, backpackers and skiers, and tourism is important to the economy, economic data clearly lay out the results of relying so heavily on visitors' dollars.

Siskiyou County's unemployment rate, depending on the season, is from two to five percentage points higher than the California average. The median household income stagnates around two-thirds of the state's. The county has fewer private-sector jobs than it did 10 years ago.

Should we preserve the north state's natural amenities, for our health, for our economy and for their own sake? Absolutely. But the people struggling to raise families in this beautiful place also need the job opportunities that only a balanced economy -- including the occasional water-bottling plant -- can provide.

Mount Shasta Herald

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Letters to the editor
September 5, 2007

'Showdown' inaccuracy

Dear Editor,

Yet another year has passed with no final decision on the Nestle bottling plant in McCloud.

Another year with no jobs, dwindling emergency services, low school enrollment, and an uncertain economic outlook for our town.

While I deeply respect the need to fully investigate the environmental, social and economic repercussions of the proposed plant, I still see and hear some disingenuous arguments from those who oppose it.

I think the top prize goes to the executive director of Cal-Trout, Mr. Brian Stranko, for his statements in the recently aired CNBC segment entitled, "Showdown in McCloud."

At the end of the segment, filmed at Lower Falls on the McCloud River, Mr. Stranko swept his arms around the beautiful view and claimed that, "This would all vanish and everything that feeds off the system would go away with it."

Holy Cow, could that be true?

Now, if I had been among the uninformed and actually believed Mr. Stranko, I probably would have been as outraged as most who viewed that segment.

But what Mr. Stranko omitted from his little fantasy was the fact that the allowed water draw from the McCloud River has been in place since the 1930s with the provision that the McCloud River flow downstream from the intake flows at least 1,800 gallons per minute.

This limit of water draw has worked well over all the years that the McCloud River Lumber Company and their successors used that water for a variety of purposes.

I can tell you that, unlike Mr. Stranko, I have lived in McCloud since 1946. I have fished, swam, picnicked, hiked and explored the entire area since that time and have never experienced what he has described.

While it is too late to correct this gross inaccuracy by CNBC, it's not too late for this information to reach the public.

Ron Berryman
McCloud

Mount Shasta Herald

Wednesday, June 20, 2007 Vol. 120, No. 21 Mount Shasta, Siskiyou County, California ©2007 75 cents 36 pages

Letters to the editor
June 20, 2007

Something's missing

Dear Editor,

I read with interest the letter last week from a number of McCloud business persons regarding their statement that McCloud could do better than Nestle and the economy is good.

There are no real facts produced to substantiate. Rather language like "evidence shows," "data also shows," and "There has been more jobs created in McCloud in the last five years than Nestle will create in a decade."

Show me evidence, data, numbers of jobs. And you say Nestle uses smoke and mirrors. Let's look a little closer.

Bold job creation claims. High school enrollment drop over 90 percent. Something's missing here.
Should we look at the numbers of jobs lost in this same time frame to give us a net figure?

This would now show us that we have less than 40 percent of the jobs that existed in McCloud at that time. Further, the average pay of the jobs is much less today than at that time.

The allegation that the industrial plant will use more services and displace local businesses is just as absurd. I will tell you what uses more services. It is unemployment. And that is a double whammy on our economy.

Do you think it is a coincidence that the local sheriff dispatches to McCloud have increased? And tell me what local business will be displaced by a bottling plant. Absolutely none.

Next I challenge you to drive by the bottling plants in Mount Shasta and Weed and then come back and view your own businesses. Which is healthy looking?

My business has spent $800,000 promoting to attract over 50,000 patrons from outside the area to McCloud in the past five years. If you drive away a clean industry like Nestle, my business will be the next casualty.

And the antigrowth cycle continues.

Jeff Forbis
McCloud Railway, Shasta
Sunset Dinner Train

Mount Shasta Herald

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Guest opinion by Lee Ahlstrom
June 20, 2007

As a McCloud High School graduate and someone intent on seeing my hometown survive, I feel compelled to write this letter in support of the planned Nestle water bottling plant in McCloud.

I am passionate about McCloud surviving as a vital community and as one of the few professional engineers to have graduated from McCloud High School in over 40 years and believe I am well qualified to speak to the full spectrum of issues surrounding this matter.

When I first learned of Nestle's plan to construct a water bottling plant in McCloud, I was encouraged by the fact that here is a clean non-forest product related industry that would provide much needed employment to the community using a natural resource that the area has in abundance.

Furthermore, I recognize that any community's survival is dependent on producing a product or service that brings value added income to the community. Frankly, I have been amazed at the ferocity by which the plan has been attacked. Recently, I saw a news clip that played nationally that inferred suggestion that the upper McCloud River would be impacted negatively by the Nestle plant, which in turn prompted me to research the matter and write this comment.

I have reviewed over 70 years of web based McCloud River flow data and I already knew that the affected springs that Nestle would tap drain through Squaw Creek and/or Mud Creek on to what I would describe as the lower McCloud.

Then I did the math using the published Nestle plant draw of 1,600 acre-feet per year as my base line. The equivalent 2.2 cubic feet per second (or 16.5 gallons per second) in my opinion does not inversely impact regional stream flows.

Simply put, the amount of water proposed for harvesting should not be an issue for a technically based discussion.

My fellow McCloudites, past, present and future, the proposed Nestle project deserves your support.

To the Siskiyou County Board of Supervisors, I urge your proactive support of this project that will bring needed tax revenues to the county and rejuvenate the community of McCloud.

To the McCloud Service District, I urge you to hold firm in your commitment to make decisions that ensure McCloud's sustainable future.

To those opposed to the Nestle plant, I urge you to step back and reflect upon the potential benefits the plant offers to the entire community and not focus your energies against what is a sound and viable means for McCloud to restore its vitality.

• *1963 McCloud High School graduate and former resident Lee Ahlstrom is a professional engineer*

Mr. KUCINICH. Thank you very much, Ms. Paul. I would like to begin by asking Mr. McFarland—and I may ask the same question of Ms. Swier—in McCloud, did Nestle hold any public hearings before you signed the contract with the municipality? And how many public meetings has Nestle—before the contract was signed with the municipality, and how many public meetings has Nestle held since the signing of the contract?

Mr. MCFARLAND. There was one public meeting that the contract was discussed. And that was the same public meeting that the contract was approved.

Mr. KUCINICH. So since the signing of the contract——

Mr. MCFARLAND. Since the signing of the contract, I believe that Nestle has held two or three public meetings in the community. And they have been—they have been designed to—they were public relations events.

Mr. KUCINICH. What do you mean by that?

Mr. MCFARLAND. They touted all the benefits of the project and didn't really discuss any of the potential negative impacts.

Mr. KUCINICH. Did the general community have an opportunity to participate in designing the plant?

Mr. MCFARLAND. None.

Mr. KUCINICH. Where it was located?

Mr. MCFARLAND. No.

Mr. KUCINICH. What about in Michigan?

Ms. SWIER. The same in Michigan.

Mr. KUCINICH. If you could turn the——

Ms. SWIER. I turned it on.

Mr. KUCINICH. Thank you.

Ms. Swier.

Ms. SWIER. Yes. No, in Michigan either.

Mr. KUCINICH. No to what? No participation in designing the plant, where it was located?

Ms. SWIER. No.

Mr. KUCINICH. What about, did Nestle hold any public meetings before the contract was signed with the municipality?

Ms. SWIER. We are not a municipality.

Mr. KUCINICH. With the area?

Ms. SWIER. Pardon?

Mr. KUCINICH. With your community. Was there any public—were there any public meetings before the contract was signed?

Ms. SWIER. The contract was signed with a private property owner.

Mr. KUCINICH. And were there any public meetings before that?

Ms. SWIER. I knew of two public meetings before. No, not before, not before—I am sorry, not before we found out about Nestle coming into Mecosta.

Mr. KUCINICH. OK. And since the signing of the contract, were there meetings?

Ms. SWIER. Yes, there have been meetings.

Mr. KUCINICH. And what was the nature of those meetings?

Ms. SWIER. The nature of the meetings were Nestle would get up and speak to the audience of what a good neighbor they were—that it was going to be and that there would be no adverse resource impact.

Mr. KUCINICH. And were you there present to respond, or were there people from the community that responded, or was it pretty much accepted that what Nestle said was true?

Ms. SWIER. No, there were people at the meetings, like myself, that were able to get up and ask questions.

Mr. KUCINICH. Mr. McCann, in your opinion, what would be the effects upon your community of the proposed water bottling plant?

Mr. MCCANN. Well, clearly the major impact is the unknown factor of what will be the impact on everyone else in the area. You are talking 307,000 gallons of water a day. You are looking at wells that are—that are considerably less deep than what has been proposed. So the impact on those wells is the unknown. And those were the questions that were asked at the public hearings that the State had.

Mr. KUCINICH. Do you think it would be possible for the bottling plant to exist without causing the kind of consequences you are talking about?

Mr. MCCANN. I don't believe so, no. I think that the situation is such that, without a thorough scientific review ahead of time, but here you have a company that owned the land and just decided this is where we are going to do it.

Mr. KUCINICH. To your knowledge, has there been any thorough scientific review?

Mr. MCCANN. There has been some scientific review done by both the company and by one of the towns involved, and they aren't in agreement. The State becomes, I guess you would say, the mediator. And the final decision is the State's of whether or not to grant the permit.

Mr. KUCINICH. Does the company show an interest, Mr. McCann, in being responsive to the community's concerns?

Mr. MCCANN. No. Unfortunately, the company took the attitude from day one that it was their land; they could do what they want. They—beginning back in 2000, they actually went in and disturbed some of the wetlands without a permit. This is the way it started. And this is what had the people concerned. And their attitude throughout the whole process has been, "You people shouldn't be out here bothering us. You shouldn't be complaining. We are going to provide jobs. We are going to provide—increase the tax base." So they had a very negative view of public input.

Mr. KUCINICH. Do you feel existing laws and regulations are sufficient to prevent those consequences even if the company is not willing to prevent them on their own?

Mr. MCCANN. Well, as I said in my opening statement, I thought what we had done in 1998 to protect the environment seemed on the surface to work good, but in actual operation, no, I would say now that the State and Federal laws failed.

Mr. KUCINICH. In your written testimony you criticize Governor Lynch for his role in the permitting process. What should he have done differently in your opinion?

Mr. MCCANN. I wouldn't say I was being necessarily critical. I just think that the reality is the Governor could have probably come in sooner and maybe worked with EPA and the Army Corps of Engineers instead of waiting until 2005. I think that what he has tried to do was thwarted by what had been done by his prede-

cessor, who made sure that DES was, quoting as he said in one of his speeches, "more business-friendly." I think that the Governor had some difficulties that were not his fault, but he also had a situation where I think he could have acted sooner, but he didn't.

Mr. KUCINICH. You criticize the role of the Army Corps of Engineers. What should they have done differently?

Mr. MCCANN. As I understand the request from the Governor to them, they were supposed to evaluate the information provided by the applicant, USA Springs, the State and the scientific data that I mentioned earlier that was provided by the Town of Nottingham and the consultant Nottingham had. In reviewing what they issued in August 2006, they basically took the information provided by the applicant and accepted it as a fact.

Mr. KUCINICH. I am going to return to the questioning in a moment. The Chair is going to recognize the distinguished Member from California, Congresswoman Diane Watson, for a round of questions.

Congresswoman.

Ms. WATSON. I want to thank you, Mr. Chairman, for holding what I feel is a very important meeting, and very sensitive and relevant to our climatic conditions and what is happening today. The consumption of water is increasing at a rapid rate. And in the year 2002, Americans consumed 6,018 million gallons of bottled water. And I think I did most of that consumption myself. The United States, as well as the global population, is putting the strain on existing water supplies. And that is putting a strain on our existing supplies of groundwater and surface water.

And the bottling industry is currently seeking to extract more water from rural areas to meet this growing demand. And I understand some of the water companies are taking the water in their city and bottling it and selling it in stores. And so there is a double profit there. But I am very, very concerned in the way the process is being done, not only our drinking water but our purification of water. And you might be aware that along the southern coast of California, we have a great deal of mercury in our water. And it has contaminated the sea life and particularly gotten into our fish life, particularly tuna, and we warn our citizens to not eat tuna off the western coast of California.

So I understand that water that is extracted from ancient sources, and once that water has been depleted, it is gone forever. I missed the first part of the hearing, Mr. Chairman, but I don't know if the witnesses are from areas where there are ancient sources of water. And as you were speaking, I thought maybe you could tell us what we need to do to protect those sources and particularly now when we are in drought in California. And we have our water up in the northern part of our State. And we had talked at one time about a peripheral canal with the water from the north in the deltas could come down to southern California into our desert. But what can we do, and should we regulate the way groundwater is extracted and how much could be extracted? And should these fields be left alone for a while so groundwater could accumulate? That would take millions of years in California because we don't get much rain truly. But let me just start and go

down the panel. What would you have us do here in Washington to protect that groundwater from ancient sources?

Let me start with Mr. McFarland.

Mr. MCFARLAND. Thank you very much. As I said in my opening testimony——

Ms. WATSON. That I missed.

Mr. MCFARLAND. Yeah, one thing that I think that is really critical, and you talk about ancient groundwater, and one thing, I am from Mount Shasta in far northern California, and I requested that this committee, the subcommittee, encourage U.S. Geological Survey scientific inquiry to monitor and characterize Mount Shasta's ground and surface water resources. This is especially important in the face of potential climate change impacts on California's water supply. So what it gets down to is good science. And I think that we don't really know whether the water that Nestle is proposing to bottle in McCloud is ancient water, or if it is water from last year, or if it is water from 10 years ago. And I think it really points to the need for really good U.S. Geological Survey studies of these aquifers before we start drawing them down.

Ms. WATSON. Thank you.

Mr. MCFARLAND. Thank you.

Ms. WATSON. Ms. Swier.

Ms. SWIER. I agree with Mr. McFarland on his proposals also. Also, I think that there needs to be a protection of Federal and State wetland laws from water extraction and diversion for export. And all water bottlers must meet standards to be set by the courts and the State law, including the no likely pollution impairment or destruction standard of Michigan's well-respected Michigan Environmental Protection Act, and an amendment to the Federal Water Resource Development Act to provide interested citizens with the right to enforce by citizen suits.

Ms. WATSON. Thank you.

Ms. SWIER. Thank you.

Ms. WATSON. Mr. McCann.

Mr. MCCANN. I would agree with what has been said earlier, and I think that the important thing is the Federal Government's role should be to help bring, through the geological information that has been talked about, the facts to the situation when we have developments proposed like was in New Hampshire or what has happened in Michigan or California. I found from my own experience that we don't know the science of the aquifers. And a consultant for a company can come in and say, "Oh, there is tons of water here; we don't need to worry about the impact," and there is no scientific backing for that. And I think the Federal Government's role would be to help provide that data so that both parties could sit down and look at what an aquifer—what the impact may really be. And so I would support what has been said by the two previous speakers.

Ms. WATSON. Should that be the responsibility of EPA?

Mr. MCCANN. I would think EPA or the Department of Interior or both. I mean, the Department of Interior has some of the records because they have designated, like I mentioned in my testimony earlier, one of the rivers that could be impacted in the New Hampshire case, the Lamprey River, is a wild and scenic river. It is so

designated by the Department of Interior. So I would think that a combination of the Department of Interior and the EPA would probably have the best data.

Ms. WATSON. Thank you.

Ms. Paul.

Ms. PAUL. I first want to clarify that we don't use any ancient waters that are not replenishable. One hundred percent of our water use is from replenishable sources.

As far as the Federal role, I think we support the Linder bill, which would say that we need a commission to look at water needs for the next 50 years and what information can be provided, for example, from the USGS to inform the decisions at the State level.

Ms. WATSON. I kind of like that idea, Mr. Chairman. Maybe we are looking at a different organization to develop standards, and let States—and we have Cal. EPA in California. Water is our big issue. And I think, State by State, we ought to require them to have their own standards, their own organization that deals with water, and plan for the next hundred years or so. Thank you so much, panel. I appreciate your input.

Mr. KUCINICH. I thank the gentle lady for her questions.

To Ms. Paul, in your testimony, you represent yourself as a trustworthy steward of the environment. Absent a court order or other legal requirement, if local people in a community bring to your attention significant adverse environmental impacts from your pumping operations, such as low stream flows, would your company be willing to reduce or to stop pumping?

Ms. PAUL. We base all of our pumping decisions on the science that says what is a sustainable use. So if the science was showing it was not a sustainable use, yes, we would cut back.

Mr. KUCINICH. OK. Well, if that is the case, and I take it as you say it is what you believe, this subcommittee has been informed that your company continued to pump from its Stanwood plant in Michigan in the summer months this year even when presented with photographic evidence that clearly show the flow levels in the stream-fed Dead Stream were dangerously low. We have a photo that was supplied to us by attorneys for MCWC that appears to show the Dead Stream living up to its name. Now, I would like you to look at the picture there, which represents the low flow levels of the Dead Stream. We have also been informed that while Nestle's pumping may have been technically in compliance with a court order, this court order was only in place pending remand to a trial court after MCWC won its court case in order to determine safe pumping levels. Now, did Nestle see these photos? Have you ever seen these photos?

Ms. PAUL. I have never seen that photo.

Mr. KUCINICH. Have you ever seen any photos similar to that? Have you seen any photos of the Dead Stream?

Ms. PAUL. Let me say, I think the question that is being raised here is I think those might be the mud flats? Are those the mud flats? Well, I guess I can't—so this is what I know.

Mr. KUCINICH. This represents a picture taken of the Dead Stream.

Ms. PAUL. There are low flows and high flows of water bodies naturally occurring. And just because there is a low flow——

Mr. KUCINICH. So you are maintaining that this was a naturally occurring low flow. Is that your position?

Ms. PAUL. My position is that there is no harm to the environment, that there are naturally higher and lower flows, that this is affected by dams built by beavers, by many things; that the mud flats—when they show are a feature that has resulted from a dredging, a historic dredging, and is the natural sediment coming back to replace the dredged amount, the dredged soils.

Mr. KUCINICH. So again——

Ms. PAUL. So no harmful impact from our use. I do agree with that statement.

Mr. KUCINICH. And that is based on science. Is that correct?

Ms. PAUL. Yes. Yes, it is.

Mr. KUCINICH. And so it is either—now, that position that you have offered, is that the result of scientific studies that you have had done, or is it only your study, or is it a consensus of a number of scientific studies that have been done? And do you have those studies to make them available to the committee?

Ms. PAUL. We do have studies, and we would be happy to make them available.

Mr. KUCINICH. But is it one study that you have done or are there other studies? Are there studies that are independent of your studies?

Ms. PAUL. I know of no independent studies, but I am happy to share our studies.

Mr. KUCINICH. Do you have any kind of knowledge of any scientific opinion that disagrees with your characterization?

Ms. PAUL. What I can say to that is there were in the original lower court some models created of what would be, could be, the impact of our use. That would be information that is different than what we have seen when we have actually used the water source.

Mr. KUCINICH. Now, Ms. Paul, it is my understanding that the source of the groundwater in McCloud is partly from a glacier. How is Nestle going to address the restriction on water supply over the next hundred years with climate change, which potentially will change the amount of water flows from your source given that your source is glacier-fed?

Ms. PAUL. We have a permitted amount that we are planning to use. If there were any harm of that use, we would cut back. The amount—I feel compelled to give a little history here, but maybe I shouldn't. McCloud came to us asking for our interest in coming to the area to build a bottling water plant. The reason being, it was a town, a lumber town built that was in decline. And today, in the school built for 250, there are eight students. It is my understanding that there is not—they are not able to afford an ambulance driver in the day. It is a community that is looking for opportunity, for more jobs. They are looking for a light industry. They had a water use of the lumber mill prior that they wanted to allow that water to be put to good use. And the contract to which you referred earlier, there were four meetings, public meetings on that contract.

Mr. KUCINICH. Has Nestle ever had any meetings with the Garrison Place Real Estate Investment Trust and/or Francesco Rotondo, trustee, doing business as USA Springs, Inc.?

Ms. PAUL. No, not to my knowledge.

Mr. KUCINICH. Do you know if there was any contact that any of those entities have had with Nestle?

Ms. PAUL. Not to my knowledge.

Mr. KUCINICH. Do you know if Nestle either offered or received a request to engage in a business transaction with any of those entities——

Ms. PAUL. Not to my knowledge.

Mr. KUCINICH [continuing]. Relative to the Barrington-Nottingham——

Ms. PAUL. I don't believe we have any connection, any dialog.

Mr. KUCINICH. Has Nestle done any site characterization of that area at any time or engaged in any discussions with any principal or representative relative to the siting of a water bottling plant or business transactions subsequent to that in New Hampshire?

Ms. PAUL. Anywhere in New Hampshire?

Mr. KUCINICH. In that area, at Nottingham and Barrington.

Ms. PAUL. Not to my knowledge.

Mr. KUCINICH. Any other place in New Hampshire?

Ms. PAUL. We look for spring sites in many States, and we have likely looked in New Hampshire.

Mr. KUCINICH. But you don't know; you have never heard of Mr. Francesco Rotondo?

Ms. PAUL. No, I have had no contact with him.

Mr. KUCINICH. Or USA Springs, Inc.?

Ms. PAUL. I have heard of them. I don't know them.

Mr. KUCINICH. Has it been Nestle's practice over the period of time, given the large share that you have in the bottled water market, to acquire bottling companies or bottling interests or to lease or to purchase any assets that relate to water bottling and the acquisition of the water that the bottling plants use?

Ms. PAUL. Yes, we sometimes do buy those rights or the business from others, yes.

Mr. KUCINICH. How many, in how many instances have you done that? Is it rare, or is that the way your business grows?

Ms. PAUL. I would say it is neither rare nor how the business grows, but it is a way; it is one of many ways. If you would like me to find out the details of that, I would be happy to offer it in written testimony.

Mr. KUCINICH. Yes, I would also like you to provide this committee, since you expressed that you didn't know, any kinds of documents that you have relating directly or indirectly to the Nottingham-Barringtonsite that relates to the Garrison Place Real Estate Investment Trust, Francesco Rotondo, USA Springs, any discussions, memoranda, e-mails, letters that relate to contact relative to that site or to the principals who are involved in that site. If you would do that, this committee would appreciate it.

Ms. PAUL. We will do that.

Mr. KUCINICH. Thank you very much. I want to—my time has expired I have been informed. And the gentle lady from California is recognized.

Ms. WATSON. I would like to give you my time, Mr. Chairman, so you can continue your line of questioning.

Mr. KUCINICH. I want to thank the gentle lady.

I want to go back to Mr. McCann. Mr. McCann, in your testimony you alleged specific failings in the enforcement of the New Hampshire and the Federal laws with respect to the siting of a water bottling plant in your community. To what do you attribute these failings? Are the laws adequate, or do they clearly prescribe the environmental safeguards that must be followed? And if it is a question of inadequate enforcement, to what do you attribute this laxity?

Mr. MCCANN. I think, as I said earlier, it is the law as written perhaps can provide some public protection. The implementation needs to be improved. The Federal role was, to put it mildly, I think very vague to people in the first year or two of this project. The environmental—Department of Environmental Services' role was to be fair. I think they were overwhelmed with the fact that this company wanted to take this water out and didn't appear to have all the scientific data that DES had looked for and that people like myself were asking for. So I think that it was, as I mentioned in my earlier testimony, this was the first test of our State law. I think the report card is still mixed. It is probably in the vicinity of C-minus. And most of that might be as a result of poor administration by the agencies involved, not necessarily poor writing of the law. But I don't deny that there is perhaps room for improvement in correcting what we have seen in the first 10 years of that law.

Mr. KUCINICH. I had asked Ms. Paul, whose presence we are grateful for, a series of questions. Is there any question that I should have asked that I didn't ask relative to the issues that relate to the community that you are here on behalf of?

Mr. MCCANN. As far as the connection with the——

Mr. KUCINICH. I am just saying, are there any questions that I did not ask that you think should have been asked?

Mr. MCCANN. I can't think of any, Mr. Chairman. I think you did a thorough job.

Mr. KUCINICH. OK. Let us go down the line here, starting with Mr. McFarland. Water bottlers often choose relatively remote or rural areas for bottling or pumping sites, and will often seek access to watersources that are located in protected natural areas, areas that are protected either because of their intrinsic natural value or because of their relative ecological fragility. How do you think this committee should weigh the economic value of the industry of the water that is extracted and bottled versus the ecological value of protecting the delicate balance of these areas?

Mr. MCFARLAND. I think they should use good economic analysis and look at the true costs versus benefits of all of the resources in the area. And you know, I think that the subcommittee understands that there is economic value to the water for downstream uses. Not only is it of economic value to—in terms of commerce, direct commerce. So I think that the science of economics today looks at the other value of those resources aside from just the pure, you know, dollar value of the resource put into a bottle.

Mr. KUCINICH. Thank you.

Ms. Swier.

Ms. SWIER. Yes. I am from Michigan, which you know, and we are living—I live in an economically depressed area. And I do feel that we have to look at the economic picture. And when Nestle

came into our area, that was one of the major draws that Nestle had said of coming into Mecosta County. But we also, as residents of my area, this is our livelihood. I am surrounded by lakes. I happen to live on a lake myself. And this is one of—the water is our heritage. And I feel that it needs to take into effect what the effect is going to be in the area. And with more scientific data available, MCWC has hired a hydrologist. And he is continually looking at what the harm is to our area, to our natural resources, which a good one was, you know, the one that you had there. And I live just 5 miles from the Dead Stream.

Mr. KUCINICH. Could that have been—that low water level, could that have been caused by beavers?

Ms. SWIER. There had been beavers there on and off for years. The people who live on the Dead Stream have never——

Mr. KUCINICH. Is that a yes or a no? I mean, could that have been caused by beavers?

Ms. SWIER. Yes. Yes, it can be caused by beavers.

Mr. KUCINICH. And in this case, do you think that it was caused by beavers?

Ms. SWIER. I can't answer that. I do not know.

Mr. KUCINICH. OK. Thank you.

Mr. McCann, do you want to comment as to the fact that these water bottlers are choosing relatively remote and rural areas for bottling or pumping sites and often seek access to water sources that are located in protected natural areas? And how do you think this committee should weigh the economic value of the industry versus the ecological value of protecting the delicate balance in these areas and also the access to water for civilian populations?

Mr. MCCANN. I think that, clearly in the past, in the instance especially in Barrington and Nottingham, but I read about, you know, other companies, obviously the economic value of a proposed development is part of the process to quote-unquote sell it to the community. And if a community has had hard economic times, it is clearly one mechanism they can use to try to come in.

I think the Federal legislation and the ideas that have been put forward by Mr. McFarland make sense. I think we need to have a level playing field, which means we try to, as I said earlier, balance the scientific data, but we also work to try to have equal opportunity for development but also at the same time recognizing, as you said, that we have a very delicate balance. And if there is a reason for the government to become more involved, I think it is to protect the environment and to ensure that a well-regulated industry is working. But it shouldn't be at the deprivation of the environment or the people who live in the community.

Mr. KUCINICH. Out of fairness, Ms. Paul, do you want to respond?

Ms. PAUL. Yes. Thank you. Everything is made with water. Everything. In fact, our bottle—the biggest user of water is the plastic bottle—which is the lightest weight plastic bottle on the market, as I mentioned; it is less than a half an ounce. So think of anything made of plastic that is greater than half an ounce; it is made with more water. We are a very visible user of water, but we are not a very large user of water on the global scale or on the U.S. scale or on our region's scale.

On a particular site, we do two things. We pick sites where our use can be sustainable, and then we monitor that use.

Mr. KUCINICH. What about the environmental effects? Do you consider those at all times, the ecological effects of what you do?

Ms. PAUL. Yes, we do. I think we are a model water user.

Mr. KUCINICH. Thank you very much.

I want to thank the members of the panel for responding.

I am going to recognize Mr. Issa. And I want to say that our clock for some reason always stays on green.

Mr. ISSA. Which is looking better all the time right now.

Mr. KUCINICH. Which is good. OK.

Mr. ISSA. Thank you, Mr. Chairman.

A lot of the questions that needed to be asked, you asked. And so I will try to do followups mostly.

Ms. Paul, do you produce, does Nestle produce beer?

Ms. PAUL. No.

Mr. ISSA. Do you produce soft drinks?

Ms. PAUL. No. Well, define soft drinks. We do have——

Mr. ISSA. Pepsi, Coca-Cola type products?

Ms. PAUL. No.

Mr. ISSA. OK. Now are these figures in your estimation accurate, that bottled water consumes about 1.3 gallons per gallon of water delivered, while soft drinks consume about 1.7 gallons per gallon delivered, and beer consumes about 2.1 gallons for every gallon delivered? Do those figures ring a bell to you from your history?

Ms. PAUL. My history would say that our company uses 1.3; that carbonated soft drinks, for just processing, uses 3, not counting the water to process the ingredients or the water to grow the ingredients; and beer is more like 9 gallons, not counting the growing and the processing of the ingredients.

Mr. ISSA. Right. Because they have to boil the hops and all the——

Ms. PAUL. It is distillation.

Mr. ISSA. I apologize for the low figures. I chose the lowest of all of them I could get just because I love Anheuser-Busch, and I am a beer drinker from time to time. So I didn't want to do anything adverse.

Mr. KUCINICH. Let the record stipulate.

Mr. ISSA. But as a Californian, I love my wine, too, let us not kid that. But I am a Californian. Let me understand this. If you are a typical crop producer, for every gallon of water you pump out—let me rephrase that—for every 10 gallons you pump out, 8 gallons are going to evaporate. Basically, nothing is going to deplete the groundwater table as much as, for example, our rice production in northern California. By definition, we are spraying water out and asking it to please evaporate in a 100-degree Sacramento day. Is there anyone—Mr. McFarland, you know, you have seen that. That is essentially how we grow rice is you spread water over it and ask it to please evaporate.

Mr. MCFARLAND. Absolutely.

Mr. ISSA. So although today we are talking about the bottled water industry, and clearly you concentrate your taking from one area, wherever your plant is, we have in California and around the country, but particularly California where we don't have the Great

Lakes, which my understanding the Great Lakes are basically a river with some big puddles in them, that every bit of water—if we took every bit of water out of the Great Lakes today, in a matter of 2 years, they would essentially refill. I know there is a gentleman shaking his head no, but I am a Clevelander. I remember when the Great Lakes were dead, and it took less than a decade for them to come back to life because they flow completely through every couple of years. We don't have that in California.

So, Mr. McFarland, excluding the fact that I clearly understand how you are personally affected and your water table is affected, don't we have a national problem of groundwater, ground table, aquifer management? Wouldn't you say that you are picking out this particular point because it is in your backyard, but you would agree that we have throughout California and the Nation a question of, how are we managing groundwater?

Mr. MCFARLAND. Yes.

Mr. ISSA. And I think although you are not in agriculture, you shook your head yes like most of us as Californians, we understand that agriculture, clearly needed, is the biggest consumer, because of the fact that we spill it on the ground, of water that doesn't get back into the water table.

Mr. MCFARLAND. Absolutely. And I believe that if Nestle was paying as much in McCloud as the rice farmers pay for their water in Colusa, that there would be less opposition to it in McCloud.

Mr. ISSA. Well, and I am a businessman, so I understand a problem is something money can't solve. It does sound like money could solve this one.

Mr. MCFARLAND. It could solve part of the problem here. Part of the big problem here is that this is an outrageously egregious contract. It is very unfair to the community of McCloud.

Mr. ISSA. The price.

Mr. MCFARLAND. The price.

Mr. ISSA. The price they are paying for the water.

Mr. MCFARLAND. They are stealing it.

Mr. ISSA. As a southern Californian, remember, I opened up with all northern Californians think southern California steals. But I get your point that it is a question of how much money is being spent for the resource that is being taken from your region. I am a Federalist. I believe the Federal Government only has the right to do what it implicitly has the right to do. Other than ensuring Federal access to navigable waterways, the national fisheries and the Clean Water Act, other than those, do any of you know a legitimate existing Federal hook that we can take? I mean, and those three are big. We do have a right to make sure that Nestle or anyone else is not taking water in a way that pollutes somebody else's water. We have to make sure that the 0.3 gallons that don't go into the bottle don't end up being backflushed in some way. And we all know some of the history of that. But are there any other hooks that we should really be aware of that exist today beyond—because we primarily make sure that agencies are doing their job. That is one of the biggest things we do on this committee. So are those three the big three that we should be looking at as we are going through this problem not just of a particular bottling operation or two, but groundwater and safe drinking water?

Mr. MCFARLAND. Boy, that is a question that is out of my league.

Mr. ISSA. But those thing three ring a bill, and you are comfortable——

Mr. MCFARLAND. Yeah, the navigable waterways thing, that comes up as definitely potentially applicable here.

Mr. ISSA. We can certainly make sure the Corps of Engineers ensured that not so much water was taken from any source as to adversely affect navigable waterways.

Any of the rest of you have anything I've missed? Because when this hearing is over and any subsequent hearings, that's what we have to look at, is can we make agencies do their jobs better. And something the chairman and I try to do whenever possible is make the agencies do their jobs without legislation.

Ms. Paul, you know, you're obviously the subject of a lot of this because of your company's operations. You mentioned your stewardship of the environment and how you make sure—or you said that what you take is sustainable. In the case of the Mount Shasta operation, could you go through the sustainability, in your company's opinion, the environmental impact and how you reached the decision for how much you can, individually and with the other companies already operating there, collectively take out of the aquifer or the groundwater?

Ms. PAUL. Yes. We're still in the middle of that regulatory process. We signed the contract, which we actually pay more for the water than any other users. And it is reliant on meeting the terms of CEQA. CEQA is involved in the environmental impact statement.

We have done the science to look at what our impact would be; and, in this case, it is a unique situation in the sense that we could take the amount of water that we'd use at peak out of the system to see the impact. You can't usually do that. You usually have to model it. But because of the way the springs come together and then we could divert one of the springs and just have the amount left——

Mr. ISSA. You could test the theory.

Ms. PAUL. We could test the theory. That said, we have heard from the town and from environmental groups that they want more information. And we are in a process—we're sitting down with environmental groups, concerned citizens and a third-party hydrologist and biologists from UC Davis at the recommendation of environmental groups; and we're going through what more science would they be comfortable with, that we'd be comfortable with to get more information.

Mr. ISSA. Excellent.

Thank you, Mr. Chairman. I think this takes us a long way with this panel. I appreciate your calling this hearing.

Mr. KUCINICH. I thank the gentleman from California for his participation as always. I know that you have a markup and you're trying to do double duty here. I appreciate you being here.

The gentlelady from California has informed me she doesn't have any other questions of this panel. Nor do I. I want to thank each member of the panel for your participation. This committee will continue to look at the issues that have arisen as a result of your

testimony, and we reserve the right to submit additional questions in writing.

And I appreciate Ms. Paul's presence here; and we would ask that you'd respond, you know, to the committee's inquiries as you indicated you would.

So I'm going to dismiss the first panel, and we're going to call the second panel to come up. Thank you again.

Will the second panel please come forward.

I want to thank all of the members of the first panel again. We're going to try to get this second panel started in an expeditious manner, and I would ask that the witnesses be seated.

I'm going to do some introductions.

We have here Ms. Wenonah Hauter, who is the executive director of Food & Water Watch, an organization dedicated to educating policymakers and the public about food safety, agriculture, environmental issues and water rights.

From 1997 to 2005, Ms. Hauter served as director of Public Citizens Energy and Environmental Program, which focused on water, food and energy policy. Before that, she was environmental policy director for Citizen Action and worked on sustainable energy campaigns for the Union of Concerned Scientists.

Next, Mr. David Hyndman. Mr. Hyndman is professor of geological sciences at Michigan State University where he studies the physical and chemical processes that influence groundwater flow. Professor Hyndman's research also examines how land use changes in regional watersheds affect ecological health. For the past 10 years, Professor Hyndman has been associate editor of the journal Groundwater, was association editor of the journal Water Resources Research for 5 years and is published widely on hydrological issues.

Professor Noah Hall is a professor at Wayne State University Law School in Detroit, MI, where he teaches environmental law and water law. Before joining the Wayne State faculty, Professor Hall taught at the University of Michigan Law School and was an attorney with the National Wildlife Federation where he managed the Great Lakes Water Resources Program. Professor Hall also worked in private practice in Minnesota for several years and clerked for the Honorable Kathleen A. Blatz, Chief Justice of the Minnesota Supreme Court.

Mr. Joseph Doss is president and CEO of the International Bottled Water Association in Alexandria, VA. The IBWA was founded in 1958 and is the trade association representing the bottled water industry both internationally and domestically. Mr. Doss has extensive experience in association management, food and drug matters, governmental affairs, public relations and legal issues. Before joining the IBWA, Mr. Doss was the director of Public Affairs At the Consumer Healthcare Products Association from 1997 to 1999.

Mr. James Wilfong is an entrepreneur, educator and public servant. He is executive director of H20 for ME, a ground water advocacy group. He also served as a member of the Maine Legislature and as an assistant administrator for the Office of International Trade at the Small Business Association during the Clinton administration. Mr. Wilfong is co-founder of several enterprises, including

Atomic Ski USA and Innovative Applied Sciences, a software development company of which he is the chairman.

I want to thank the members of the panel for being here. It is the policy of the Committee on Oversight and Government Reform to swear in all the witnesses before they testify. I'd ask each of you to rise—all of you to rise and raise your right hands.

[Witnesses sworn.]

Mr. KUCINICH. Thank you very much. Let the record reflect that the witnesses have answered in the affirmative.

As with the first panel, I ask that the witnesses give an oral summary of his or her testimony and to keep this summary under 5 minutes in duration. Bear in mind the complete written statement will be included in the hearing record.

I'd like to begin with Ms. Hauter.

Thank you. You may proceed.

STATEMENTS OF WENONAH HAUTER, EXECUTIVE DIRECTOR, FOOD & WATER WATCH; DAVID W. HYNDMAN, DEPARTMENT OF GEOLOGICAL SCIENCES, MICHIGAN STATE UNIVERSITY; NOAH D. HALL, WAYNE STATE UNIVERSITY LAW SCHOOL; JOSEPH K. DOSS, PRESIDENT AND CEO, INTERNATIONAL BOTTLED WATER ASSOCIATION; AND JAMES WILFONG, EXECUTIVE DIRECTOR, H20 FOR ME

STATEMENT OF WENONAH HAUTER

Ms. HAUTER. Good afternoon, Chairman Kucinich and Congresswoman Watson. Thank you for the opportunity to testify today.

My organization, Food & Water Watch, is very concerned about the commodification of water, which is a resource owned by no one and needed by everyone. In setting the context for the discussion of the bottled water industry's mining in rural communities, it is important to acknowledge both the industry's explosive growth over the last 20 years and its profit—that its profitability is based on selling the myth that bottled water is some how safer and better than tap water.

The truth is that bottled water is generally no cleaner, no safer or healthier than tap water and that the Federal Government requires far more rigorous and frequent testing and monitoring of municipal drinking water. Almost half of all bottled water is nothing more than reprocessed tap water. The FDA only requires that companies test four empty bottles once every 3 months for bacterial contamination, and they must test a sample of water after filtration and before bottling for bacteria once a week.

In contrast, the EPA requires that public water systems serving more than one million residents test water 300 times per month and utilities serving more than 3 million people must collect and test 480 samples monthly.

Now I raise this issue because the lax regulation of the bottled water industry is one of the things that helps make it profitable, along with the little that they pay to access water.

A former chairman of Perrier was quoted as saying, "it struck me that all you had to do is take the water out of the ground and then sell it for more than the price of wine, milk or, for that matter, oil." And it is true. Bottled water costs more than gasoline or the com-

panies charge about $1.50 for a 20-ounce bottle of water which penciled out to more than $9 a gallon. That profit must be measured against the mere cents that it costs them to bottle the water.

But those few cents are only the company's internal costs, the ones they have to pay. The mining of water does not include the external economic, social and environmental costs to rural communities and society in general, such as the loss of groundwater, toxic emissions from plastic production and disposal, air pollution and damage to roads and other local infrastructure from transporting the products.

For instance, plastic bottle production in the United States annually requires more than 1.5 million barrels of oil, enough to fuel 100,000 cars. Worldwide bottling of water uses about 2.7 million tons of plastic. And after the production of billions of plastic bottles and the national and international travel of bottled water, billions of those empty bottles remain. Eighty-six percent of empty plastic water bottles in the U.S. land in the garbage instead of being recycled.

Besides the cost to the environment of the plastic bottles, water mining could have long-lasting effects on the rural communities where it is mined. When the flows and levels of a region's springs, wetlands, lakes, streams and rivers are materially altered because of the extraction for bottling, the entire local and even regional environment suffers; and this extends to the activities that depend on water: agriculture, the individuals in the community, businesses, tourism and recreation.

And groundwater is a fragile resource. Our Nation's groundwater reserve is not a single vast pool of underground water but is contained within a variety of aquifer systems that cross political lines at county, State and international boundaries.

Groundwater management decisions in the United States are made at local level by a State municipality or special district formed for groundwater management. The monitoring of groundwater reserves is uneven around the country and often the amount of water available in an aquifer is unknown because of lack of data collection and the analysis that is needed to support informed decisionmaking about groundwater.

Some communities across the country developed water management plans that take into account such issues as population and climate change, including drought. The people and businesses living and operating there have to live within the rules set forth in these plans, but often bottling companies get a nearly free pass, even though they're permanently removing water from a community's aquifer. Indeed, in McLeod, CA, which we discussed earlier, they plan to extract about 500 million gallons of water annually; and it appears that the contract would give the company preference over the town's ratepayers.

What is more, the local water district bears all the responsibility for the well-being of the springs and the water infrastructure. The ongoing extraction of water from cities and rural areas to be bottled and sold——

Mr. KUCINICH. I'm going to ask the gentlelady to wrap it up because your time has expired, and I just want to try to keep to the 5-minute rule. Thank you.

Ms. HAUTER. So our recommendation is that the Federal Government should, of course, strengthen bottled water quality regulations. But, just as importantly, we believe that there must be some kind of regulation or standard at State and local levels that addresses how much water bottling companies can extract from State. Federal funding should be provided to collect adequate data about the health and quantity of groundwater, and this data needs to be properly analyzed.

Mr. KUCINICH. Thank you. I want to thank you for your excellent testimony.

[The prepared statement of Ms. Hauter follows:]

Testimony

of

Wenonah Hauter, Executive Director of Food & Water Watch

Domestic Policy Subcommittee

Oversight and Government Reform Committee

Wednesday, December 12, 2007

2154 Rayburn HOB - 2:00 P.M.

Good morning Chairman Kucinich, Ranking Minority Member Issa and Members of the Subcommittee, my name is Wenonah Hauter, and I am executive director of Food & Water Watch. We are a non-profit consumer advocacy organization based here in Washington, D.C.

I welcome this opportunity to testify today on an issue that is very important to my organization—the negative environmental consequences of water bottling plants extracting groundwater and spring water from rural communities. I would like to discuss the broader policy context of the water bottling industry's operation in rural communities.

The bottled water industry, including Nestlé, Pepsi, and other companies, has seen explosive growth over the past 20 years. These companies are enjoying hundreds of millions of dollars in profits annually from selling the myth that bottled water is

somehow safer or better than tap water. The truth is that bottled water is generally no cleaner, or safer, or healthier than tap water. The federal government requires far more rigorous and frequent safety and testing and monitoring of municipal drinking water.

The regulatory reality with bottled water is that the Food & Drug Administration has less than one full-time employee devoted to bottled water oversight. The federal rules apply only to bottled water packaged and sold across state lines, which leaves out the 60 to 70 percent of water bottled and sold within a single state. For the 30 to 40 percent of bottled water that FDA does regulate, it requires that companies test four empty bottles once every three months for bacterial contamination. They must test a sample of water after filtration and before bottling for bacteria once a week. When it comes to chemical, physical, and radiological contaminants, a sample of water must be checked only once a year. Companies do not have to test the water after bottling or storage.

Only one out of five states has bottled water laws and regulations. Some of the state regulations mirror FDA standards, some are more stringent, and some fall far short of ensuring consumer safety.

In contrast, the Environmental Protection Agency requires that water systems serving more than one million residents test 300 water samples per month, while utilities serving three million people or more must collect and test 480 samples monthly, far more than the once-a-week test for bottled water.

Almost half of all bottled water is nothing more than purified tap water. But whether it originates from a municipal tap or from an aquifer in a rural community, such as McCloud, California, or Mecosta County, Michigan, water is a life-giving resource from

a unique ecosystem and economy. People, places, and animals depend on this water – a public resource – that beverage corporations are extracting, bottling, and selling in return for big private profit.

This business has been relatively easy money for the bottlers, given how little they often are charged to access the water. Indeed, a former chairman of Perriér was quoted as saying, "It struck me…that all you had to do is take the water out of the ground and then sell it for more than the price of wine, milk, or, for that matter, oil." It's true: bottled water costs more than gasoline (refined oil) on a per gallon basis. These companies charge about $1.50 for a 20-ounce bottle of water, which pencils out to more than $9 a gallon. That profit must be measured against the mere cents that it costs them to bottle the water.

But those few cents are only the companies' internal costs, the ones they have to pay. Unfortunately, mining the water does not include the external economic, social, and environmental costs that the rural communities and society in general must deal with, such as loss of groundwater, toxic emissions from plastic production and destruction, air pollution, and damage to roads and other local infrastructure from transporting the products.

For instance, plastic bottle production in the United States annually requires more than 1.5 million barrels of oil, enough to fuel 100,000 cars a year. Worldwide bottling of water uses about 2.7 million tons of plastic each year. And after the production of billions of plastic bottles and the national and international travel of bottled water, billions of empty bottles remain. About 86 percent of the empty plastic water bottles in the United States

land in the garbage instead of being recycled.

That amounts to about two million tons of PET plastic bottles piling up in U.S. landfills every year. Single serve water bottles and other beverage containers, often used on the go, are recycled at a lower rate than containers typically used at home. The national recycling rate for all PET type #1 plastic fell from almost 40 percent to just over 23 percent in 2005. And ultimately, many plastic bottles of all types and sizes will be incinerated, which releases toxic byproducts, such as chlorine gas and ash laden with heavy metals.

Besides the cost to the environment of the plastic bottles, water mining could have long-lasting effects on the rural communities where it is mined. When the flows and levels of a region's springs, wetlands, lakes, streams, and rivers are materially altered because of extraction for bottling, the entire local and even regional environment suffers, and this extends to the activities that depend on the water –agriculture, individuals, businesses, tourism, and recreation.

Many communities across the country develop water management plans that take into account such issues as population and climate, including drought. The people and businesses living and operating there have to live within the rules set forth in those plans, but bottling companies too often get a nearly free pass, even though they are permanently removing water from a rural community's aquifer.

Indeed, in McCloud, California, where Nestlé wants to build a bottling plant to extract about 500 million gallons of water annually, concerned citizens have said that the proposed contract between the McCloud water provider and the transnational beverage

giant would give the company preference over the town's ratepayers because the company could draw the maximum amount of water it wants, regardless of drought or water shortage. What is more, the local water district bears all the responsibility for the wellbeing of the springs and the water infrastructure. McCloud residents have been fighting the plan, contending that the company paying only $300,000 a year for access to the water would leave the town with only a PENNY for every 17 gallons.

The ongoing extraction of water from cities and rural areas to be bottled and sold sets up a frightening scenario. We are seeing a steady shift of a public resource, water, into private hands. No one owns water. The people and businesses in a watershed have the right to reasonably use it for drinking, growing food, and other activities. Over the long term, it could become difficult for states and local governments to regulate water being removed from local communities, precisely because the water will be seen, in legal terms, as severed from the community and classified as a product. Companies could challenge any attempted regulation under the auspices of the World Trade Organization or other free trade agreements, which are nothing more than rules allowing corporate managed trade.

So, why are rural water providers – and urban municipal water systems, for that matter – agreeing to let these companies bottle up and ship away the water? In many cases because local governments are strapped for cash and public water systems are drastically underfunded. According to EPA, we are facing an annual shortfall of $22 billion in terms of the minimum spending we need to ensure clean, drinkable water.

Without adequate money, communities are lured into 50- or 100-year contracts that seem

lucrative in terms of what the bottler will pay. But studies have shown that the companies are not really covering the various costs to the community or what happens when the water is gone. The jobs created by these bottling plants are seasonal, low-paying, and often go to people outside of the community. And, again, none of these corporations assign adequate value or pay the full cost of the economic, social, and environmental damage they cause, while pouring millions of dollars of misleading advertising into a poorly regulated, inadequately labeled, wasteful and overpriced product, all of which we stressed in our report on the lengthy list of problems with bottled water -- *Take Back the Tap: Why Choosing Tap Water Over Bottled Water is Better for Your Health, Your Pocketbook, and the Environment.*

Given that communities are struggling financially to address water issues, it is important for the Congress to pass and the president to sign into law a clean water trust fund that would provide a solid, consistent stream of money to the states for improving our clean water infrastructure, including rural water systems. Renewed investment in public water infrastructure through dedicated funding, like a clean water trust fund, would ensure that communities have the financial resources necessary to keep their pipes upgraded, their water safe, and their natural resources in their community. As we at Food & Water Watch stated in another of our reports on water, *Clear Waters: Why America Needs a Clean Water Trust Fund*, it also would create more long-term, sustainable jobs; for example, one billion dollars invested creates about 47,500 jobs.

The federal government should of course strengthen bottled water quality regulations. But just as importantly, we believe that there must be some regulation or standard, preferably at state and local levels, addressing how much water bottling companies can

extract from states. At the federal level, we should de-commodify water, which would help to prevent private companies from treating it as a product that they can force communities to sell. To continue to allow the sale and export of water in the face of a water crisis, including falling water levels in the Great Lakes or drought draining Atlanta's municipal water supply, makes no sense. Instead, states and communities across America must have the freedom and the resources to protect their local water supplies now and for future generations.

I thank the subcommittee for its attention, and I would be happy to respond to any questions that you might have.

Mr. KUCINICH. I just want every member of the panel to know that your statement, the entire statement, will be included in the record of the hearing. So, you know, I know, having been on the other side of a panel and testifying, that the tendency is to try to get in every word. That's where I learned how to talk fast. But you can just present a good, solid 5 minutes, and we'll include everything in the record, and I think during the Q&A we'll probably have an opportunity to cover it all.

So, with that, again I want to thank Ms. Hauter for her testimony and proceed to Professor Hyndman.

STATEMENT OF DAVID W. HYNDMAN

Mr. HYNDMAN. Thank you, Chairman Kucinich and members of the subcommittee, for inviting me to testify today.

Mr. KUCINICH. Could you move a little bit closer to the mic.

Mr. HYNDMAN. Certainly, Sir.

In addition to my research in groundwater hydrology and surface water hydrology that you mentioned, I've also been an expert witness in several cases involving groundwater; and those have included several that relate to the bottled water industry. And in all cases so far, I have been retained by those opposed to the bottled water industry. However, today I've been asked to come here on my own behalf and give general scientific opinions about the impact of the bottled water industry on surface water, groundwater and riparian areas. And in addition to that testimony, I'll briefly discuss some issues related to the Food and Drug Administration's definition of spring water, which I think relates to many of the issues where bottled water companies are placing their plants in the headwater of stream systems.

The issues that I see with the FDA definition is there is little to distinguish spring water from diffuse groundwater seepage into stream systems. In addition, if we look at what is happening in groundwater systems, an area that could be called a spring is really a focused area where water is coming out of the subsurface, whereas most groundwater is flowing in in a diffused sense along the surface water systems; And that is where I think some of the confusion comes to play.

The FDA has a specific definition that says if the groundwater is not extracted directly from the orifice of the spring, then it can be tapped by a bore hole that is in connection with the same formation and that connection has to be shown in a hydrogeologically scientific fashion.

The issue with that specific clause leads bottle water plants to often be put in headwaters of streams. Because, in those areas, it is really easy to demonstrate that connection because there is very little flow coming into the system other than what is coming in via some localized areas. The problem with that is that these headwater systems are also environmentally sensitive, and they are areas where the consequences and impacts of pumping may be the largest.

If you separate these out into really groundwater and surface water issues and you look at what the previous panelists have already mentioned, most of the impacts that you heard were related

to surface water and that is because that's where a lot of the environmental concern is.

You also heard a little bit about groundwater concerns. If there are people living in the vicinity of high capacity wells, the water table or the level of water in the subsurface is declined in the vicinity of that well, and that can extend over a large area. So there are potential impacts to localized groundwater users.

I'll focus most of my testimony, however, on the surface water issues because that is where, again, the most environmental harm is. If you pump shallow groundwater effectively, there is a one-to-one relationship between how much is pumped and the reduction in stream flow in the nearby areas. So high capacity wells can, as a result of that, cause large percentage declines in the flow of surface water.

When you reduce surface water flow, by the nature of doing that you're also reducing the level of streams. If you reduce the level of streams, there is environmental consequences, especially if there are riparian wetlands right in the vicinity of that. Some of the concerns that have been expressed in cases I've been involved are reduced navigability, degraded aesthetic quality and impairment of the stream for aquatic organisms and fish. In addition, the pumping can alter the water temperature, which can also be a problem for the ecological systems.

Finally, some of the most sensitive systems are wetland and lake systems where if you lower the groundwater level below these, if they're connected to groundwater, the level of the wetlands will also decline.

The seasonal effects are worse. If you look at pumping during the middle of the growing season, the declines will be more significant. They are even more significant if you're in a drought period. So all of these things are on top of the natural variability in a system.

In terms of recommendations, I'd recommend additional funding in areas of hydrologic science. Several people have mentioned this already in terms of examining new mapping approaches and new approaches that characterize what the impacts are of not only bottled water pumping but any broad level of pumping and climate change and land use change.

Thank you for the opportunity to speak to you today.

Mr. KUCINICH. I thank the gentleman.

[The prepared statement of Mr. Hyndman follows:]

WRITTEN TESTIMONY OF

Dr. David W. Hyndman

Associate Professor, Michigan State University

BEFORE THE

SUBCOMMITTEE ON DOMESTIC POLICY,

COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM,

UNITED STATES HOUSE OF REPRESENTATIVES

December 12, 2007

Introduction

Thank you Chairman Kucinich, and members of the Subcommittee, for inviting me to testify today. My name is David Hyndman, and I am an associate professor at Michigan State University in Groundwater Hydrology. My main areas of scientific research are: 1) evaluating the impacts of changes in climate and land use on water quality and quantity, and 2) developing novel methods to characterize subsurface properties that control the movement and fate of water and associated contaminants.

I have participated as an expert witness in several legal cases involving groundwater and surface water, including several concerned with the impacts associated with the bottled water industry. In all cases involving this industry to date, I have been retained by interests opposed to bottled water. I am here today on my own behalf, and am providing my scientific opinions, not those of my university or any other organization.

Today, I have been asked to provide some general testimony related to the impacts of the bottled water industry on groundwater, surface water, and riparian areas. I will also briefly discuss where these bottled water wells and plants are being located, and the relationship of the resulting environmental impacts to the Food and Drug Administration (FDA) definition of *Spring Water*.

Definition of Spring Water

I have highlighted the most relevant portions of the FDA definition of Spring Water in [21CFR165 (110)] as:

> *The name of water* **derived from an underground formation from which water flows naturally to the surface** of the earth may be **"spring water."** *Spring water shall be* **collected only at the spring or through a bore hole tapping the underground formation feeding the spring**.
>
> *There shall be a natural force causing the water to flow to the surface through a natural orifice. The location of the spring shall be identified. Spring water collected with the use of an external force shall be from the same underground stratum as the spring, as shown by a* **measurable hydraulic connection** *using a hydrogeologically valid method* **between the bore hole and the natural spring, and shall have all the physical properties**, *before treatment,* **and be of the same composition and quality, as the water that flows naturally to the surface** *of the earth.*
>
> *If spring water is collected with the use of an external force, water* **must continue to flow naturally to the surface of the earth through the spring's natural orifice**. *Plants shall demonstrate, on request, to appropriate regulatory officials, using a hydrogeologically valid method, that an appropriate hydraulic connection exists between the natural orifice of the spring and the bore hole.*

In my opinion, there are several issues with this definition.

1) There is little in this definition to distinguish "spring water" from slow groundwater seepage across broad areas to surface water bodies.
2) The nature of the required hydraulic connection test for pumping encourages placement of these "spring water" extraction wells in areas where the environmental consequences of such extraction is likely the most significant.

3) Groundwater flow through sediments is generally a diffuse process, and areas that are being tapped as "springs" are often simply areas in the subsurface with coarse grained material that causes water to flow more rapidly to the surface.

Common Locations for Spring Water Wells

Pumping facilities for spring water are often placed in the headwaters of streams, where the groundwater level reaches the surface, because it is easier to show the reduction of streamflow in these locations during forced pumping. Unfortunately, these also tend to be environmentally sensitive ecosystems.

The water sold as "spring water" in some cases contains shallow groundwater that would not have otherwise flowed to a spring's *"natural orifice"*.

Groundwater Impacts

When water is extracted from the shallow subsurface using wells, the elevation of the water table (defined by the water level in surrounding wells) will decline in what is called a "cone of depression". The decline is largest adjacent to the extraction well, but this cone of depression can encompass a large region. If individuals have drinking water wells in the cone of depression, their water supply can be affected by the reduction in levels.

Surface Water Impacts

Streamflow and Level

Groundwater is the main source of streamflow in most humid areas, such as the Midwestern United States. In these areas, there is essentially a one to one relationship between pumping of shallow groundwater and the resulting reduction of outflow to surface water. In other words, for every gallon of water pumped out of groundwater, there is one gallon of water lost to streams in the watershed. High capacity bottled water extraction in headwater locations can cause large percentage reductions in the flow of streams. For example if the natural flow of a

stream was 1000 gallons per minute, and 500 gallons per minute were extracted to be bottled as "spring water", the flow of the stream which would capture the extracted water would be reduced by 50 %.

When the flow of a stream is reduced by significant groundwater extraction, the level of the stream is also reduced. The more familiar example is the opposite case; stream levels rise when streamflow increases after a large storm event. Concerns associated with reductions in level include reduced navigability, degraded aesthetic quality, and impairment of the stream for aquatic organisms such as fish.

In addition changes in flow and level can also alter the water temperature relative to an unaltered system. In turn, this can have significant consequences for organisms that live on those water bodies.

Wetland and Lake Levels

If pumping reduces the groundwater level below lakes or connected wetlands, the level of these surface water bodies will generally drop by a similar amount. In addition, riparian wetlands exist on the margins of many stream systems. As a result, reduction of the levels of a stream would also reduce the water level in adjoining wetlands.

Seasonal Impacts

In locations, such as Michigan, our research has demonstrated that there is very little recharge to groundwater during the growing season, because most of the precipitation that falls during this period evaporates or is transpired (used) by vegetation. Streamflow during the growing season thus relies almost entirely on the slow outflow of groundwater, which is reduced by large groundwater extractions in the vicinity of those streams. The largest impacts would occur when large volume extractions continue during drought periods, because the impacts of pumping exacerbate already low streamflows during such periods.

Necessary Information for Informed Decisions

Decisions about the location and capacity of high capacity pumping are facilitated by hydrologic research and mapping. Specifically, there is a need for detailed mapping of subsurface properties, including the geometry of the shallow aquifer systems, the storage and transmission properties of subsurface materials, and the detailed nature of connections between surface water bodies and groundwater. This information, along with detailed climate data, can drive emerging numerical models that can predict the local and regional influences of large volume groundwater extractions under current and future conditions.

Summary

Large groundwater extractions for "spring water" bottling have significant impacts including:

- reductions in the flow and level of regional streams,
- declines in groundwater level, which reduce the level of lakes and some wetlands,
- changes in the temperature of surface water bodies, and
- alteration of the habitat for fish and other species that live in lakes, streams, and wetlands.

These impacts are most significant during dry portions of the year, especially during droughts.

The FDA definition of spring water encourages placement of "spring water" extraction wells in environmentally sensitive headwaters of stream systems.

Additional research is needed in the hydrologic sciences to address these concerns.

Mr. KUCINICH. Professor Hall.

STATEMENT OF NOAH D. HALL

Mr. HALL. Thank you, Mr. Chairman and members of the committee.

I'm going to very briefly summarize the applicable State and Federal law that deals with the extraction and pumping of groundwater both for bottled water and for other water uses.

Water use and extraction, both groundwater and surface water, is primarily the domain of State law. The rules governing how much water you can pump, from what resource, how much impacts are allowed are typically addressed under State law.

State law comes at groundwater pumping from two directions. There is background common law principles that are intended to primarily address conflicts between water users of a shared water resource. The original rule that was used here was what was called a rule of capture. What this meant was basically if you could pump the water, it is yours. It would be no different from me turning to Mr. Doss on my left here, grabbing his water, drinking it and saying I got it and now it is mine. So, in effect, the rule of capture is really no rule at all.

That rule has not remained in almost any State. The one exception being Texas, which I'll come back to in a moment. But in almost every other State, the rule of capture, we've moved beyond that, and we've evolved toward a more correlative rights approach to share groundwater resources. What this means is that a landowner has the right to the reasonable use of the groundwater below his property unless that reasonable use interferes with the neighboring landowner's reasonable use of the same groundwater.

And when reasonable uses of shared waters are in conflict or interfere with each other, courts reconcile those conflicts using a variety of equitable principles, including opportunities for water conservation, sharing, reduction of need, reasonableness of use, economic values, social harms, environmental impacts, etc.

Most recently, we've seen this shared correlative rights approach to groundwater use extend to the types of conflicts that Professor Hyndman just mentioned where groundwater withdrawals impact surface waters and courts have begun applying the same principles: shared, reasonable use, correlative rights, equitable remedies to resolve groundwater and surface water conflicts.

The common law, however, is not perfect. It has some serious shortcomings. Primary among those, I believe, are, first of all, the cost of litigation, which several members of the first panel can attest to firsthand. Common law litigation tends to be very expensive and requires the use of numerous expert testimony.

Second, the common law does a very good job of protecting shared rights and groundwater, but it doesn't do such a great job of ensuring environmental protection of public resources from water pumping, and this is where State statutes have come in. Many—I'd say most, but not all, State have in place some type of regulatory statute scheme to ensure that water withdrawals don't have unreasonable harm on natural resources, aquatic life, fisheries, wetlands, etc. Some of these systems and programs work quite well. Some of them don't. There is tremendous diversity both

in how strict the standards are, how well they are enforced and in the ability for citizens to avail themselves of remedies under the statutes.

Beyond State law, I want to briefly mention the Federal role in all of this. The Federal Government doesn't regulate water use, and for the Federal Government to take on regulation of water use would be an undertaking that would make regulation of carbon emissions seem modest in comparison.

But the Federal Government has been a driver of water use. The Food and Drug Administration [FDA], for over a decade through its source identity regulations have required that if water bottlers want to label their bottled water as spring water—and spring water seems to be the label that consumers prefer over any other—then, as Dr. Hyndman said, it requires the water bottlers to go to groundwater that has an immediate and direct connection to a natural spring.

Inadvertently, this puts tremendous pressure on the water resources that are least able to withstand groundwater pumping pressures. Bottled water is not a large user of groundwater nationwide or on a macro scale. But when water bottlers, to comply with the FDA regulations, go into the headwaters of a relatively small spring system, even a modest size withdrawal, a few hundred thousand gallons per day, which is modest in this area, can have a significant environmental impact.

So I'd offer two brief recommendations for the committee's consideration. The first is, I would echo the recommendations of several of the panelists before me that we give the USGS, U.S. Geological Survey, increased support and resources to conduct extensive groundwater mapping, water use data analysis, investigative studies. The USGS data is critically important to both State and private decisionmakers in this area.

Second, I would encourage this committee to exercise its oversight jurisdiction and powers to work collaboratively with the FDA and other stakeholders involved in this issue to reform and revise the FDA's bottled water identity rules to basically allow water bottlers to continue to identify their product in a way the consumers demand and deserve but doesn't put pressure on our most vulnerable springs.

Mr. KUCINICH. I thank the gentleman for his testimony, and I will note that you presented this committee with an extensive preparation. And I think the Members are grateful to you and to all of those who have presented this voluminous testimony.

[The prepared statement of Mr. Hall follows:]

"Federal and State Laws Regarding Bottled Water –
An Overview and Recommendations for Reform"

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Testimony Before the United State House of Representatives
Oversight and Government Reform Committee
Domestic Policy Subcommittee

Hearing on "Assessing the Environmental Risks
of the Water Bottling Industry's Extraction of Groundwater"

December 12, 2007
Rayburn House Office Building, Room 2154.

This written testimony is being provided in response to an invitation to appear before the United States House of Representatives Oversight and Government Reform Committee, Domestic Policy Subcommittee's hearing on "Assessing the Environmental Risks of the Water Bottling Industry's Extraction of Groundwater." The Chairman has requested that my testimony describe "the existing state and federal regulatory schemes that apply to groundwater and spring water extraction by the water bottling industry" and evaluate "the adequacy of these regulatory regimes."

Pursuant to House Rule XI, 2(g)(4), I state that I am appearing in a nongovernmental capacity and am not representing any other persons or entities. I further state that I have not received any federal grants or contracts during the current fiscal year or either of the two previous fiscal years. Finally, pursuant to the above House Rule, my curriculum vitae is attached to this written testimony as Appendix A.

This testimony provides an overview of the federal and state laws pertaining to groundwater and spring water extraction by the water bottling industry. It also provides several recommendations for new policies and legal reform to address environmental concerns relating to water extraction and bottling.

I. Introduction and Summary

Water bottling is big business and getting bigger, growing by about ten percent annually over the past five years. This raises numerous environmental concerns regarding the quality of bottled water, the waste and pollution associated with manufacturing, shipping, and disposing of plastic water bottles, and social concerns regarding water privatization and commoditization. The most important environmental concerns from a legal and regulatory perspective relate to the impact of water extraction to fill the billions of bottles Americans purchase every year. While water bottling has almost no impact on the total national freshwater supply, the majority of bottled water comes from groundwater which has a direct hydrologic connection to springs and other vulnerable surface waters. Thus, even relatively small water withdrawals for bottled water can produce significant impacts at the local scale on other water users and the environment.

Bottled water is regulated by the federal government as a food product by the Food and Drug Administration (FDA). FDA regulations provide for source identity labeling of bottled water. Consumer preferences seem to favor bottled water labeled as "spring water" over bottled water from other sources, including municipal supply. This has inadvertently led to increased pressures on vulnerable spring resources. The FDA should immediately begin a process to review and revise its source identity rule to consider the impact of bottled water withdrawals on springs and other vulnerable water resources. Further, the federal government should increase support for the United States Geological Survey to provide additional data collection, research, and investigation regarding groundwater resources and use nationwide, a role that is critically important to both water users and managers.

While federal environmental laws may incidentally apply to some bottled water operations, water withdrawals and use are generally the domain of state law. State law governs groundwater withdrawals with a mix of common law rules and more modern regulatory schemes. Most states have adopted some form of correlative rights for competing groundwater uses, under which property owners have a right to the use of groundwater below their property, subject to interference with neighboring property owners' reasonable use of the groundwater. More recently the correlative rights approach has been applied to groundwater withdrawals that impact surface waters. Still, litigation under the common law is not an ideal system for protecting water resources from withdrawals and extractions. Many states have already adopted or are currently considering regulatory systems that proactively ensure that water withdrawals (both surface water and groundwater) do not harm other users or the environment. The most significant example is the proposed Great Lakes-St. Lawrence River Basin Water Resources Compact, which would protect and manage all freshwater within the Great Lakes basin pursuant to minimum standards administered primarily under the authority of individual states and provinces. The proposed compact standards represent numerous advances in the development of water use law, including uniform treatment for ground and surface water withdrawals, water conservation, return flow, and prevention of environmental impacts. Examples such as this should be developed and implemented at the state and regional level nationwide.

II. Background on Bottled Water

A. The Bottled Water Industry

Bottled water is a tremendous growth industry. According to the Beverage Marketing Corporation, bottled water became the second largest commercial beverage category by volume in the United States in 2003, second only to carbonated soft drinks.[1] Americans buy more bottled water than beer, milk, or juice. In 2006, Americans consumed 8.25 billion gallons of bottled water, nearly ten percent more than the previous year.[2] This total consumption equates an average of 27.6 gallons of bottled water per person per year.[3] In 2007, total consumption of bottled water is expected to increase another ten percent and go over 9 billion gallons.[4] This is typical for the industry. In the past five years, bottled water consumption has almost doubled, averaging nearly ten percent annual growth.[5]

The tremendous growth in consumption has correlated with similar growth in bottled water producer revenues. In 2005, bottled water sales in the United States surpassed ten billion dollars ($10,000,000,000).[6] With revenues increasing by nearly ten percent annually over the past two years, 2007 sales of bottled water are expected to approach twelve billion dollars.[7] Just one example of the size and value of the bottled water industry is that Whole Foods, the nation's leading organic upscale food retailer, sells more bottled water than any other item.[8]

The vast majority (over 95% the past two years) of bottled water consumed in the United States is domestically produced non-sparkling water.[9] The largest producer of bottled water in the United States is Nestlé Waters North America, with a 2006 market share of 32.4% of the bottled water sales.[10] Nestlé Waters North America focuses on "spring water" (defined and discussed more below), and markets its bottled water under different brand names by region. Its leading brands are "Poland Spring" (Northeast), "Arrowhead"

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[1] Beverage Marketing Corporation 2006 Statistics, *available at* http://www.bottledwater.org/public/Stats_2006.doc.
[2] *Id.*
[3] *Id.*
[4] *Id.*
[5] *See id.*
[6] *Id.*
[7] *Id.* The Beverage Marketing Corporation projects 2007 sales of bottled water to be $11,905,000,000.
[8] Charles Fishman, *Message in a Bottle*, FAST COMPANY, Issue 117, at 110 (July 2007), *available at* http://www.fastcompany.com/magazine/117/features-message-in-a-bottle.html.
[9] *See* Beverage Marketing Corporation 2006 Statistics, *supra* note 1. In 2005, Americans consumed 7,171.4 millions of gallons of domestic, non-sparkling water and 7,537.1 millions of gallons of total bottled water (including imported products and sparkling water). In 2006, the quantities were 7,899.9 millions of gallons and 8,253.6 millions of gallons, respectively. In 2007, the projected quantities are 8,7000.0 millions of gallons and 9,075.0 millions of gallons, respectively.
[10] *See* Nestlé Waters North America Performance, *available at* http://www.nestle-watersna.com/Menu/AboutUs/Performance.htm. In 2006, Nestlé Waters North America had bottled water sales of $3.846 billion. *Id.*

(West), "Deer Park" (Mid-Atlantic), "Ice Mountain" (Midwest), "Ozarka" (Texas), and "Zephyrhills" (Florida), as well as the national brand "Nestlé Pure Life."[11] The other leading bottled water companies are Coke, which sells the brand name "Dasani" and distributes "Evian," and Pepsi, which sells the brand name "Aquafina."[12] Both Coke's Dasani and Pepsi's Aquafina are purified municipal water from many sources around the country.[13]

B. Environmental Concerns Relating to Bottled Water

Bottled water has come under increasing scrutiny for its environmental impacts. The environmental concerns regarding bottled water are varied and diverse. For purposes of this analysis, environmental concerns and opposition to bottled water can be organized into four categories, each of which is discussed in more detail below:

1. Quality of bottled water, especially in comparison to municipal tap water

2. Pollution and waste resulting from the manufacturing, shipping, and disposal of plastic water bottles

3. The privatization and commoditization of water through bottling and sale of water

4. Impacts of water bottlers' groundwater and spring water extraction on other water users and dependent natural resources

I understand that the Subcommittee's hearing is focused on the fourth category of environmental concerns – the impacts of water bottlers' groundwater and spring water extraction on other water users and dependent natural resources – and thus my testimony focuses on these impacts. However, it is important to consider these impacts in the context of other environmental concerns which often play a part in disputes over bottled water.

1. Concerns regarding the quality of bottled water, especially in comparison to municipal tap water

While bottled water is often perceived as being of higher quality than tap water, at least one prominent environmental organization has directly attacked this perception. The Natural Resources Defense Council (NRDC) issued a report in 1999, entitled "Bottled Water: Pure Drink or Pure Hype?"[14] In the report, NRDC warned the public that "[n]o

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[11] *See* Nestlé Waters North America Share of Category, *available at* http://www.nestle-watersna.com/Menu/AboutUs/Performance/Nestlé+Waters+North+America+Share+of+Category.htm.
[12] *See* Fishman, *supra* note 8.
[13] *Id.*
[14] *See* Natural Resources Defense Council, BOTTLED WATER: PURE DRINK OR PURE HYPE? (1999), *available at* http://www.nrdc.org/water/drinking/bw/bwinx.asp.

one should assume that just because he or she purchases water in a bottle that it is necessarily any better regulated, purer, or safer than most tap water."[15] NRDC performed "'snapshot' testing of more than 1,000 bottles of 103 brands of water by three independent labs [and] found that most bottled water tested was of good quality, but some brands' quality was spotty."[16]

Not surprisingly, the bottled water industry disputes NRDC's findings and conclusions. An analysis of the NRDC report by the Drinking Water Research Foundation concludes:

> Throughout all of their analysis, NRDC found not one instance of contamination that would raise a legitimate health concern. Indeed, the survey could find only four results where federal health standards were exceeded. Closer inspection reveals that the two results charged by the NRDC Report to exceed total coliform standards, were in fact quite likely false positives because they could not be replicated in subsequent tests as required by federal standards. The other two exceedances were for a fluoride standard so narrow, and with such limited application, as to be irrelevant to public health. In fact, the levels found in the bottled water are below the EPA health-based fluoride standard for public water systems.[17]

It should also be noted that NRDC has subsequently determined that many municipal water supplies also have exceedances of drinking water standards.[18] For purposes of this analysis, it is fair to conclude that concerns remain regarding drinking water quality standards (from both bottles and tap), and environmental groups such as NRDC would advocate stronger standards and more enforcement to protect public health from all drinking water sources.

2. Concerns regarding pollution and waste resulting from the manufacturing, shipping, and disposal of plastic water bottles

If bottled water had no water in it, and consumers simply purchased empty bottles, the environmental impact of the bottled water industry would still be significant. The pollution and waste resulting from the manufacturing, shipping, and disposal of plastic water bottles strikes many people as simply wasteful. Most water bottles are made from the plastic polyethylene terephthalate (PET), which is derived from crude oil. The Earth Policy Institute originally estimated that the manufacture of water bottles for United States consumption required more than 1.5 million barrels of oil annually, and later updated the estimate to 10 million barrels of oil annually.[19]

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[15] *Id.*, Executive Summary.
[16] *Id.*
[17] Drinking Water Research Foundation, Analysis of the February, 1999 Natural Resources Defense Council Report on Bottled Water, *available at* http://www.dwrf.info/nrdc_bottled_water.htm.
[18] *See generally* Natural Resources Defense Council, WHAT'S ON TAP? GRADING DRINKING WATER IN U.S. CITIES (2003), *available at* http://www.nrdc.org/water/drinking/uscities/contents.asp.
[19] Earth Policy Institute, BOTTLED WATER: POURING RESOURCES DOWN THE DRAIN (2006), *available at* http://www.earth-policy.org/Updates/2006/Update51.htm.

Manufacturing is only the first step in an energy intensive process of distributing water in plastic water bottles. As noted by the Earth Policy Institute, "[i]n contrast to tap water, which is distributed through an energy-efficient infrastructure, transporting bottled water long distances involves burning massive quantities of fossil fuels."[20] Then, after drinking the bottled water, the bottle is generally thrown out. While PET plastic can be recycled (and the bottled water industry strongly encourages recycling[21]), 86% of plastic water bottles used in the United States become garbage or litter.[22]

The environmental concerns regarding the manufacturing, shipping, and disposal of plastic water bottles motivated the United States Conference of Mayors to recently pass a resolution to study the environmental impact of bottled water.[23] The Conference of Mayors resolution noted:

> bottled water must travel many miles from the source, resulting in the burning of massive amounts of fossil fuels, releasing CO2 and other pollution into the atmosphere; ... plastic water bottles are one of the fastest growing sources of municipal waste; and ... in the U.S. the plastic bottles produced for water require 1.5 million barrels of oil per year, enough to generate electricity for 250,000 homes or fuel 100,000 cars for a year.[24]

While the bottled water industry does not seem to dispute the statistics regarding the pollution and waste impacts relating to the manufacturing, shipping, and disposal of plastic water bottles, it may not be fair to compare these impacts to tap water. In an recent article on the subject, the CEO of Whole Foods Market made the argument that water bottles are simply substituting for other plastic beverage bottles in the marketplace: "It's unfair to say bottled water is causing extra plastic in landfills, and it's using energy transporting it. There's a substitution effect – it's substituting for juices and Coke and Pepsi."[25]

The substitution argument notwithstanding, the waste associated with bottled water seems to have caught the public's attention. A recent New York Times article quoted a San Francisco citizen as saying that "fellow Bay Area residents act as if 'you just killed their puppy' if you dare throw a bottle in the garbage."[26] Yet despite the attention, people still buy bottled water. While many consumers probably don't consider the

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[20] *Id.*
[21] *See* International Bottled Water Association Recycling Resource Guide *available at* http://www.bottledwater.org/public/05_IBWA_Recycle_Guide_1.pdf.
[22] Earth Policy Institute, *supra* note 19.
[23] United States Conference of Mayors, Resolution regarding Importance of Municipal Water (2007), *available at* http://www.usmayors.org/uscm/resolutions/75th_conference/environment_02.asp.
[24] *Id.*
[25] *See* Fishman, *supra* note 8 (quoting John Mackey, CEO of Whole Foods Market).
[26] Alex Williams, *Water, Water Everywhere, but Guilt by the Bottleful*, THE NEW YORK TIMES (August 12, 2007).

environmental impacts of energy and waste, a Seattle citizen admitted in the same New York Times article that she still buys bottled water as a "guilty pleasure."[27]

3. Concerns regarding the privatization and commoditization of water through bottling and sale of water

Water privatization and commoditization is a complex and contentious issue well beyond the scope of this testimony. However, as the issue often motivates bottled water opposition (even when the legal issues litigated relate to other concerns), it is important to at least understand these concerns. The fundamental concern is articulated by the Sierra Club's Water Commodification and Corporate Privatization of Municipal Water/Sewer Services Policy, stating that "water is a public resource, not a commodity" and a basic right for all people.[28] The bottling and sale of water is often seen as a clear example of water privatization and commodification, with other examples including private control of water distribution systems and schemes for the bulk export and trade of water at a global scale.[29] It may not be fair to characterize these concerns as "environmental," since they are more fundamentally about social justice, human rights, and public governance. Nonetheless, the concerns often are at the heart of environmental opposition.

4. Concerns regarding impacts of water bottlers' groundwater and spring water extraction on other water users and dependent natural resources

Litigation over bottled water typically involves concerns regarding the impacts of water bottlers' groundwater and spring water extraction on other water users and dependent natural resources. To understand these impacts, it is important to first explain the applicable source and scale of bottled water withdrawals.

Most bottled water products come from one of two major sources. The majority of bottled water is sold under the "spring water" label (discussed below in the section on FDA regulation) and comes from groundwater connected to springs (the leading examples are the Nestlé regional brands). The second leading source for bottled water is municipal water supply (examples include Coke's Dasani brand and Pepsi's Aquafina brand). Bottling municipal water almost never raises environmental concerns regarding the water withdrawal, since the water bottling is often using surplus municipal withdrawal and distribution capacity. Thus, this discussion will focus on the environmental impact of groundwater and spring water extraction for water bottling.

On a macro-national scale, water bottling results in an insignificant amount of overall groundwater extraction. Groundwater withdrawals for bottled water production represent well less than one-tenth of one percent (less than 0.03%) of the total groundwater

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[27] *Id.*

[28] Sierra Club Water Commodification and Corporate Privatization of Municipal Water/Sewer Services Policy, *available at* http://www.sierraclub.org/policy/conservation/commodification.asp.

[29] *See, e.g.*, Public Citizen, Water Privatization Overview, *available at* *http://www.citizen.org/cmep/Water/general/.*

withdrawals in the United States. As detailed above, total annual bottled water production is approaching ten billion gallons (not all of which comes from groundwater). The United States Geological Survey estimates that total annual groundwater withdrawals in the United States in 2000 were 30,305 billion gallons.[30] Of this total, agricultural use of groundwater for irrigation comprises over 68% (20,769 billion gallons) of the total groundwater withdrawals.[31] Of course, water bottling results in a very high consumption of the water withdrawn, with essentially no water returning to the ground. However, agricultural irrigation also has very high consumptive use rates, with estimates ranging from seventy to ninety percent (70-90%),[32] so the resulting impact on total groundwater supplies is still tremendously disproportionate.

While water bottling has essentially no impact on the total national supply of groundwater, it can have significant impacts on local groundwater supplies. Groundwater extraction may affect the quantity and quality of the groundwater aquifer. Significant groundwater pumping can cause a temporary or permanent lowering of the water table, increased concentration of contaminants, and in some regions salt water intrusion into the aquifer. This affects other groundwater users whose wells go dry or stop producing potable water.[33]

Moreover, groundwater is often hydrologically connected to fresh surface waters such as rivers, streams, and lakes (and groundwater that is bottled and sold as "spring water" is by definition hydrologically connected to natural springs, as discussed more below in the section on FDA regulation). Pumping groundwater can take water from these surface water systems. The basic hydrology was succinctly described in a recent report commissioned by the Michigan Legislature in the wake of the Nestlé bottled water litigation in that state (discussed in more detail below):

> Over time, the dominant source of water to a well, particularly a well completed in an unconfined aquifer, changes to streams. This water may either be decreased groundwater discharge to the stream or increased recharge to the groundwater system from the stream. In either case, streamflow reduction occurs and is often referred to as streamflow capture. In the long term, the cumulative streamflow capture from a groundwater system can approach the total amount of water being pumped from that system.[34]

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[30] United States Geological Survey, Estimated Use of Water in the United States in 2000, Table 4, *available at* http://pubs.usgs.gov/circ/2004/circ1268/htdocs/table04.html.

[31] *Id.*

[32] *See* to seventy to ninety percent for agricultural irrigation. *See* GREAT LAKES COMMISSION, TOWARD A WATER RESOURCES MANAGEMENT DECISION SUPPORT SYSTEM FOR THE GREAT LAKES-ST. LAWRENCE RIVER BASIN 60 (2003), *available at* http://www.glc.org/wateruse/wrmdss/finalreport/pdf/WR-ExSum-2003.pdf.

[33] For a more thorough discussion of these impacts, *see* Robert Glennon, WATER FOLLIES: GROUNDWATER PUMPING AND THE FATE OF AMERICA'S FRESH WATERS (2002).

[34] Groundwater Conservation Advisory Council, FINAL REPORT TO THE MICHIGAN LEGISLATURE IN RESPONSE TO PUBLIC ACT 148 OF 2003 (February 6, 2006), *available at* http://www.deq.state.mi.us/documents/deq-gwcac-legislature.pdf

Thus, groundwater pumping can directly impact surface water users, both consumptive water users and people who use the surface water for recreation and aesthetics. Further, when groundwater is hydrologically connected to surface water, a wide range of natural resources, including fisheries, wetlands, and aquatic invertebrates, often rely on the groundwater input to the surface water for their existence and health. The report commissioned by the Michigan legislature determined that "about 80 percent of the annual streamflow in [Michigan's] Lower Peninsula results from groundwater discharge."[35] Further, "[m]any lakes and wetlands do not have streams flowing into them, and groundwater, therefore, is the only inflow besides precipitation on the surface of the lake or wetland."[36] The report concluded that "[m]ost aquatic ecosystems in Michigan are dependent upon the discharge of groundwater into surface water."[37]

As discussed in the following sections, the impacts of groundwater withdrawals on other groundwater users and connected surface water systems are most often the legal bases for opposition to bottled water proposals.

III. Federal Laws Applicable to Groundwater Extraction and Water Bottling

As a general matter, the federal government does not regulate water withdrawals and water use from surface waters or groundwater for bottled water or any other purpose. Water law is primarily state-based law, as discussed in the next section. However, because bottled water is considered a food product under the Federal Food, Drug and Cosmetic Act,[38] the Food and Drug Administration (FDA) regulates bottled water for drinking water quality and labeling accuracy. Further, several federal environmental laws may incidentally apply to a specific water bottling project based on the specific facts of the project. Finally, while not regulatory, the United States Geological Survey provides critically important data collection, research, and investigations that assist federal, state, and local decision-makers in groundwater management.

A. Food and Drug Administration Regulation of Bottled Water as a Food Product

Because bottled water is considered a food product under the Federal Food, Drug and Cosmetic Act,[39] the Food and Drug Administration (FDA) regulates bottled water for drinking water quality and labeling accuracy. The quality of other drinking water supplies, including municipal tap water, is regulated by the U.S. Environmental Protection Agency (EPA) pursuant to the Safe Drinking Water Act.[40] While bottled water is not subject to the EPA's Safe Drinking Water Act regulation, the FDA is required to ensure that bottled water quality standards are compatible with EPA drinking

[35] *Id.*
[36] *Id.*
[37] *Id.*
[38] 21 U.S.C. §§ 301-321(f).
[39] 21 U.S.C. §§ 301-321(f).
[40] 42 U.S.C. § 300(f) (1974), amended by Pub. L. No. 104-182, 110 Stat. 1613 (1996).

water quality standards.[41] Further, whenever the EPA revises its drinking water standards, the FDA must also set a similar level for bottled water or report in the Federal Register why it is not doing so.[42]

In addition to its water quality protection regulations, the FDA regulates "identity" labeling of bottled water.[43] The identity regulations describe the different types of bottled water by source and treatment process. In addition to simply labeling a product as "bottled water" or "drinking water," producers obtaining water from certain sources or meeting specified treatment standards can use numerous other labels, including "artesian water," "ground water," "mineral water," "purified water," "distilled water," "sparkling bottled water," "sterilized water," and "well water."[44] Further, bottled water must be labeled as "from a community water system" or "from a municipal source" unless the bottled water has met certain treatment standards.[45]

Most relevant to this hearing is the labeling requirements for "spring water," which seems to be the identity that consumers prefer. The FDA regulations provide:

> The name of water derived from an underground formation from which water flows naturally to the surface of the earth may be "spring water." Spring water shall be collected only at the spring or through a bore hole tapping the underground formation feeding the spring. There shall be a natural force causing the water to flow to the surface through a natural orifice. The location of the spring shall be identified. Spring water collected with the use of an external force shall be from the same underground stratum as the spring, as shown by a measurable hydraulic connection using a hydrogeologically valid method between the bore hole and the natural spring, and shall have all the physical properties, before treatment, and be of the same composition and quality, as the water that flows naturally to the surface of the earth. If spring water is collected with the use of an external force, water must continue to flow naturally to the surface of the earth through the spring's natural orifice. Plants shall demonstrate, on request, to appropriate regulatory officials, using a hydrogeologically valid method, that an appropriate hydraulic connection exists between the natural orifice of the spring and the bore hole.[46]

The FDA thus requires that in order to produce bottled water with the consumer-desired label of "spring water," a bottled water producer must draw water either directly from a spring or from groundwater that has a direct hydrological connection to a surface spring. This regulation has had the unintended consequence of putting tremendous demand and

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[41] *See* Tara Boldt-Van Rooy, *"Bottling Up" Our Natural Resources: The Fight Over Bottled Water Extraction in the United States*, 18 J. LAND USE & ENVTL. L. 267, 275 (2003).
[42] 21 U.S.C. § 349.
[43] 21 C.F.R. § 165.110(a).
[44] 21 C.F.R. § 165.110(a)(2).
[45] 21 C.F.R. § 165.110(a)(3)(ii).
[46] 21 C.F.R. § 165.110(a)(2)(vi).

pressure on springs, which are typically some of the most fragile and vulnerable water resources.

B. Federal Environmental Laws Applicable to Groundwater Extraction and Water Bottling

While water withdrawals and extraction are not generally regulated under federal law, but are rather left to state law, several federal environmental laws may incidentally apply to a specific water bottling project.

1. The Federal Water Pollution Control Act (Clean Water Act)

Section 404 of the Federal Water Pollution Control Act[47] (known more commonly as the Clean Water Act) authorizes the U.S. Army Corps of Engineers to "issue permits, after notice and opportunity for public hearings for the discharge of dredged or fill material into the navigable waters."[48] Section 404 is a "modern supplement"[49] to section 10 of the Rivers and Harbors Act of 1899,[50] which similarly made it unlawful to excavate or fill in navigable waters without authorization from the U.S. Army Corps of Engineers. The term "navigable waters" is defined by the Clean Water Act as "waters of the United States."[51] The scope of this definition was the subject of a recent Supreme Court opinion, *Rapanos v. United States*.[52] While a complete discussion of the meaning of the term "navigable waters" after the *Rapanos* decision is beyond the scope of this testimony, it is now clear that most lower courts and commentators have recognized that Justice Kennedy's concurring opinion offers the controlling analysis and test:

> [T]he Corps' jurisdiction over wetlands depends upon the existence of a significant nexus between the wetlands in question and navigable waters in the traditional sense. The required nexus must be assessed in terms of the statute's goals and purposes. ... With respect to wetlands, the rationale for Clean Water Act regulation is, as the Corps has recognized, that wetlands can perform critical functions related to the integrity of other waters – functions such as pollutant trapping, flood control, and runoff storage. 33 C.F.R. §320.4(b)(2). Accordingly, wetlands possess the requisite nexus, and thus come within the statutory phrase "navigable waters," if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as "navigable." When, in contrast, wetlands' effects on water quality are speculative or insubstantial, they fall outside the zone fairly encompassed by the statutory term "navigable waters."[53]

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[47] 33 U.S.C. § 1344.
[48] 33 U.S.C. § 1344(a).
[49] JOSEPH L. SAX ET AL., LEGAL CONTROL OF WATER RESOURCES 639 (3d ed. 2000).
[50] 30 Stat. 1151, 33 U.S.C. § 403.
[51] 33 U.S.C. § 1362(7).
[52] 126 S.Ct. 2208 (2006)
[53] Rapanos v. United States, 126 S.Ct. 2208, 2248 (Kennedy, J., concurring) (2006).

The Corps' thus has jurisdiction over many waters and wetlands, yet section 404 only applies to the "discharge" of dredged or fill materials.[54] While groundwater and spring water extraction, for water bottling or any other purpose, may drain water from hydrologically connected surface waters and wetlands, the draining of water from surface waters and wetlands is not regulated by the Clean Water Act. A water bottling operation only needs a section 404 permit if it results in filling wetlands incidentally to the water extraction.

2. Wild and Scenic Rivers Act

The federal Wild and Scenic Rivers Act of 1968[55] provides that certain rivers "shall be preserved in free-flowing condition."[56] The act seeks to accomplish this goal by forbidding any "department or agency of the United States [from] recommending authorization of any water resources project that would have a direct and adverse effect on the values for which such river was established."[57] However, the act faces two obvious limitations.

First, the Wild and Scenic Rivers Act only applies to river segments designated as National Wild and Scenic Rivers. The National Wild and Scenic Rivers system has only 11,409 river miles in it, which represents merely one-quarter of one percent of the nation's rivers.[58] Second, the act only expressly applies to federal actions, not private water withdrawals made pursuant to state law. It has not been settled through litigation how a conflict between the goals of the federal act and a water withdrawal made pursuant to state law would be resolved. Section 13 of the act provides:

> (b) Compensation for water rights
> The jurisdiction of the States and the United States over waters of any stream included in a national wild, scenic or recreational river area shall be determined by established principles of law. Under the provisions of this chapter, any taking by the United States of a water right which is vested under either State or Federal law at the time such river is included in the national wild and scenic rivers system shall entitle the owner thereof to just compensation. Nothing in this chapter shall constitute an express or implied claim or denial on the part of the Federal Government as to exemption from State water laws.
> ****
> (d) State jurisdiction over included streams
> The jurisdiction of the States over waters of any stream included in a national wild, scenic or recreational river area shall be unaffected by this

[54] 33 U.S.C. § 1344(a).
[55] 16 U.S.C. §§1271-1287.
[56] 16 U.S.C. § 1271.
[57] 16 U.S.C. § 1278(a).
[58] National Wild and Scenic Rivers System, River and Water Facts, *available at* http://www.rivers.gov/waterfacts.html.

> chapter to the extent that such jurisdiction may be exercised without impairing the purposes of this chapter or its administration.[59]

However, section 10 of the Act seems to provide authority to limit new water withdrawals that impact a designated river:

> Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area.[60]

3. The National Environmental Policy Act

The National Environmental Policy Act (NEPA) of 1969[61] was intended to "promote environmentally sensitive decision-making without prescribing any substantive standards."[62] It accomplishes this goal by requiring information exchange and public processes. NEPA "guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decision making process and the implementation of that decision."[63] NEPA's central legal requirement is that federal agencies prepare an Environmental Impact Statement ("EIS") whenever a proposed major federal action will significantly affect the quality of the human environment.[64] Again, however, the major limitation of NEPA is that it only applies to federal actions. As water withdrawals are made pursuant to state law, NEPA does not generally apply. In some instances, such as when a federal permit is incidentally required (such as a Clean Water Act section 404 permit, discussed above), NEPA may be triggered.

4. The Endangered Species Act

The Endangered Species Act (ESA)[65] is a powerful regulatory law intended to prevent the extinction of endangered species. The ESA requires the Secretary of the Interior to determine animal and plant species that are endangered or threatened based on the best scientific and commercial data available, and to list such species and designate their critical habitat. Once a species is listed, federal agencies must insure that their actions are not likely to jeopardize the listed species' continued existence or harm their critical

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[59] 16 U.S.C. § 1284(b),(d).
[60] 16 U.S.C. § 1281(a).
[61] Pub. L. No. 91-190, 83 Stat. 852 (codified as amended at 42 U.S.C. § 4321–4347 (2000)).
[62] Anderson v. Evans, 314 F.3d 1006, 1016 (9th Cir. 2002).
[63] Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989).
[64] Sierra Club v. Peterson, 717 F.2d 1409, 1412 (D.C.Cir.1983); *see also* 42 U.S.C. § 4332(2)(C).
[65] 16 U.S.C. §§ 1531-1544.

habitat.[66] The ESA also prohibits any person from "tak[ing]" a listed species, which includes disturbance of habitat.[67]

The ESA can be implicated in water withdrawals when additional instream flows are required for an endangered species but water is already in use by private parties with state water rights. Similarly, a new water withdrawal that would diminish the instream flows and aquatic habitat of an endangered species would conflict with the ESA. This application has never affected a water bottler, although it has affected other private water users with considerable controversy.

5. The 1986 Water Resources and Development Act

It has been argued that bottled water withdrawals within the Great Lakes basin (which includes portions of Minnesota, Wisconsin, Michigan, Illinois, Indiana, Ohio, Pennsylvania, and New York) are subject to the section 1109 of the 1986 Water Resources Development Act (typically referred to as 1986 WRDA).[68] The statute provides:

> No water shall be diverted or exported from any portion of the Great Lakes within the United States, or from any tributary within the United States of any of the Great Lakes, for use outside the Great Lakes basin unless such diversion or export is approved by the Governor of each of the Great Lake [sic] States.[69]

Thus, any of the Great Lakes governors can veto a proposed diversion of Great Lakes water out of the basin. This essentially gives the Great Lakes states authority that they would otherwise not have pursuant to the Constitution's dormant commerce clause.[70]

It is still not a settled question whether the ban on diversions applies to bottles of water leaving the Great Lakes basin. The one lawsuit attempting to use 1986 WRDA to stop a proposed bottled water operation was dismissed because the law does not provide a private right of action to enforce compliance.[71] Further, 1986 WRDA lacks any standards for the governors' collective approval and may not apply to groundwater.[72] Thus, it does not provide a solid basis for addressing bottled water withdrawals.

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[66] 16 U.S.C. § 1536(a).
[67] *See* 16 U.S.C. § 1538(a)(1)(B); Babbitt v. Sweet Home Chapter, 515 U.S. 687 (1995).
[68] Pub. L. No. 99-662, § 1109, 100 Stat. 4082, 4230 (codified as amended at 42 U.S.C. § 1962d-20 (2000)).
[69] 42 U.S.C. § 1962d-20(d) (2000). This section only applies to new diversions; diversions authorized before 1986 are not covered by the veto. *Id.* § 1962d-20(f).
[70] 1986 WRDA was enacted only a few years after the Supreme Court's decision in Sporhase v. Nebraska ex rel. Douglas, 458 U.S. 941 (1982), which limited a state's ability to restrict export of groundwater under the dormant commerce clause.
[71] *See* Little Traverse Bay Bands of Odawa Indians v. Great Spring Waters of Am., Inc., 203 F.Supp.2d 853 (W.D. Mich. 2002). For additional commentary on the lack of a private right of action under 1986 WRDA, *see* Charles F. Glass, Jr., Note, *Enforcing Great Lakes Water Export Restrictions Under the Water Resources Development Act of 1986*, 103 COLUM. L. REV. 1503 (2003).
[72] *See* Noah D. Hall, *Toward A New Horizontal Federalism: Interstate Water Management in the Great Lakes Region*, 77 COLORADO L. REV. 405, 429-31 (2006).

C. The United States Geological Survey

The United States Geological Survey (USGS) does not regulate water use in any way. However, it provides an arguably more important function, supplying important data collection, research, and investigations that assist federal, state, and local decision-makers in groundwater management. USGS investigations and reports have informed many policy efforts and provided unbiased information to resolve groundwater disputes, including disputes involving bottled water extraction.[73] Unfortunately, the agency has suffered from a lack of funding that has limited its ability to assist water managers and users nationwide.

IV. State Laws Applicable to Groundwater Extraction and Water Bottling

State law is the primary authority for water withdrawal and management, including groundwater extraction for water bottling. A detailed and comprehensive survey of state laws applicable to water bottling would be massive undertaking and is beyond the scope of this analysis. Instead, this section will provide a succinct overview of groundwater withdrawal law in some sample states that represent both the general principles and diversity of state law.

A. Correlative Property Rights for the Use of Underlying Groundwater – Background Principles from Ohio

The common law regarding competing groundwater rights and use varies by state, but most states follow some form of correlative rights (a notable exception is Texas, discussed below). Essentially, property owners have a right to the use of groundwater below their property, subject to interference with neighboring property owners' reasonable use of the groundwater. The origins and applications of this principle were explained in a recent case decided by the Ohio Supreme Court.[74] The issue came to the Supreme Court of Ohio as a certified question from the United States Sixth Circuit Court of Appeals,[75] so the facts are not particularly important and the case provides an excellent summary of the law itself (the case did not involve bottled water). The certified question asked the Supreme Court of Ohio: "Does an Ohio homeowner have a property interest in so much of the groundwater located beneath the land owner's property as is necessary to the use and enjoyment of the owner's home?"

The Supreme Court of Ohio first reviewed its prior decisions on groundwater rights and liability for groundwater well interference. In the mid-nineteenth century, Ohio adopted a rule of capture for groundwater, holding that groundwater "is to be regarded as part of the land itself, to be enjoyed absolutely by the proprietor within whose territory it lies."[76]

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[73] For examples of the work that USGS does regarding groundwater, see USGS Ground Water Information Pages, *available at* http://water.usgs.gov/ogw/.
[74] McNamara v. City of Rittman, 838 N.E.2d 640 (2005).
[75] Hensley v. City of Columbus, 433 F.3d 494 (6th Cir. 2006).
[76] Frazier v. Brown, 12 Ohio St. 294, 308 (1861).

Under this holding, Ohio refused to recognize any rule requiring the sharing of water among landowners overlying a common aquifer. Thus, any owner of property was entitled to use all the groundwater he could, without regard to how that use affected neighboring landowners. The Supreme Court of Ohio set forth two public policy justifications for its holding:

> 1. Because the existence, origin, movement and course of such waters, and the causes which govern and direct their movements, are so secret, occult and concealed, that an attempt to administer any set of legal rules in respect to them would be involved in hopeless uncertainty, and would be, therefore, practically impossible.[77]
>
> 2. Because any such recognition of correlative rights, would interfere, to the material detriment of the common wealth, with drainage and agriculture, mining, the construction of highways and railroads, with sanitary regulations, building and the general progress of improvement in works of embellishment and utility.[78]

This holding stood for over one hundred years, until the Supreme Court of Ohio adopted the Restatement (Second) of Torts § 858 correlative rights "reasonable use" doctrine for groundwater.[79] The Restatement (Second) of Torts § 858 established, which has been widely adopted by state courts, provides that landowners have property rights with respect to groundwater, specifically the right to be free from unreasonable harm through lowering the water table and diminishing a water supply. The Ohio court concluded that the century of science since the rule of capture enabled courts to determine the effect of one landowner's water use on another landowner's property. The court essentially adopted the same property and liability rules for landowners in groundwater disputes as had been used for riparians in surface water disputes, giving legal protection to a landowner's groundwater supply.

In addressing the certified question, the Supreme Court of Ohio held that this right of reasonable use amounts to a property right: "That right [to use groundwater below one's property] is one of the fundamental attributes of property ownership and an essential stick in the bundle of rights that is part of title to property."[80] The court further stated: "[Groundwater] rights are appurtenant to title in real property.... By way of analogy, a riparian landowner does not own the water in a stream that runs along his property, but he does own the right to the reasonable use of the stream as a part of the title to his real estate."[81] The court concluded:

> The well-being of Ohio homeowners, the stability of Ohio's economy, and the reliability of real estate transfers require the protection of groundwater

[77] *Id.* at 311.
[78] *Id.*
[79] Cline v. Am. Aggregates Corp., 474 N.E.2d 324 (1984)
[80] McNamara, 838 N.E.2d at 645.
[81] *Id.*

> rights. We therefore hold that Ohio landowners have a property interest in the groundwater underlying their land ...."[82]

The Supreme Court of Ohio's decision is representative of the general correlative rights approach to groundwater disputes, giving landowners a right of use subject to interference with their neighbors' rights. The decision provides a clear rebuke of the outdated rule of capture for those with the greatest pumping capacity.

B. The Exception – The Rule of Capture Is Still the Law in Texas

Various versions of correlative rights for groundwater use are the common law in most states, but it is worth briefly mentioning the notable exception of Texas. In *Sipriano v. Great Spring Waters of America, Inc.*,[83] the Texas Supreme Court bucked the trend displayed by Ohio and most other states and held fast to the rule of capture, which is basically no legal rule for groundwater extraction at all.

The dispute began when Nestlé sought a new source for its Ozarka "spring water" brand. Nestlé initially began pumping a relatively modest 90,000 gallons of water per day from Rohr Springs in Big Rock, Texas.[84] Only four days after the pumping started, Bart Sipriano and several other local homeowners experienced decreases in their well water supply and brought suit against the water bottler.[85] The plaintiffs' suit was predicated on an attempt to reform the common law in Texas from a rule of capture to the more modern correlative rights approach.

In short, the plaintiffs failed. The Texas Supreme Court upheld the state's common law rule of capture, which had been in place for almost a century. As explained by the court, the "rule of capture essentially allows ... a landowner to pump as much groundwater as the landowner chooses, without liability to neighbors who claim that the pumping has depleted their wells."[86] In a separate concurrence, Texas Supreme Court Justice Hecht noted that Texas is the only western state out of eighteen to still follow the outdated rule of capture, but chose to leave to the state legislature the task of modernizing Texas groundwater law.[87]

C. Correlative Rights for Groundwater Uses that Impact Surface Waters – A Michigan Case Study

While some version of common law correlative rights for competing groundwater uses have been long established in most states, water bottling disputes often involve groundwater withdrawals that impact surface waters. Recently, state courts have begun to expand the correlative rights approach to these disputes.

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[82] McNamara, 838 N.E.2d at 646.
[83] 1 S.W.3d 75 (Tex. 1999).
[84] *Sipriano v. Great Spring Waters of America, Inc.*, 1 S.W.3d at 75-76.
[85] *Id.*
[86] *Id.* at 75.
[87] *Id.* at 81-83.

In *Michigan Citizens for Water Conservation v. Nestlé Waters North America Inc.*,[88] defendant Nestlé sought to pump approximately 400 gallons per minute (gpm) of groundwater from four wells located on a site called Sanctuary Springs in northern Michigan. The wells would supply Nestlé's "Ice Mountain" bottled water production facility twelve miles from the Sanctuary Springs site. Nestlé selected the Sanctuary Springs location because the groundwater would meet the Food and Drug Administration's requirements to be marketed as "spring water" pursuant to 21 C.F.R. § 165.110(a)(2)(vi) (discussed above).

The plaintiffs were riparians along several nearby waterbodies, notably the unfortunately named Dead Stream. In challenging Nestlé's groundwater pumping, plaintiffs raised three principal legal issues. First, plaintiffs alleged that Nestlé's groundwater pumping would diminish hydrologically connected surface waters (including the Dead Stream), violating plaintiffs' riparian rights in the recreational use and enjoyment of such surface waters. Second, the plaintiffs claimed that the groundwater pumping violates the Michigan Environmental Protection Act (MEPA),[89] which allows "any person" to bring an action "for the protection of the air, water, and other natural resources and the public trust in these resources from pollution, impairment, or destruction." Third, plaintiffs argued that Nestlé's bottling and selling of groundwater outside of the source watershed violated the public trust.

After a lengthy bench trial, the trial court found that Nestlé's groundwater pumping would diminish the base flow of the hydrologically connected Dead Stream by 24%. Because Nestlé was pumping the groundwater for bottling off-tract, and eventual sale and distribution outside of the source watershed, the trial court found Nestlé's water use to be unreasonable. Further, the trial court found that Nestlé violated MEPA, relying primarily on another Michigan statute, the Inland Lakes and Streams Act (ILSA),[90] which prohibits "diminishment" of an inland lake or stream without a state permit (which Nestlé did not obtain). However, the trial court dismissed the plaintiffs' public trust claim, ruling that Michigan law does extend public trust protections for navigable waters to groundwater.

The Court of Appeals first affirmed the trial court's findings of fact, most importantly that Nestlé's groundwater pumping would diminish the base flow of the Dead Stream by 24%. The court's opinion then focused on the common law rules for surface water and groundwater use in Michigan. As an eastern state, Michigan generally follows riparian reasonable use rules for surface water use, which allow some diminishment of a surface water by one riparian, as long as the water use and potential harms to other riparians are reasonable. However, the rules in Michigan for groundwater use are less clear. Michigan had already rejected an absolute rule of capture (discussed below) for groundwater use, but had never before considered the problem of groundwater use measurably affecting a hydrologically connected surface water.

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[88] 709 N.W.2d 174 (Mich. App. 2005), *portions rev'd on other grounds*, 737 N.W.2d 447 (Mich. 2007).
[89] Mich. Comp. Laws § 324.1701 *et seq.*
[90] Mich. Comp. Laws § 324.30101 *et seq.*

To address this issue, the court adopted a correlative rights approach for the competing ground and surface water rights. Under this approach, a court would look to the same reasonable use factors employed for balancing competing riparian rights to a surface water. The balancing test is based on three principles. First, the law will strive to ensure "fair participation" in the water use, preserving as many beneficial uses of the common resource as possible. Second, the law will only protect uses that are reasonable. Third, the law will only redress unreasonable harms to other water users. Numerous factors are then used on a case-by-case basis. For example, "natural" uses which are necessary for drinking and household needs have priority over "artificial" uses "which merely increase one's comfort and prosperity and do not rank as essential to his existence, such as commercial profit and recreation." Other factors include the suitability of the water use to the location, the extent of harm, the benefits of the use, and the necessity of the use.

In applying these factors to the present dispute, the court first noted that both competing uses (Nestlé's water bottling and the plaintiffs' recreational and aesthetic enjoyment of the Dead Stream) are reasonable and beneficial, and that neither use was so preferable or necessary such that it prevails on that basis alone. Instead, the court looked to the amount of pumping, the suitability of the water body for Nestlé's use, and the extent of the harm. In this case, Nestlé did not need to pump 400 gpm from this location to meet its commercial needs. Further, the rate of pumping would cause an unreasonable harm to the Dead Stream. Therefore, the court ruled that Nestlé's pumping of 400 gpm was unreasonable, enjoined future pumping at that rate, and remanded the case to the trial court to determine what rate of pumping would be reasonable under this analysis.

The court further held that Nestlé's failure to obtain a permit under ILSA does not establish a *per se* prima facie case under MEPA. Instead, the court remanded the statutory MEPA claim to the trial court to allow both the plaintiffs and defendant to present their arguments on the substantive MEPA violation. The remand was in part subsequently mooted by the Michigan Supreme Court, which held that the plaintiffs lacked standing to bring a MEPA claim for impacts to certain resources.[91] The court also affirmed the trial court's ruling that the public trust protections for water in Michigan only apply to navigable waters, thus Nestlé's groundwater pumping does not give rise to a public trust violation.

This case received tremendous public attention, including coverage in national media outlets such as USA Today.[92] Much of the public attention was focused on bottled water, and the controversies surrounding diversion and sale of water in Michigan. However, the court's opinion did not focus on the bottling and sale of water, but instead on the competing legal rights of surface and groundwater users. The Michigan court, as is typical, did not treat the water bottler any different than other commercial water users.

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[91] *Michigan Citizens for Water Conservation v. Nestlé Waters North America Inc.*, 737 N.W.2d 447 (Mich. 2007).

[92] Debbie Howlett, *Water Battle Dredges Up Acrimony*, USA TODAY, June 23, 2003, at 3A.

D. State Statutory Reform – the Wake of the Michigan Nestlé Case

The cases decided by state courts under the common law and older state resource protection statutes may not be the final chapter in a bottled water dispute. Often, the litigation motivates statutory reform sought by both water bottlers and opponents. An excellent example is the ongoing effort to reform water withdrawal regulation in Michigan in the wake of the Nestlé case.

Even before the Michigan court of appeals handed down its decision in the Nestlé case, the Michigan legislature made some modest reforms in groundwater law. In 2003, Michigan enacted a groundwater dispute resolution program. The program provides a simple process for small quantity well owners to "submit a complaint alleging a potential groundwater dispute if the small quantity well has failed to furnish the well's normal supply of water and the owner has credible reason to believe the well's problems have been caused by a high capacity well."[93] Small quantity wells are defined as wells with less than 100,000 gallons per day of pumping capacity; high capacity wells are defined as wells with capacity greater than 100,000 gallons per day.[94] Essentially, the statute provides a far cheaper and simpler mechanism than private litigation to protect the groundwater use rights of individuals and small businesses harmed by larger groundwater extractions.

After the Nestlé decision, the Michigan legislature made far more significant reforms. Statutes enacted in 2006 require any person that develops new or increased water withdrawal capacity of over 2 million gallons per day (gpd) from an inland water source (including groundwater) or 5 million gpd from the Great Lakes to obtain a water withdrawal permit.[95] For withdrawals from inland waters and groundwater, the sole standard for issuance of a permit is whether or not the withdrawal is "likely to cause an adverse resource impact."[96] An "adverse resource impact" is defined as decreasing either the flow of a stream or the level of a body of surface water such that the water body's "ability to support characteristic fish populations is functionally impaired."[97] Permit terms are not specified, but the state may revoke a permit if it "determines following a hearing, based upon clear and convincing scientific evidence, that the withdrawal is causing an adverse resource impact."[98] The permit process and appeals are subject to the Michigan Administrative Procedures Act.[99]

Water bottlers are not subject to the above provisions, since they are regulated under Michigan's Safe Drinking Water Act. However, the state Safe Drinking Water Act was also amended by the legislation to subject those water withdrawals to essentially the same standards.[100] The legislation gives municipal water suppliers the additional benefit of

[93] Mich. Comp. Laws § 324.31702(1).
[94] Mich. Comp. Laws § 324.31701(j) and (q).
[95] Mich. Comp. Laws § 324.32723(1).
[96] Mich. Comp. Laws § 324.32723(5).
[97] Mich. Comp. Laws § 324.32701(a).
[98] Mich. Comp. Laws § 324.32723(8).
[99] Mich. Comp. Laws § 324.32723(9).
[100] Mich. Comp. Laws § 324.32723(10), § 325.1004(3),(4).

being allowed to withdraw water even if the above standards have not been met, if "there is no feasible and prudent alternative location for the withdrawal" *and* "conditions related to depth, pumping capacity, rate of flow, and ultimate use ... ensure that the environmental impact of the withdrawal is balanced by the public benefit of the withdrawal related to public health, safety, and welfare."[101]

Beyond the general reforms to water withdrawal law, the Michigan statute subjects bottled water produces to many additional standards and requirements. Water bottlers must be permitted at a far lower permit threshold (new or increased withdrawal of 250,000 gpd) and meet the following standards:

- The proposed use is not likely to have an adverse resource impact.
- The proposed use is reasonable under common law principles of water law in Michigan.
- The withdrawal will be conducted in such a manner as to protect riparian rights as defined by Michigan common law.
- The person will undertake activities, if needed, to address hydrologic impacts commensurate with the nature and extent of the withdrawal. These activities may include those related to the stream flow regime, water quality, and aquifer protection.
- Advance consultation with local government officials and interested community members.
- Advance public notice and an opportunity for public comment.[102]

The statute also makes clear that water packaged in containers of 5.7 gallons (20 liters) or less is not considered a prohibited diversion under Michigan law.[103] Since 1985, Michigan law has prohibited diversion of water out of the Great Lakes watershed, effectively prohibiting almost any bulk diversion of water from the state.[104] However, because there has been some reason for concern about the Constitutionality of this blanket prohibition, the new statute expressly provides that if the prohibition is determined to be invalid, then new diversions are subject to the approval of the legislature's public trust duties.[105]

It is worth noting that almost all of the state's leading business, municipal, agricultural, and environmental organizations (including the bottled water industry) supported the passage of the legislation. The general consensus was that both water users and environmentalists would be better served by a proactive permitting system than common law litigation over water rights. Whether this will prove to be correct remains to be seen.

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[101] Mich. Comp. Laws § 325.1004(4).
[102] *See* Mich. Comp. Laws § 325.1017(3)-(5).
[103] Mich. Comp. Laws § 324.32701(e).
[104] Mich. Comp. Laws § 324.32703.
[105] *See* Mich. Comp. Laws § 324.32703a.

E. The Proposed Great Lakes Compact – A Major Advance in Water Protection

The eight Great Lakes states[106] have recently proposed and begun adopting the Great Lakes-St. Lawrence River Basin Water Resources Compact.[107] The Great Lakes are the world's largest freshwater resource, containing ninety-five percent of the fresh surface water in the United States and twenty percent of the world's supply.[108] The proposed Great Lakes compact would protect and manage all freshwater (groundwater and surface water) within the basin pursuant to minimum standards administered primarily under the authority of individual states. The proposed compact puts common law correlative water use rules and environmental protection standards into a proactive public law regime. The standards represent numerous advances in the development of water use law, including uniform treatment for ground and surface water withdrawals, water conservation, return flow, and prevention of environmental impacts. Building on 1986 WRDA (discussed above), the compact bans diversions of water out of the basin, but leaves it to individual states to decide whether to treat bottled water as a diversion subject to the ban.[109]

V. Recommendations

This review and analysis of laws applicable to groundwater and spring water extraction by the water bottling industry highlights several problems with the status quo and opportunities for reform. As a general matter, because bottled water withdrawals impact groundwater systems at the local level, federal regulation does not seem appropriate. However, there are two specific actions that the federal government can and should take to address the problem and assist state governments and local communities. First, the FDA should revise its bottled water identity labeling regulations which have inadvertently caused water bottlers to seek extractions from springs – one of the most vulnerable freshwater resources. Second, the federal government should increase funding for data collection, research, and investigation regarding groundwater resources and use nationwide, a role that is critically important to both water users and managers.

At the state level, the continued evolution towards protective regulatory laws is a welcomed development. Most significant is the proposed Great Lakes compact, which would implement uniform protections for groundwater and surface water withdrawals, water conservation, return flow, and prevention of environmental impacts in eight states. The states have made passage of the proposed Great Lakes compact a priority, and Congress should ratify the compact immediately after it is passed by the states.

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[106] Minnesota, Wisconsin, Michigan, Illinois, Indiana, Ohio, Pennsylvania, New York, Ontario, and Quebec.

[107] Great Lakes-St. Lawrence River Basin Water Resources Compact, Dec. 13, 2005, *available at* http://www.cglg.org/projects/water/docs/12-13-05/Great_Lakes-St_Lawrence_River_Basin_Water_Resources_Compact.pdf [hereinafter Proposed Compact].

[108] *See* GREAT LAKES COMMISSION, TOWARD A WATER RESOURCES MANAGEMENT DECISION SUPPORT SYSTEM FOR THE GREAT LAKES-ST. LAWRENCE RIVER BASIN 9 (2003), *available at* http://www.glc.org/wateruse/wrmdss/finalreport/pdf/WR-ExSum-2003.pdf

[109] For a more thorough discussion of the proposed Great Lakes compact, *see* Noah D. Hall, *Toward A New Horizontal Federalism: Interstate Water Management in the Great Lakes Region*, 77 COLORADO L. REV. 405 (2006) (and discussion of the compact's treatment of bottled water at pages 443-44).

Appendix A – C.V.

Noah D. Hall

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Ann Arbor, Michigan 48013

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Academic Appointments

University of Michigan Law School, Ann Arbor, MI
Visiting Professor, Winter 2008
Teaching: Water Law

Wayne State University Law School, Detroit, MI
Assistant Professor of Law, 2005 – present
Teaching: Environmental Law, Water Law, Administrative Law, International Environmental Law, Advanced Topics in Environmental Law

University of Michigan Law School, Ann Arbor, MI
Adjunct Clinical Professor, Winter 2005
Teaching: Environmental Law Practicum

Education

University of Michigan Law School, Ann Arbor, MI, J.D., 1998

University of Michigan School of Natural Resources & Environment, Ann Arbor, MI, B.S., *with distinction* 1995 (graduated in three years with concentration in Environmental Policy and Behavior)

Publications – Books

ENVIRONMENTAL LAW AND POLICY: NATURE, LAW, AND SOCIETY (with Zygmunt J.B. Plater, Robert H. Abrams, Robert L. Graham, Lisa Heinzerling, and David A. Wirth) (4th ed., Aspen Publishers, forthcoming 2009)

Publications - Articles

Political Externalities, Federalism, and a Proposal for an Interstate Environmental Impact Assessment Policy, 32 HARVARD ENVIRONMENTAL LAW REVIEW __ (forthcoming, 2008)
(available at http://ssrn.com/abstract=982929 and http://works.bepress.com/noahhall/)

Climate Change and Freshwater Resources (with Bret B. Stuntz, and Robert H. Abrams), 22 NATURAL RESOURCES & ENVIRONMENT __ (forthcoming, Winter 2008)

Transboundary Pollution: Harmonizing International and Domestic Law, 40 U. MICH. J.L. REFORM 681 (2007) (lead symposium article)

The Evolving Role of Citizens in United States-Canadian International Environmental Law Compliance, 24 PACE ENVTL. L. REV. 131 (2007) (symposium article based on previously published work, presented at the IUCN Academy of Environmental Law, 4th Worldwide Colloquium, will also be published in abbreviated form by Cambridge University Press)

Toward A New Horizontal Federalism: Interstate Water Management in the Great Lakes Region, 77 COLORADO LAW REVIEW 405 (2006)

Bilateral Breakdown: U.S.-Canada Pollution Disputes, 21 NATURAL RESOURCES & ENVIRONMENT 18 (Summer 2006)

Publications - Book Chapters

"North American Transboundary Waters" in THE EVOLUTION OF THE LAW AND POLITICS OF WATER, Joseph W. Dellapenna & Joyeeta Gupta Eds. (forthcoming 2009)

Publications - Reports

"Climate Change and Great Lakes Water Resources" (with Bret B. Stuntz) prepared for the National Wildlife Federation (2007), available at http://works.bepress.com/noahhall/

Publications - Editorial Positions and Other Contributions

Editorial Board Member, EASTERN WATER LAW & POLICY REPORTER (2006)

Contributing Editor, 2006 YEAR IN REVIEW (published jointly by ENERGY LAW JOURNAL and American Bar Association Section of Environment, Energy and Resources, wrote section on Great Lakes water resources)

Contributing Editor, 2005 YEAR IN REVIEW (published jointly by ENERGY LAW JOURNAL and American Bar Association Section of Environment, Energy and Resources, wrote section on Great Lakes water resources)

Midwest Reporter, American Bar Association Water Resources Committee

Previous Legal Employment

National Wildlife Federation, Ann Arbor, MI
Senior Manager, Water Resources Program, 2003 – 2005
Developed new water resource policies for the Great Lakes region, working directly with governors and state legislatures to draft legislation and a proposed interstate compact/binational water management agreement for the Great Lakes

Minnesota Center for Environmental Advocacy, St. Paul, MN
Assistant Director, 2001 – 2003
Successfully litigated numerous matters involving wetland protection, environmental review, energy policy, and administrative law in state and federal trial and appellate courts

Leonard, Street and Deinard, Minneapolis, MN
Associate Attorney, 1999 – 2001
Practice focused on environmental and energy litigation for both private and non-profit clients

Clerkship

Minnesota Supreme Court, St. Paul, MN
Judicial Clerk, 1998 – 1999
Served as judicial clerk for the Honorable Kathleen A. Blatz, Chief Justice of the Minnesota Supreme Court

Litigation Accomplishments and Published Decisions

Fednav, Ltd. v. Chester, 505 F.Supp.2d 381 (E.D.Mich. 2007) – successfully represented *amici* bipartisan group of state lawmakers in a Constitutional challenge to a state law intended to prevent biological pollution in the Great Lakes

Glass v. Goeckel, 703 N.W.2d 58 (Mich. 2005) – successfully represented *amici* conservation organizations in nationally-recognized decision holding that the Great Lakes shorelines and beaches are protected by the public trust doctrine and open to recreational access

Michigan Citizens for Water Conservation v. Nestlé Waters North America Inc., 709 N.W.2d 174 (Mich.App. 2005) – successfully represented *amici* conservation organizations in precedent-setting decision unifying legal rules and protections between groundwater and surface water users

Mid States Coalition for Progress v. Surface Transp. Bd., 345 F.3d 520 (8th Cir. 2003) – successfully represented environmental organization in NEPA challenge to proposed coal train based on expected increases in national carbon dioxide (CO^2) emissions

Minnesota Center for Environmental Advocacy v. Big Stone County Bd. of Com'rs, 638 N.W.2d 198 (Minn. Ct. App. 2002) – successfully represented environmental organizations in challenge to drainage practices, setting new precedent for applicability of environmental review and wetland protection laws to agricultural drainage activities

Associated Contract Loggers, Inc. v. U.S. Forest Service, 84 F.Supp.2d 1029 (D.Minn. 2000) – successfully defended environmental organization in SLAPP suit alleging interference with logging contracts and alleged establishment of religion of "deep ecology" in the United States Forest Service practices

Selected Invited Presentations

University of Toledo College of Law – Great Lakes Water Conference
(Toledo, OH, November 16, 2007)
Invasive Species in the Great Lakes

Michigan Senate, Environment and Natural Resources Committee
(Lansing, MI, November 14, 2007)
The Great Lakes Compact and Public Trust Doctrine

The Chicago Humanities Festival – Climate of Concern
(Loyola University, Chicago IL, November 10, 2007)
Governing the Great Lakes

The Property and Environment Research Center 2007 Conference – Fresh Water
(Big Sky, Montana, September 29, 2007)
Protecting Regional Water Resources

Great Lakes Legislative Caucus Annual Meeting
(Traverse City, Michigan, August 25, 2007)
Federal Litigation and the Battle Over Invasive Species

Harvard Law School, Environmental Law Faculty Workshop
(Cambridge, Massachusetts, June 13, 2007)
Political Externalities, Federalism, and a Proposal for an Interstate Environmental Impact Assessment Policy

University of Windsor (Canada) Faculty of Law – 2007 Wayne/Windsor Forum Lecture
(Windsor, Ontario, January 15, 2007)
Bilateral Breakdown: Going to Court Over U.S.-Canada Pollution Disputes

Michigan State University College of Law, Institute for Trade in the Americas – The Great Lakes Water Basin: International Law and Policy Crossroads
(Chicago, IL, December 2, 2006)
Federalism and Interstate Environmental Management

Council of Great Lakes Industries – Building a Sustainable Great Lakes Water Quality Agreement (Ann Arbor, MI, November 16, 2006)
Elements of Sustainable Development and the Role of Government

International Union for the Conservation of Nature and Natural Resources Academy of Environmental Law – 4th Worldwide Colloquium (New York, October 18, 2006)
The Evolving Role of Citizens in United States-Canadian International Environmental Law Compliance

University of Michigan Law School – The Great Lakes: Reflecting the Landscape of Environmental Law Symposium (Ann Arbor, MI, September 29, 2006)
Transboundary Pollution: Harmonizing International and Domestic Law

Government of Canada Policy Research Initiative – Freshwater for the Future (Ottawa, Ontario/Gatineau, Quebeq, May 8-9, 2006)
Boundary Waters: Implementing an Ecosystem Approach / Managing Conflicting Interests

Canadian Bar Association – Annual National Environmental, Energy and Resources Law Summit: Canada-U.S. Cross-Border Issues (Toronto, Ontario, April 28, 2006)
Waterways, Waterwars: The Protection, Taking and Use of Water

International Joint Commission – The State of Groundwater in the Great Lakes Basin (Lansing, MI, March 9, 2006)
Reforming Public and Private Rights in Groundwater

Michigan Bar Association – Environmental Section Conference (Ann Arbor, MI, February 4, 2006)
Federal Jurisdiction for Wetlands Protection: The Clean Water Act in the Supreme Court

University of Toledo College of Law – The National Water Crises: Energy and Access for All (Toledo, OH, November 18, 2005)
New Legal Approaches to Controlling Access to Great Lakes Water

University of Michigan Law School – The World Today: Multi-Disciplinary Perspectives on Climate Change (Ann Arbor, MI, March 15, 2005)
Climate Change Litigation Strategies

Society of Environmental Journalists – 14th Annual Conference (Pittsburgh, PA, October 22, 2004)
Great Lakes Water Law and Policy

Selected Media Appearances

Detroit News – quoted in Jim Lynch, *Lansing Moves to Protect Lakes* (December 6, 2007)

Cleveland Plain Dealer – quoted in editorial, *Protecting Great Lakes Water is a Clear Necessity* (December 2, 2007)

Toledo Blade – quoted in Tom Henry, *Global Warming Predictions Rouse Great Lakes Lobbying* (November 28, 2007)

Milwaukee Journal Sentinel – quoted in Dan Egan, *Protect Waters Before It's Too Late* (November 28, 2007)

Buffalo News – quoted in Jerry Zremski, *Great Lakes Face Trouble on 2 Fronts* (November 28, 2007)

Chicago Tribune – quoted in Tim Jones, *Great Lakes Key Front in Water Wars* (October 28, 2007)

Milwaukee Journal Sentinel – quoted in Dan Egan, *A Water Query from Out West* (October 5, 2007)

Milwaukee Journal Sentinel – quoted in Dan Egan, *BP Backpedals on Increasing Lake Pollution* (August 23, 2007)

Windsor Star (Canada) – quoted in *Great Lakes Divide Slows Water Deal* (March 31, 2007)

Law Times (Canada) – profiled extensively and research quoted in Ron Stang, *Domestic Courts Used to Fight Environmental Cases* (Feb. 19, 2007)

Windsor Star (Ontario, Canada) – quoted extensively in *Prof Raps Pollution Laws* (January 16, 2007)

Michigan Public Radio – invited studio guest to provide commentary on water privatization disputes (December 18, 2006)

Michigan Public Radio – invited studio guest to provide commentary on *Massachusetts v. EPA* case argued before the U.S. Supreme Court (November 29, 2006)

Chicago Tribune – quoted in John Flesher, *Book Predicts Great Lakes Water Battles Will Intensify* (September 8, 2006) (this article also ran in numerous other newspapers, including the Detroit News and the Detroit Free Press)

Milwaukee Journal Sentinel – quoted in Dan Egan, *Who Should Be Able to Tap Great Lakes?* (July 16, 2006)

Milwaukee Journal Sentinel – quoted in Dan Egan and Darryl Enriquez, *Michigan Shuts Tap to Lake New Berlin Blocked in Request to Divert Water* (June 30, 2006)

Detroit News – quoted in Alison Bethel, *Michigan Cases Key to Wetlands* (February 21, 2006)

Michigan Public Radio – invited studio guest on "Points North" show to discuss Great Lakes water law (December 2, 2005)

Michigan Public Radio – provided commentary on *Glass v. Goeckel* case decided by the Michigan Supreme Court (September 2, 2005)

Awards for Teaching

Donald Gordon Award and Honorarium for Teaching Excellence (2007)

Izumi Family Fund/Pedagogical Innovations Grant Award (2006)

Consistently one of the highest rated faculty members based on Student Teaching Evaluations

Academic Service

Wayne State University Law School

Faculty Appointments Committee: member (2007-2008)
Institute for Continuing Legal Education: Executive Committee member (2005-2007)
Student Affairs Committee: chairperson (2006-2007), member (2005-2006)
Faculty advisor, Moot Court Program (2006-2007)
Faculty advisor, National Environmental Law Moot Court Competition (2005-2008)

Professional Memberships

American Bar Association (Section of Environment, Energy and Resources)
Michigan Bar Association (Environmental Section)
Association of American Law Schools (section on Environmental Law)

Bar Admissions

Michigan, 2003
Minnesota, 1998 (inactive)
Also admitted to Federal District Court for the District of Minnesota, Eastern District of Michigan, and Eighth Circuit Court of Appeals

Mr. KUCINICH. So, Mr. Doss, please continue.

STATEMENT OF JOSEPH K. DOSS

Mr. DOSS. Good afternoon, Chairman Kucinich. And Congresswoman Watson I think has just left.

My name is Joe Doss, and I am president and CEO of the International Bottled Water Association. We appreciate this opportunity to discuss environmental issues associated with the bottled water industry's extraction of groundwater.

Groundwater, particularly spring water, is the primary water source for bottled water products sold in the United States. Because a long-term, sustainable supply of high-quality water is the foundation and lifeblood of bottled water companies, IBWA members recognize the critical importance of environmental conservation and stewardship of all water resources. In particular, IBWA supports groundwater management laws that are comprehensive, science-based, multijurisdictional, treat all users equitably and balance the rights of current users and the future needs to protect the sustainable resource.

The bottled water industry uses only minimal amounts of groundwater to produce this important consumer product and does so with great efficiency. According to a 2005 study by the Drinking Water Research Foundation, annual bottled water production accounts for less than 2/100 of the 1 percent of the total groundwater withdrawn in the United States each year.

The two largest users we've heard before of groundwater in the United States are irrigation and public water systems. According to the 2004 U.S. Geological Survey, irrigation accounted for 68 percent of the total groundwater withdrawn, while public water systems was the second largest user at 20 percent.

It is important to note that an aquifer or other groundwater source does not know the difference between water withdrawn to produce bottled water and water withdrawn to make other beverages or consumer products. Although bottled water is currently the second most consumed beverage in the United States, its consumption volume is about half of that of carbonated soft drinks and only slightly ahead of milk and beer. All such beverage products fundamentally have a high water content. Bottled water is just one of countless products and enterprises that use water; and to single out any one product or industry, particularly one that accounts for only 0.02 percent of all withdrawals, will not be effective in sustaining groundwater resources.

The States have a strong interest in regulating and ensuring efficient use of water resources and must effectively manage them to ensure that this important resource will be sustainable for all users. IBWA believes that in order to ensure sustainable water resources, a comprehensive management approach must be taken. To this end, the bottled water industry has been a strong and vocal supporter of comprehensive State groundwater management legislation that requires the permitting of large groundwater withdrawals and ensures a science-based approach to evaluating potential impacts of all users.

For example, we recently supported the enactment of such laws in Maine, Michigan and New Hampshire. Based on our experiences

in the State, it is very clear to IBWA that there is a need for more and better data on the aquifers throughout the United States in order to assist State authorities in managing available water resources. We think that this is an area where the Federal Government can play an important role. As a result, IBWA supports the enactment of H.R. 135 which would establish the 21st Century Water Commission to make recommendations on how to ensure comprehensive water resource strategy in the United States.

The Commission would be authorized to, one, project U.S. future water supply and demand; two, study current water management programs of Federal, intrastate, State and local agencies; and, three, consult with representatives of such agencies to develop recommendations for a comprehensive water strategy.

Bottled water is comprehensively regulated as a processed food product by the FDA. By law, FDA's bottled water regulations must be as stringent and protective of the public health as EPA's standards for public drinking water systems.

Under FDA regulations, there are two fundamentally distinct types of bottled water products. The first type is natural water, such as Artesian water, mineral water and spring water, which all have groundwater sources. The second type is processed water, such as purified water, which could be from a groundwater or a municipal water source. Bottled water is sold in small containers at retail locations and restaurants and is also delivered to homes and offices in three- and five-gallon bottles used with water coolers.

In summary, Mr. Chairman, bottled water is a safe, healthy, convenient food product and is an extremely small user of groundwater when compared with all other users. The bottled water industry is a conscientious and dedicated steward of the environment which has been demonstrated by its active pursuit of responsible groundwater management policies at both the Federal and State level.

IBWA supports groundwater management policies, laws and regulations that are comprehensive, science-based, multijurisdictional, treat all users equitably and balances the rights of current users and the future needs to provide a sustainable resource.

Thank you for considering our thoughts, and IBWA stands ready to assist the committee and the subcommittee as it considers this very important issue.

Mr. KUCINICH. I thank the gentleman.

[The prepared statement of Mr. Doss follows:]

Written Testimony of
Joseph K. Doss
President and CEO
International Bottled Water Association
Before the
Domestic Policy Subcommittee
Oversight and Government Reform Committee
United States House of Representatives
Hearing on "Assessing the Environmental Risks of the Water
Bottling Industry's Extraction of Groundwater"
December 12, 2007

Chairman Kucinich, Ranking Member Issa, and Members of the Subcommittee, my name is Joseph K. Doss. I am President and CEO of the International Bottled Water Association (IBWA) in Alexandria, Virginia. Thank you for the opportunity to present this written testimony.

IBWA is the trade association representing all segments of the bottled water industry, including spring, artesian, mineral, sparkling, well, groundwater and purified bottled waters. Founded in 1958, IBWA member companies include United States and international bottlers, distributors and suppliers. Bottled water companies produce a packaged food product that is comprehensively and stringently regulated by the United States Food and Drug Administration (FDA). IBWA is committed to working with state and federal governments to establish and implement stringent standards for assuring the production and sale of safe, high-quality bottled water products. In furtherance of this objective, IBWA has developed and published a Code of Practice (available at IBWA's website: http://www.bottledwater.org/public/policies_main.html), which establishes standards of bottled water production, quality, and distribution that must be met by IBWA members. In several cases, the IBWA Code of Practice is even more stringent than state and federal regulations. As a condition of membership, IBWA bottlers must submit to an annual, unannounced plant inspection by an independent third party to determine compliance with the Code of Practice and all applicable FDA regulations.

Background

Bottled Water is a Comprehensively Regulated Food Product

Bottled water is comprehensively and stringently regulated in the United States at both the federal and state levels, which helps ensure its safety and quality. At the federal level, bottled water is regulated as a processed food product by the FDA under the Federal Food, Drug, and Cosmetic Act (FFDCA), 21 U.S.C. §§ 301 *et seq.*, and several parts of Title 21 of the Code of Federal Regulations (CFR). It must meet FDA's general food regulations as well as standards of identity, standards of quality, good manufacturing practices and labeling requirements specifically promulgated for bottled water.

The FFDCA defines "food" as "articles used for food ***or drink*** for man or other animals ...."[1] The FFDCA further defines a "processed food" as "any food other than a raw agricultural commodity and includes any raw agricultural commodity that has been subject to processing, such as canning, cooking, freezing, dehydration, or milling."[2] As a result, bottled water is subject to the general Good Manufacturing Practices (GMP) and labeling regulations for all food products,[3] as well as the specific bottled water GMPs in 21 CFR 129, and the FDA-established Standards of Quality and Identity in 21 CFR Part 165. Bottled water is one of only a few food products that must follow additional, product-specific GMPs in addition to the general food GMPs.

Additionally, Section 410 of FFDCA requires FDA to review all U.S. Environmental Protection Agency (EPA) National Primary Drinking Water Standards (NPDWS) for public water systems to determine their applicability to bottled water. If FDA determines that the NPDWS is applicable to bottled water, it must establish standards of quality for bottled water that are as stringent and protective of public health as the EPA's standards for public drinking water. If FDA fails to act within 180 days of the effective date of any new EPA NPDWS for public water systems, FDA must then apply the new NPDWS to bottled water.

Under 21 CFR Part 165.110 (a), strict standards of identity are established for bottled water. Standards of identity define what a given food product is, particularly its name and the ingredients that may or must be used in the production of the food. The standards of identity for bottled water are divided into two fundamentally distinct classes of product: natural waters and processed waters. Numerous brands and companies produce bottled water in these two product categories. Natural waters include: artesian water, groundwater, mineral water, sparkling water, spring water, and well water. Processed waters must meet the United States Pharmacopoeia 23rd Revision standards for purified water or sterile water, and the following processes may be used to achieve compliance with the standard: distillation, deionization, de-mineralization, or reverse osmosis. These bottled waters are usually from municipal water sources.

Bottled Water Consumption and Sales Figures

The United States bottled water industry is the second largest commercial beverage category by volume in the United States. According to the Beverage Marketing Corporation, in 2006, the total volume of bottled water consumed in the United States surpassed 8.25 billion gallons, a 9.5% advance over the 2005 volume level. That translates into an average of 27.6 gallons per person, which means U.S. residents now drink more bottled water annually than any other beverage besides carbonated soft drinks (CSDs). Sales revenues for the United States bottled water market in 2006 were approximately $11 billion (in wholesale dollars), a 9.7% advance over the previous year.

Bottled water is a safe, convenient, healthful and refreshing beverage that lacks calories, caffeine, or other ingredients that some consumers wish to eliminate or moderate in their diets.

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[1] 21 U.S.C. § 321(f) (emphasis added).
[2] 21 U.S.C. § 321(gg).
[3] 21 C.F.R. § 110.3 et seq.

Although bottled water is currently the second most consumed beverage in the United States, its consumption volume is about half that of carbonated soft drinks (CSDs) and only slightly ahead of milk and beer. The 2006 bottled water advertising expenses totaled only $52 million.[4] For comparison purposes, $637 million was spent on advertising for carbonated soft drinks and advertising expenses for beer totaled $1 billion. Based on this data, it is apparent that consumers are choosing bottled water in greater numbers for various reasons. As an interesting side note, 75% of bottled water consumers also drink water from their public water system.

Bottled Water Business Models – Retail and Home and Office

The bottled water industry can be divided into two primary business models. The first model is the home and office delivery (HOD) of the three and five gallon bottles used with water coolers, which accounts for about 20% of the bottled water market. The second model is retail sales of bottled water to consumers in 2 ½ gallon, 1 gallon, and smaller sized bottles (e.g., half liter and liter), generally through convenience and grocery stores, as well as vending machines. Retail business accounts for about 80% of the bottled water market and is the largest and fastest growing segment of the United States bottled water industry.

Groundwater Use by the Bottled Water Industry

Bottled Water Companies are Good Stewards of the Environment

Groundwater is the primary water source for bottled water products sold in the United States. However, public water systems, utilizing both surface and groundwater, are the water source for nearly 50% of the retail bottled water market. Because a long-term sustainable supply of high-quality water is literally the foundation and "lifeblood" of bottled water companies, IBWA member bottlers recognize the critical importance of environmental conservation and stewardship of all water resources. In particular, many bottled water companies perform hydro-geological assessments, monitor the quality and quantity at source wells and participate in local and regional water stewardship partnerships on aquifer protection.

Groundwater is a renewable natural resource that is replenished through the hydrologic cycle. The duration of the replenishment cycle is influenced by weather patterns, recharge areas and characteristics, geologic settings and other site-specific factors. When developing and using water resources, it is essential that use is balanced with the replenishment cycle and the requirements of the regional demand for the resource. IBWA supports groundwater management policies, laws and regulations that are comprehensive, science-based, multi-jurisdictional, treat all users equitably, and balance the rights of current users against the future needs to provide a sustainable resource.

Bottled Water Companies Use Minimal Amounts of Groundwater

The bottled water industry uses minimal amounts of ground water to produce an important consumer product—and does so with great efficiency. According to a 2005 study by the

[4] Beverage Marketing Corp.

Drinking Water Research Foundation (DWRF), annual bottled water production accounts for less than 2/100 of one percent (0.02%) of the total groundwater withdrawn in the United States each year.[5] Additionally, based on information gathered in the DWRF study, in 2001, 87% of the water withdrawn by bottled water companies, on average, was actually bottled for consumption by humans, so the bottling process is a very efficient one.[6]

The two largest uses of groundwater in the United States are for public water systems and irrigation. According to a United States Geological Survey (USGS) report published in 2004, irrigation accounts for 68% of the total groundwater withdrawn, while public water systems are the second largest user at 20%.[7] When comparing the amount of groundwater used by other industries with the 0.02% that is used by bottled water companies, it becomes very clear that any attempt to manage groundwater resources must focus on all users and not target any one industry.

Criticism of the bottled water industry in groundwater management debates is not based on the science or hydrology of groundwater withdrawals by the bottled water industry. The key fact is that bottled water is a beverage product intended for human consumption – just like soft drinks, milk products, beer and other beverages. All such beverage products fundamentally have a high water content. Bottled water is just one of countless products and enterprises that use water, and to single out any one product or industry is misguided and will not be effective in sustaining water resources.

In 2006, total bottled water consumption (including both groundwater and municipal source waters) was about 8.2 billion gallons. Although this may sound like a significant quantity of water, it is approximately the same amount used annually by the public water systems in cities the size of Albany, New York; Springfield, Massachusetts; or Canton, Ohio, which have a population of approximately 100,000. It is important to recognize that the sustainability of the aquifers and other water resources is not determined by who uses the water, but by how much is being withdrawn.

The Bottled Water Industry Supports Comprehensive Groundwater Legislation

The states have primary jurisdiction over their water resources and must effectively manage them to ensure that this important resource will be sustainable. IBWA believes that in order to ensure sustainable water resources, a comprehensive management approach must be taken. To this end, the bottled water industry has been a strong and vocal supporter of comprehensive state groundwater management legislation enacted in recent years in Maine, Michigan, New Hampshire, Pennsylvania, Vermont, and Wisconsin. In these states, the bottled water industry actively supported a system that required permitting of large quantity groundwater withdrawals and ensured a science-based approach to evaluating potential impacts by all withdrawals.

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[5] Drinking Water Research Foundation, 2005, *Bottled Water Production in the United States: How Much Groundwater Is Actually Being Used?*
[6] Id.
[7] USGS *Estimated Use of Water in the United States in 2000;* USGS Circular 1268, 2004

In several states, IBWA has supported the permitting and reporting of groundwater user withdrawals. We have also supported establishing a regulatory framework to evaluate the environmental and water resource impact of all commercial or industrial withdrawals. It is vital for water resource managers to have quality data on current withdrawals and available water resources. Some of the comprehensive state groundwater management statutes the bottled water industry has supported require a higher standard of approval for bottled water sources than for other users of the same resource. The bottled water industry has accepted these standards in order to provide a foundation for a predictable future for the industry.

Federal Legislation Needed to Ensure Comprehensive Water Resource Management

Based on our experiences in the states, it is very clear that there is a need for more and better data on the aquifers throughout the United States in order to assist states in managing available water resources. We think that this is an area where the federal government can play an important role. To that end, IBWA supports the enactment of HR 135, which would establish the 21st Century Water Commission to make recommendations on how to ensure a comprehensive water resource strategy in the United States. Every member of the current Domestic Policy Subcommittee who served in the 109th Congress voted for HR 135 when it passed the House of Representatives in 2005. The Commission would be authorized to: 1) project U.S. future water supply and demand; (2) study current water management programs of federal, interstate, state and local agencies and private sector entities directed at increasing water supplies and improving the availability, reliability and quality of freshwater resources; and (3) consult with representatives of such agencies and entities to develop recommendations for a comprehensive water strategy.

All Groundwater Users Should Be Treated Equally

All groundwater use, whether for bottling purposes or micro-chip production, must be based on the science of the particular site. IBWA supports the development of comprehensive groundwater management legislation to assist in making those decisions. However, such a framework must treat all groundwater withdrawals equitably. IBWA believes there is a need for more and better data at the state level on groundwater resources. A number of federal agencies, such as the United States Geological Survey, the United States Environmental Protection Agency, the Bureau of Land Management, the Bureau of Reclamation, and others, maintain water data on both quality and quantity, and it would be helpful for states to have this information when managing their groundwater resources. However, this data is not easily accessible and is not as complete as needed. Additional federal assistance in developing useful data for evaluation of proposed large withdrawals would enable state water management officials to better evaluate their resources and withdrawals.

From the perspective of water management programs, the bottled water industry should be treated no differently than other beverage, food processing or other manufacturing operations. If bottled water is produced according to FDA regulations, it is without question a food product, and all food products should be treated equally. To single out bottled water from other food products – not to mention thousands of other consumer products that use water as an ingredient

or in production – will not further the sustainability of water resources and is not in the best interest of consumers.

Bottled Water is a Safe, Healthy, Convenient Product

Bottled water is a safe, healthy, convenient, food product that consumers use because of its refreshing taste and because it is an excellent way to stay hydrated. Bottled water continues to grow in popularity because people appreciate its consistent quality, taste, and convenience. Consumers also choose bottled water over other beverages because it does not contain calories, caffeine, sugar, artificial flavors or colors, alcohol and other ingredients.

Reports on America's declining health are in the headlines almost daily. Obesity, diabetes and heart disease are all on the rise. Bottled water is a very healthy beverage choice, and any actions by legislators or activist groups that would discourage the use of this product are not in the public's best interest.

Bottled Water Emergency Relief Efforts

The bottled water industry has always been at the forefront of relief efforts during natural disasters and other catastrophic events. Throughout the years, bottled water companies have immediately responded to the need for clean water after natural disasters, such as Hurricanes Andrew, Charlie, and Katrina, California wildfires, or the terrorist attacks on the Pentagon and World Trade Center. Bottled water companies have donated millions of bottles of water in response to these types of catastrophes. Clean, safe water is a critical need for citizens and first responders immediately following a natural disaster or other catastrophic event. Unfortunately, the availability of water from public water systems is often compromised in the aftermath of such an event. During these times, bottled water is the often best option to deliver clean safe drinking water quickly into affected areas. Some bottled water opponents believe bottled water should only exist to satisfy emergency and relief effort needs, but the bottled water industry could not exist and sustain itself if this were its only purpose.

Conclusion

Bottled water is a de minimus user of groundwater when compared with all other groundwater users within the United States. The bottled water industry is a conscientious and dedicated conservator and steward of groundwater resources, which has been demonstrated by its active pursuit of responsible groundwater management policies at both the federal and state level. IBWA supports groundwater management policies, laws and regulations that are comprehensive, science-based, multi-jurisdictional, treats all users equably, and balances the rights of current users against the future needs to provide a sustainable resource.
As defined by federal law, bottled water is a food product. For that reason alone it should be afforded the same equitable treatment as all other food products. Any efforts or actions that limit or discourage the bottled water industry's ability to offer consumers use of this beneficial product are not in the public's best interest.

IBWA respectfully recommends that a measure such as HR 135 should be enacted to help chart the course for better water management to meet our nation's future needs. A Commission should identify the projected future water supply and demand. In order to accomplish this goal, additional data on groundwater resources, both use and quantity, will be needed. This data would also be helpful to the states in better managing their groundwater resources.

Thank you for considering our thoughts. IBWA stands ready to assist the Subcommittee as it considers this very important issue.

Attachments:

IBWA Groundwater Resource Management Policy Paper
US Beverage Market Pie Chart – Shares by Volume
Total US Groundwater Usage Chart

IBWA
International Bottled Water Association

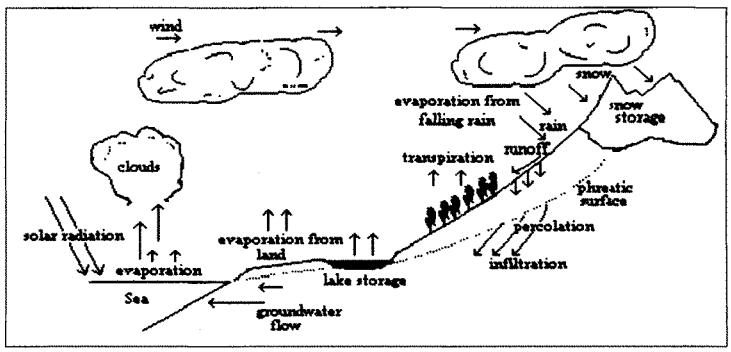
Groundwater Resource Management

IBWA Policy

The International Bottled Water Association (IBWA) is dedicated to the responsible management of renewable groundwater resources. This can be accomplished by using sound science and environmental stewardship, preventing adverse impact on the source, the surrounding environment or neighbors. IBWA supports comprehensive water resource management that regulates both the quality and quantity of groundwater, and balances the interests and rights of those using this natural resource today and in the future.

Background

The bottled water industry uses groundwater as its predominant source for bottling. Groundwater is a renewable natural resource that is replenished through the hydrologic cycle, illustrated below in Figure 1. The duration of the replenishment cycle is influenced by weather patterns, recharge areas and characteristics, geologic settings and other site-specific factors. When developing and using water resources, it is essential that use is balanced with the replenishment cycle and the requirements of the regional demand for the resource.



(Figure 1)

The United States population has grown by more than 100 million people since 1960. This growth has placed demands on regional water resources resulting in concerns about water quality and availability. Such concern has been a major factor in local community opposition to groundwater withdrawals. As the country continues to grow, these concerns along with the demands for water will intensify, creating a pressing need for a comprehensive approach to groundwater management.

While all groundwater withdrawals should be managed in a sustainable and compatible manner, a study concluded that concerns about the bottled water industry's use of groundwater are not science-based or factual.[1] IBWA believes that no industry should be identified as a threat to the groundwater supply without the benefit of sound, scientific evidence demonstrating its impact on the groundwater quality and quantity.

Bottled water plants account for only a fraction of a percent of the groundwater withdrawn each day in the United States. According to the U.S. Geological Survey, total fresh groundwater withdrawals in the U.S. in 1995 (the latest year for which published data were available) were 27.6 trillion gallons. In 2001, total annual groundwater withdrawals for bottled water production were determined to be 6.15 billion gallons. Thus, groundwater withdrawals for bottled water production represent only 0.020 percent (two one-hundredths of one percent) of the total fresh groundwater withdrawals in the U.S.

Regulation of Water Resources

Regulation of water resources varies from state to state. The management and use of water resources are based on water rights as applicable to individual states. State legal systems can be grouped roughly into three areas: *riparian, prior appropriation and "dual doctrine."*

1. The *riparian* system grants water rights to the owner of a parcel of land touching a watercourse. This system applies in the 29 states east of the Mississippi River and Arkansas.
2. Under the *prior appropriation* doctrine, water rights exist when the water is taken from the source and is used (appropriated) for a beneficial (as defined by law and court decisions) purpose. This system applies to the eight non-coastal states in the West and Alaska. The holder of the oldest appropriated water right receives priority for water delivery over more junior rights. In times of shortage, the water is not rationed but provided on the basis of seniority (first in time, first in right).
3. In the *"dual system"* states, the law of appropriation has been superimposed on a pre-existing system of riparian rights and each state reconciles the issues individually. The "dual system" is used in 12 states.

Water rights are also governed in a number of states by interstate and/or international treaties and compacts. As an example, the Great Lakes Water Resources Development Act regulates large diversions of water through a cooperative agreement with the five contiguous states and the two Canadian provinces along the Great Lakes. In addition, a number of states that share a common watershed have developed processes (compacts) to jointly address the management of their common water resources.

Guiding Principles of Comprehensive Groundwater Resource Management

IBWA believes that comprehensive groundwater resource management must be supported by a foundation of sound science, which provides for projections of use and determines the limitations of the resource base. Such comprehensive resource management planning and policy must also incorporate a capability to resolve conflicting interests based on the principle of equitable partition of the resource.

[1] DWRF Study by Dr. Keith Eshelman

IBWA offers the following guiding principles as the foundation for executing a comprehensive groundwater resource management policy and plan.

- **Scientific documentation.** The primary effort of protecting and managing groundwater resources must be based on a solid foundation of appropriate and reasonably applied science. The flux, flow, recharge rate, surface water influence and impact, zone of contribution, and other factors affecting a groundwater resource must be analyzed and considered in the design of a management plan. The entire aquifer must be viewed within the context of science supported by empirical data. Advanced research techniques and the collection of baseline data of groundwater resource characteristics and source use must be utilized to assist in the analysis and design of groundwater management policies.

- **The plan shall be comprehensive and multi-jurisdictional.** Effective management of a groundwater resource must be multi-jurisdictional by its very nature. Watersheds, streams, rivers and aquifers are not contained by local political boundaries (city, municipal, county, etc.). Local control of the management of groundwater resources cannot effectively address the impact of withdrawals from an aquifer that flows through many local jurisdictions. In addition, the multi-jurisdictional approach to management of groundwater resources will prevent the fragmentation of permitting authority and overlapping management of the resources.

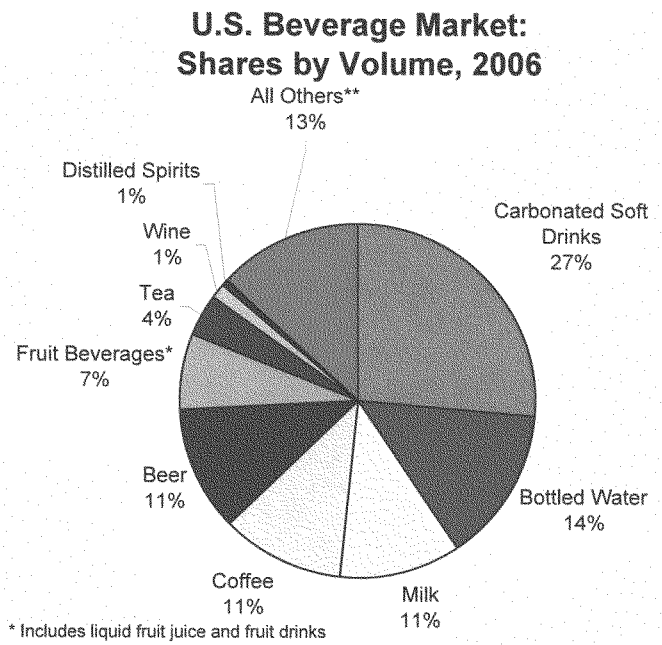
- **Identify the quality and quantity of the groundwater.** In developing a comprehensive groundwater resource management program, the impact of use on quantity and quality must be fully assessed. Quantitative measures on the impact from various influences on groundwater resources must be developed and incorporated into any groundwater resource management approach. This includes withdrawal reporting and permitting, surface water impacts of groundwater withdrawals, "water budgeting," and well siting. By using quantitative measures, the permitting of water withdrawals can be more equitably managed through comprehensive understanding of the impact of the withdrawal on the total aquifer.

- **Consider all users in an equitable manner.** Requests for water withdrawals must be reviewed under objective criteria that are based on science. Allocation of water resources should not be subject to requirements exceeding those applied to users of similar quantities and quality, such as moratoriums of new or increased permits for only bottled water facilities. All users must be treated in an equitable manner with an emphasis on providing priority use of the groundwater resource for human consumption.

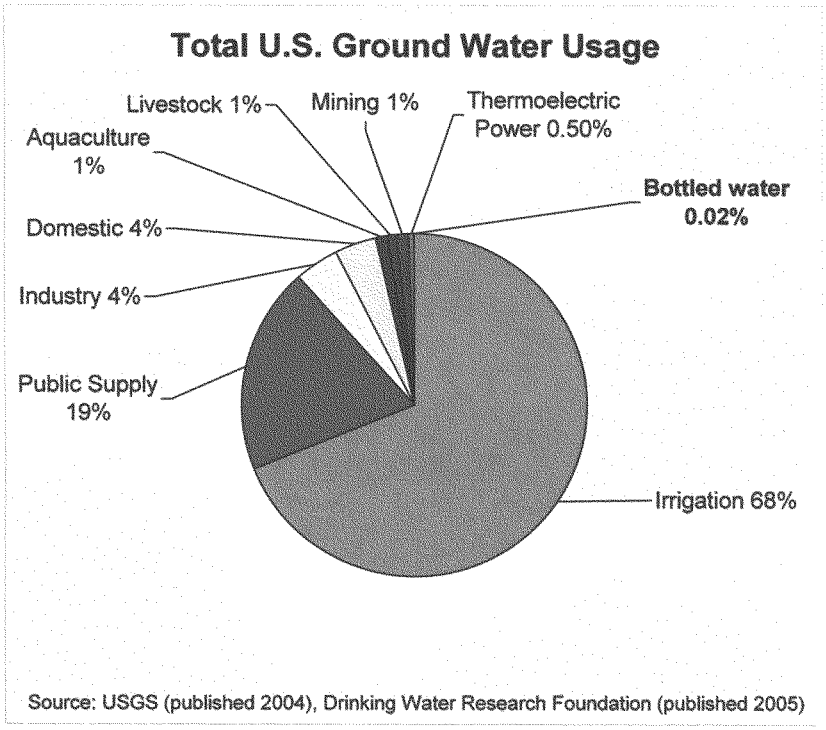
- **Balance the rights of use against future needs for the resource.** By moving to a scientific basis supported by acceptable quantitative measurements, the balance of competing interests may be better evaluated and lead to beneficial conflict resolution that supports the rights equitably for all interested parties. It is essential for each user of groundwater to act as a steward of this renewable water resource in order to maintain both quality and quantity of the source and the system at large.

Conclusion

IBWA's position on various proposals for government regulation will be based on the above set of principles. IBWA advocates comprehensive groundwater management policies that are based on sound science and that consider and treat all users equitably. IBWA believes that only through this approach to groundwater resource management can the water needs of the population and the environment be effectively addressed.



* Includes liquid fruit juice and fruit drinks
** Includes vegetable juices, sports drinks, powders and miscellaneous others
Source: Beverage Marketing Corporation



Source: USGS (published 2004), Drinking Water Research Foundation (published 2005)

Mr. KUCINICH. Mr. Wilfong.

STATEMENT OF JAMES WILFONG

Mr. WILFONG. Thank you, Chairman Kucinich. Thank you very much for inviting to testify here today on this very important topic.

I'm from a little town in the western mountains of Maine called Stow. Stow is located in a very freshwater rich area backed up against the State of New Hampshire in the White Mountain National Forest.

In 2003, several citizens of this region, including myself, were concerned about the large-scale extraction that was taking place in the Fryeburg, ME, section of the Saco River Sand and Gravel Aquifer, an aquifer that extends from Bartlett, NH, to Hiram, ME. The recipient of this extracted water is the largest bottled water company in the world, Nestle. We knew that they were not here for a little water, that they were here for a lot of water. This raised several immediate questions and concerns for us.

One, who owns the water?

Two, who will control the usage of the water?

Three, how will the water be allocated if it becomes limited?

Four, is damage being done to the aquifer or the surrounding environment?

Five, do the citizens of Maine have a financial interest in this resource?

Six, which regulatory agency is responsible to sort out these many questions? Is it a State, local or Federal responsibility.

And, seven, since water is considered a tradable good or commodity, is trade treaty law somehow involved and how would that law affect local, State and Federal laws in the environmental area?

And finally, eight, is our community ready for this business?

I'm sure that we had a few more thoughts, but this was a start. The answers to these questions in Maine were not encouraging. We are ruled by the common law of absolute dominion. Essentially, this law means if the water runs under your property, you can pump it. In Texas, they call it the law of the biggest pump. Under this doctrine, the landowners over groundwater claim ownership. This may seem strange, as groundwater and surface water are part of one hydrological system and in Maine surface water is in the public trust and groundwater is not.

So several questions remain to be answered.

So who will allocate the usage?

It is not clear. It still has not been decided.

Is the environment and the aquifer being damaged?

Well, in some cases, studies have been done, but, in many cases, expertise for review and long-term evaluation has not been sufficient and the public isn't sure the resource is being protected.

What can citizens do to protect their interest?

In Maine, we wanted to pass a comprehensive law. We looked at four legislative concepts. We wanted to extend Maine's environmental law to large-scale extraction. We wanted a fair, open and transparent citizen's process. We wanted to establish reasonable use standards. We wanted to place groundwater under the public trust doctrine, and we wanted some recognition of the public investment in clean water. We suggested a severance tax on major

extraction and to have the revenues invested in a permanent fund similar to Alaska's oil trust.

H20 for ME, the bottlers and their stakeholders launched into a Statewide debate and added to the national debate on groundwater issues. After nearly 4 years of debate and discussion, H20 decided it was necessary to protect the resource and the environment as a first step. We found legislators who agreed. We also found a willingness among the bottlers and other stakeholders to be constructive, and we negotiated a position.

In June 2007, the Maine legislature passed a law that does the same.

It places all large-volume wells under the Natural Resource Protection Act.

Two, it provides for an open and transparent citizens process.

Three, it requires perpetual monitoring of all high-volume wells.

Four, it requires the applicant to pay for expert consultants to review, evaluate and make recommendations to the State.

Five, it establishes a freshwater resource committee within the State planning office to investigate all freshwater uses within watersheds.

And, six, it places environmental management and review responsibility for groundwater into two departments.

That is essentially what it does. It does not establish a public trust with water. It does erode absolute dominion. The law will only be effective if citizens are diligent about the enforcement of its intent.

Finally, what could the Congress do to help the situation?

Well, it could provide financial resources and technical assistance to local and State regulators involving environmental studies and review.

Two, it could establish Federal minimum environmental standards for major extraction wells.

Three, it could review trade rules concerning water being designated as a tradable good and ensure access and control of clean freshwater for the long-term best interest of U.S. citizens.

Four, it could extend standing to U.S. citizens using the Clean Water Act as a model.

Five, it could place all freshwater in the public trust, and it could hold the national conference on freshwater issues.

The Maine law is a start. Each State must review its situation and adjust its State statutes to meet the new realities of the freshwater demands of the bottled water industry. For those States with weak and outdated law, the new Maine law could be a first-step model.

I wish that more than 30 years ago when I was a young legislator who was working on clean water law that I could have seen the future. We could have fixed our groundwater law right then. Water was bestowed upon us by the same power that granted us our freedom. Water is life. When it comes to potable water law, we can't afford to get it wrong.

Thank you very much.

Mr. KUCINICH. I thank the gentleman.

[The prepared statement of Mr. Wilfong follows:]

DOMESTIC POLICY SUBCOMMITTEE
OVERSIGHT AND GOVERNMENT REFORM COMMITTEE
WEDNESDAY, DECEMBER 12, 1007
2154 Rayburn HOB
2:00 P.M.

CHAIRMAN KUCINICH, MEMBERS OF THE COMMITTEE, Thank you very much for inviting me to testify today on this important topic. My name is James Wilfong and I am from a little town in the western mountains of Maine called Stow. Stow is located in a very freshwater rich area backed up against the state of New Hampshire and the White Mountain National Forest.

In 2003, several citizens of this region, including myself, were concerned about the large-scale extraction that was taking place in the Fryeburg, Maine section of the Saco River Sand and Gravel Aquifer, an aquifer that extends from Bartlett, NH to Hiram Me. The recipient of this extracted water is the largest bottled water company in the world, Nestle. We knew they were not here for a little water they were here for a lot of water. This pumping averages 500,000 gallons a day. We had several immediate questions and concerns:

1. Who owns the water?
2. Who will control the usage of the water?
3. How will the water be allocated if it becomes limited?
4. Is damage being done to the aquifer or the surrounding environment?
5. Do the citizens of Maine have a financial interest in this resource?
6. Which regulatory agency is responsible to sort out these many questions? Is it a local, state or federal responsibility?
7. Since water is considered a tradable good or a commodity, is trade treaty law involved? How will that affect our local, state and federal laws in this environmental area?
8. Is our state ready for this business?

I am sure that we had a few more thoughts, but this was a start. The answers to these questions in Maine are not encouraging. We are ruled by the common law of absolute dominion. Essentially, this law means, if the water runs under your property you can pump it. In Texas, they call it the law of the biggest pump. Under this doctrine, the landowners over groundwater claim ownership. This may seem strange, as groundwater and surface water are part of one hydrological system and in Maine, surface water is in the public trust and groundwater is not.

So, who will allocate the usage? It is not clear. It is still to be decided. Is the environment and aquifer being damage? In some cases, studies have been done but expertise for review and long-term evaluation is not sufficient and the public isn't sure the resource is being protected.

What can citizens do to protect their interests? In Maine, we wanted to pass a comprehensive law. We looked at four legislative concepts: we wanted to extend Maine's environmental law to large-scale extraction. We wanted a fair, open and transparent citizen's process. We wanted to establish reasonable use standards; we wanted to place groundwater under the public trust doctrine and we wanted some recognition of the public investment in clean water. We suggested a severance tax on major extraction.

H2O for ME and its supporters and the bottlers and their stakeholders launched into a statewide debate and tried to add to the national debate on groundwater issues. After nearly four years of debate and discussion we decided it was necessary to protect the resource and the environment as a first step. We found legislators who agreed. We also found a willingness among the bottlers and other stakeholders to be constructive and we negotiated a position. In June, the Maine Legislature passed a law that does the following: 1. It places all large volume wells under the Natural Resource Protection Act [NRPA]. 2. It provides for an open and transparent citizen process. 3. It only grandfathers 2 wells all others are covered. 4. It requires perpetual monitoring of all high volume wells. 5. It requires the applicant to pay for expert consultants to review, evaluate and make recommendations to the state. 6. It establishes a freshwater resource committee within the State Planning Office to investigate all freshwater uses within watersheds. 7. It places responsibility for groundwater in two departments.

That is essentially what it does. It does not establish a public trust for groundwater. It does erode absolute dominion. The law will only be effective if citizens are diligent about the enforcement of its intent. They must shoulder this responsibility.

What could the Congress do to help the situation?

1. It should provide financial resources and technical assistance to local and state regulators involving environmental studies
2. It could establish Federal minimum environmental standards for major extraction wells
3. It should review trade rules concerning water being designated as a tradable good and ensure access and control of clean fresh water for the long-term best interests of US citizens.
4. It could extend standing to US citizens [using the clean water act as a model]
5. It could place all freshwater in the public trust
6. It could hold a national conference on freshwater issues

The Maine law is a start. Each state must review its situation and adjust its water statues to meet the new realities of the freshwater demands of the bottled water industry. For those states with weak and outdated groundwater law, the new Maine law could be a 1st step model. I wished that more than 30 years ago, when I was a young legislator, who was working on clean water law that I could have seen the future. We could have fixed our groundwater law right then. Water was bestowed upon us by the same power that granted us our freedom. Water is life. When it comes to potable water law we can't afford to get it wrong.

Mr. KUCINICH. We're now going to go to questions of the panel and to Professor Hall.

In many of the bottling cases, Federal jurisdiction is invoked when groundwater extraction affects surface waters. Do you believe that Federal agencies such as the Army Corps and the EPA diligently enforce acts like the Clean Water Act and the Endangered Species Act in these cases?

Mr. HALL. Thank you, Mr. Chairman.

In the bottled water cases—in many of the bottled water cases, including some of the ones I've been involved in—and I should disclose that I represented some conservation groups, Trout Unlimited, National Wildlife Federation and the Nestle case in Michigan—Federal jurisdiction and Federal statutes were not an issue. Federal statutes really come into play only incidentally, if, for example, the water bottler is also discharging pollutants into a navigable waterway or filling a wetland. But keep in mind that the Federal wetland regulations only pertain to the placement of dredged or filled material into a wetland, not the draining of water out of a wetland. So the U.S. Army Corps of Engineers doesn't really have much of a hook to address the environmental impacts of water withdrawals.

Mr. KUCINICH. Thank you.

Now, in the proposed Great Lakes Compact that has not been ratified by Congress, I understand there is an exception to the anti-diversion provisions for products that are less than 5.7 gallons. Does this provision effectively exempt typical bottled water products? And if it does, is there environmental justification for the 5.7 gallon threshold requirement?

Mr. HALL. That is an excellent question, Mr. Chairman. Thank you.

Of course, I've been intimately involved in both the negotiation and drafting of the proposed Great Lakes Compact. The exception that you mentioned, the Great Lakes Compact, bans diversions of water out of the Great Lakes basin which includes parts of eight U.S. State plus two Canadian provinces. Exempted from that ban on diversions of water out of the basin is water in containers less than 5.7 gallons, basically an office cooler. So you're correct. Bottled water is exempted from the ban on diversions.

However, the Great Lakes Compact would also require public management by the State of water withdrawals, both ground and surface water, at the State level for water that is used within the basin; and water withdrawals for bottled water or any other use are still subject to those requirements.

So I think it is actually a pretty fair compromise, all things considered. A water bottler within the Great Lakes basin, if the Great Lakes Compact is enacted, which I hope it is, would be subject to a long list of permit requirements, environmental protection standards, water conservation measures, as well as citizen review and judicial review of any permits that are granted. They wouldn't be flat-out banned, but they would be under pretty good regulations, and I think it would be a step in a good direction.

Mr. KUCINICH. It is my understanding that the FDA did not subject its spring water classification to a NEPA review. Do you think it was obligated to do so under law? And if it did undertake such

a review now, what would be the practical consequences? Could anything be gained.

Mr. HALL. That's another good question.

When the EPA promulgated its current bottled water rule, it did not conduct an environmental impact statement pursuant to the National Environmental Policy Act. I believe it should have. The issue was not raised at the time.

I think it is very clear, even just looking at the common agreement among the panelists, that bottled water withdrawals from springs certainly have the potential for significant environmental impacts, which is the threshold requirement for an environmental impact statement. And I think if the FDA were to relook at that rule or reconsider it or if there were a petition for rulemaking filed to the FDA, it would absolutely have to comply with the environmental impact statement in connection with its bottled water spring rule.

Mr. KUCINICH. I think that is quite significant.

Now, in the wake of recent Supreme Court decisions narrowing the definition of navigable waters in the Clean Water Act, have there been proposals to enact new legislation to expand Clean Water Act jurisdiction to the maximum that the Constitution permits to believe that this legislation is advisable and will it make much of a difference for the types of disputes that we have heard about today?

Mr. HALL. Yes, Mr. Chairman, I do. I believe it is Congressman Oberstar and my Congressman, Congressman Dingell, who have led an effort to enact the Clean Water Restoration Act which would make clear really that the Federal Government's jurisdiction over navigable waters extends to all waters of the United States to the extent of the commerce clause of the Constitution. I think that is excellent legislation. That is how the Clean Water Act was enforced and applied for over 30 years. I'd hate to see us take a step back in the wake of the Supreme Court's recent Rapano's decision.

Mr. KUCINICH. Thank you, Professor Hall.

Mr. Shays.

Mr. SHAYS. Thank you, Mr. Chairman. Thank you for having this hearing.

I view water as precious as gold in so many different ways. And it was not lost to me that foreign companies came and bought a number of water companies in the New England area because they bought it for the water and they bought it for the land because there is so much land that is reserved to protect our water supply.

I'm wrestling, though, with this topic as it is designed against—as it appears to be focused on bottlers of water. I look at Candlewood Lake in my State. I think a lot of that water goes to New York City. And I'm wrestling with the fact that water from northern California goes to southern California. I am wrestling with the fact that soda uses water. You know, Gatorade uses water. And yet we're focused on the water company. You know, I am tempted to ask you, Ms. Hauter, if you'd prefer and do you think that Coca-Cola is better for me than drinking water from a bottle. Is it better?

Ms. HAUTER. Well, I think what we believe——

Mr. SHAYS. No, no, I need you to——

Ms. HAUTER. I think that what we believe is that it is a societal question. Do we want safe and affordable——

Mr. SHAYS. That's not what I asked you. I asked you specifically if you think the water in a Coca-Cola is better for you than the water that would be pure?

Ms. HAUTER. I think that is a question—it is an unfair question.

Mr. SHAYS. It is not an unfair question. If you are going to come and testify before us and you are going to attack companies for making money, it is very fair. Otherwise, you're a meaningless witness, and I shouldn't ask you any questions.

Do you want to be relevant? Do you want to testify? Then answer the question. Please answer the question.

Ms. HAUTER. I think that Coca-Cola is unhealthy and that drinking a glass of tap water is a better option than drinking bottled water.

Mr. SHAYS. Let me ask you this, though. Why would you not have the concern—I guess I don't know. Maybe Professor Hall. Where does Coca-Cola get its water from?

Mr. HALL. Coca-Cola—both for the product Coke and as well as for what I believe is their Dasani brand primarily uses water from a municipal water supply.

Mr. SHAYS. Doesn't the same analogy apply to soda and beer that would apply to bottled water?

Mr. HALL. In some instances, yes, it does. For example, Coke, which primarily sells bottled water that comes from municipal water supply, I believe it is Dasani is their brand name.

Mr. SHAYS. I'm not talking bottled water.

Mr. HALL. Yeah, it is the same as Coke.

Mr. SHAYS. So they are depleting, in a sense, the water supply locally and distributing it nationwide?

Mr. HALL. Correct.

Mr. SHAYS. OK. Water, basically, I believe is 1/50th percent of the water that we consume. In other words, it is less than a percent. It is not 1/10th of a percent. It is 1/50th of a percent. So, in the realm of things, why should I be focused on this issue, as opposed to the other 99 percent?

Mr. HALL. That is an excellent question, Representative.

I would say that, as I hopefully made clear in my initial testimony, bottled water is a tiny microscopic use of the overall national water supply. And from a macro level, it is really not a major concern in terms of our water conservation and use. The concern is that spring water bottlers withdraw water from, by definition, springs which are very small, vulnerable water resources such that——

Mr. SHAYS. These are unique water systems that you're making the point about?

Mr. HALL. Exactly.

Mr. SHAYS. Let me ask you. In Stanford, CT, next door was Greenwich, CT. Greenwich—American Water Co., I think is the name of it, didn't have enough supply. The bog reservoir, they were going to pump from the ground and put into the pond—into the lake, and then they were going to take it. And we realized in Connecticut that we didn't have anything that focused on the water table. We focused on surface water.

So what I did as a State legislator is I gave that right to the Department of Health. Because I do think Ms. Hauter and others have an issue as it relates to a locally confined area that may find its water table being drawn down. Why wouldn't that just be an issue that Maine, New Hampshire and others should work out on their own without the Federal Government stepping in?

Mr. HALL. Well, first off, I'm pretty familiar with that region. I actually grew up in Richfield right by Stanford.

Mr. SHAYS. Do you have family still there.

Mr. HALL. Yeah. Yes, sir.

Mr. SHAYS. Geez, I have to be on my best behavior. I just want to say you have been an excellent witness.

Mr. KUCINICH. And even though the gentleman's time has expired, since there is this local connection, I'll ask the professor to answer the question.

Mr. HALL. Thank you. And, in all seriousness, it is an excellent question. I think that primarily water use should be managed at the State and local level; and I think, by and large, State and local governments have done and are doing an excellent job of improving their management. But, however, the FDA through the spring water rule has created essentially a national market for some of the most vulnerable water resources in localities and State, and so this is a problem that in some part was caused by the FDA and to some extent can be fixed by the FDA.

Mr. SHAYS. Just last, though, I mean, if the State of New Hampshire or Maine or whatever is concerned with what is happening with its aquifers, with its springs, it does have the legal authority to step in, correct?

Mr. HALL. Absolutely. Yes.

Mr. SHAYS. And I would just say that I hope it does in a constructive way working with the bottlers and so on.

Mr. KUCINICH. I thank the gentleman. His time has expired.

To Professor Hyndman, is there a difference from a hydrological perspective when you use groundwater for irrigation for agriculture versus using it for extraction for water bottling?

Mr. HYNDMAN. The primary difference is exactly what Professor Hall just mentioned. I mean, groundwater is groundwater. If we're talking about shallow groundwater, the quality of much of the shallow groundwater across, say, the Midwest is fairly similar. The main difference in agricultural pumping is that is largely from deeper aquifer systems that are further down in a watershed. They're not in the headwaters of a watershed.

Mr. KUCINICH. Is one more damaging than the other?

Mr. HYNDMAN. Yes. The spring water pumping is more damaging because of the fact that it is in the headwaters.

Mr. KUCINICH. Would you repeat that.

Mr. HYNDMAN. Yes. The spring water pumping is more damaging in my opinion because it is done in the headwaters of watersheds.

Mr. KUCINICH. Because it is done?

Mr. HYNDMAN. In the headwaters of watersheds in ecologically sensitive areas.

Mr. KUCINICH. Now I'd like to ask you one more question, but I'd also like to ask Mr. Doss and Ms. Hauter to respond. And I've always wondered this. Can people typically perceive a difference in

taste and is there a quality of difference between FDA defined spring water and bottled water that does not technically meet the spring water designation. Professor Hyndman.

Mr. HYNDMAN. For me, that would be a personal choice. And I—personally tasting between the two of them in a blind tasting, I probably could not tell you if one is spring water versus not.

Mr. KUCINICH. Professor Hall.

Mr. HALL. I doubt the average person could tell the difference. And, in fact, some municipalities like Evart, MI, have as municipal water, water that meets the FDA spring water definition.

Mr. KUCINICH. And Ms. Hauter.

Ms. HAUTER. No. There have been many taste tests around the country and people have difficulty. Basically, bottled water is marketed on its packaging and its sex appeal and the claims that it is healthier, not taste.

Mr. KUCINICH. Sounds like a Presidential campaign.

Mr. Doss.

Mr. DOSS. It is a consumer choice. Obviously, some consumers may prefer tap water; some consumers may prefer bottled water. We don't disparage tap water. We think that if people are drinking water that is a good thing, because it is a very healthy product. Again, it boils down to consumer choice. I can tell the difference in many bottled waters, just as I can tell the difference between tap water and other beverages.

Mr. KUCINICH. You are saying you can't or cannot.

Mr. DOSS. I can.

Mr. KUCINICH. You can?

Mr. DOSS. Absolutely.

Mr. KUCINICH. Can we take a test right now.

Mr. DOSS. I'm just saying I can certainly tell the difference in many bottled waters that I drink.

Mr. KUCINICH. You're under oath, but you're——

Mr. DOSS. Absolutely.

Mr. KUCINICH. We'll give you an exemption.

OK. Mr. Wilfong.

Mr. WILFONG. Yes, I think there really is no difference. The water just happens to hit a low point in the ground and bubbles up and out of it. It is all essentially the same water system.

Mr. KUCINICH. OK. To Professor Hyndman, if the FDA changed its definition of spring water—I'd like to ask Mr. Doss to answer this, too, so you can get ready. If the FDA changed its definition of spring water to include groundwater not immediately and directly connected to a lake or spring, that is, you don't have to draw down the spring when you pump in order to sell it as spring water, would that alleviate the direct impacts in spring wetland surface water situations like in the McCloud, NH, and other locations where they have been having problems during lower precipitation—or there have been problems during lower precipitation or drought-like conditions.

Mr. HYNDMAN. Thank you, Mr. Chairman. It is an excellent question.

If the FDA changed the definition to include groundwater that is in the vicinity and even deeper groundwater, that could resolve the concern because the pumping would not be pushed into those head-

water areas. And, in fact, you could do hydrogeologic studies that would basically define the best areas to put this pumping where it would have minimal impact.

Mr. KUCINICH. Mr. Doss, would you like to respond.

Mr. DOSS. I think the issue really goes back to the question of sustainability at the State level. When a State grants a permit for a bottled water company to withdraw that water, they should take into consideration all the science involved. They should take into consideration all the concerns raised here today by these professors. And if they decide that the water source is not sustainable with the bottled water plant, then they should deny the plant the ability to pump water from that particular source. So I think it gets back to sustainability.

Mr. KUCINICH. I'd like to just go and ask every member of this panel a question. From your written and oral testimony, there seems to be broad support for the proposition that the USGS should be empowered and funded to assume a much greater role in groundwater mapping and monitoring. And if this is so, why hasn't it been done yet and what political obstacles stand in the way of that reform? Ms. Hauter.

Ms. HAUTER. I think it is something that has been overlooked and there has been a lack of funding for and that we have to get busy and it is not just for bottling—for bottled water, but we need to do it for a range of water issues from agriculture to industry.

Mr. KUCINICH. Professor Hyndman.

Mr. HYNDMAN. I think that the issues go beyond just mapping for the U.S. Geological Survey. In fact, it is very important for the funding for the USGS to have monitoring of surface water. It is an incredible network that the U.S. Geological Survey has across the country, but the funds have been continually cut. They have to keep going back to cooperators for money.

And personally when I do research on broad scales to try to figure out the impacts on the things like climate change and land use change, it is very difficult when these USGS gauges go off line or, you know, a new one will startup somewhere else because that is where a cooperator has an interest. If we don't maintain the network for the type of science we're talking about, it is very difficult to talk about what the impacts will be.

Mr. KUCINICH. Thank you.

Professor Hall.

Mr. HALL. The truth is that doing the scientific work, gathering information, the research, it is not sexy. It doesn't capture the public's imagination. The work that Professor Hyndman does, the work that I do, the work that USGS does is often overlooked, and that is unfortunate because really that information is the foundation for making good decisions. And so I think one of the most important things that this committee could do would be to strongly recommend more funding and support for USGS.

Mr. KUCINICH. Thank you.

Mr. Doss.

Mr. DOSS. I think I would say that we have a consensus here that decisions need to be made on sound science, and I would agree with that. And IBWA has supported the enactment of the 21st Century Water Commission, which will help those Federal agencies

share data with the State, that can allow the State to make more informed decisions, have better science. We think that is a great thing, and we support passage of that Federal legislation and think that is a proper role for the Federal Government.

Mr. KUCINICH. Thank you.

Mr. Wilfong.

Mr. WILFONG. Yes, I would agree with all that has been said. We need a lot of help, especially in the smaller communities that have few financial resources to be able to take a hard look at the groundwater situation.

Mr. KUCINICH. Thank you.

Mr. Hyndman, we showed a photo of the Dead Stream to the first panel witness from Nestle. And this photo was taken at a time after Nestle began pumping in Michigan. My staff was informed that this photo was shown to Nestle. What did you think the photo shows? What do you think it shows?

Mr. HYNDMAN. This is the mud flats in front of the Doyles' property, and the Doyles were involved in that case. And during this summer, as well as at least one previous summer, the conditions went to a point where the levels had fallen below what had been observed prior to pumping. And it is a situation where the pumping that is occurring is drawing down the water level beyond what the natural conditions would be. So, therefore, the impacts are exacerbated by the pumping that Nestle has——

Mr. KUCINICH. Was this beavers that did this?

Mr. HYNDMAN. No, this is not beavers. This is a low water level.

Mr. KUCINICH. How do you know? How do you know it wasn't beavers?

Mr. HYNDMAN. Because I am very aware of what is happening at this site. And there has been a beaver dam intermittently down below this site.

Mr. KUCINICH. How many beavers would it take do that?

Mr. HYNDMAN. I am not sure how many beavers.

Mr. KUCINICH. OK. I just thought I would ask.

Ms. Hauter, is there a connection between what you see as a threat of privatization of public water resources and the deterioration of the public water infrastructure? Could there be some sort of taxation scheme by which either consumers or producers of water products fund improvements in the public infrastructure, such as the Clean Water Fund that you propose in your written testimony?

Ms. HAUTER. Yes. This is one of our main concerns with bottled water. Because it is sold as safer, because we no longer see public water fountains being built, we are concerned that it is actually undermining our public water systems. And we do generally have very safe and affordable drinking water, but we have real infrastructure problems. And every year there is a $22 billion deficit. And in the future, in the very near future, if we don't have more Federal investment in our water infrastructure, we could be in a situation where there isn't safe and affordable drinking water. So we would like to see that public commitment to safe drinking water grow. And we do need a clean water trust fund to do that.

Mr. KUCINICH. Thank you very much.

I want to thank all the witnesses. I am Dennis Kucinich, chairman of the Domestic Policy Subcommittee of the Oversight and Government Reform Committee. This has been a hearing on assessing the environmental risks of the water bottling industry's extraction. I want to thank all the witnesses from the first and the second panel for their cooperation. The subcommittee will be in correspondence with you to followup on some of the points that were raised today. I want to thank the staff on both sides for their participation, Mr. Issa for his cooperation.

And without further discussion, this committee stands adjourned.

[Whereupon, at 4:26 p.m., the subcommittee was adjourned.]

[The prepared statement of Hon. Bart Stupak follows:]

Opening Statement by Congressman Bart Stupak
Subcommittee on Domestic Policy
"Assessing the Environmental Risks of the Water Bottling Industry's Extraction of Groundwater"
December 12, 2007

Thank you, Mr. Chairman, and Members of the Subcommittee for holding this very important hearing on the environmental risks posed by the water bottling industry's extraction of groundwater.

Since 1992, I have made it my mission to protect and promote Michigan's most precious resource, the Great Lakes.

The Great Lakes are important to area residents for more than just a source for drinking water. Millions of people rely on the Great Lakes for jobs, transportation, agriculture, and energy production. 180 million tons of cargo are shipped annually representing an over $4 billion economy.

Currently, Great Lakes water levels have reached the lowest point in recorded history dating back to 1918.

As a result, additional expensive dredging projects will be required to sustain access to harbors and transportation routes for commercial shipping. Lower water levels have also affected water quality by reducing the lakes ability to flush out toxic substances and excessive levels of nutrients, such as phosphorous and nitrogen.

Groundwater sources, which bottling companies seek to extract from, play a vital role in replenishing the Great Lakes. Groundwater alone makes up approximately 35% of Lake Michigan. Today, the Army Corps of Engineers website shows that Lake Michigan is more than 2 feet below its monthly average.

The Nestle Company pumps 218 gallons per minute of groundwater headed for Lake Michigan. The City of Detroit has also entered into water contracts with Coke and Pepsi to bottle and ship substantial amounts of Great Lakes water as Aquafina and Dasani. Future water bottling facilities have already been proposed.

These companies do not own this water, the people in the Great Lakes basin do. Regardless, bottling companies are being allowed to take a shared resource, our Great Lakes water, and turn it into a commodity which they sell for a profit.

With the net profit of the bottled water industry in the billions, the drive to extract more from the Great Lakes for commercial gain will increase. The problems associated with low water levels in the Great Lakes will only become worse with the expansion of the bottled water industry.

Many in the bottled water industry will argue that their extraction of this public resource will have no impact on the natural ecology.

However, Mr. Chairman, these arguments ignore the astronomical growth of consumption occurring in the United States. The Beverage Marketing Corp. estimated that the U.S. consumed 8.2 billion gallons of bottled water in 2006, 3 billion gallons more than 2001.

Without a ban on the extraction of groundwater sources in the Great Lakes Basin for bottled water export, it won't be long before irreparable harm is brought upon this pristine environment. The reckless commoditization of groundwater only serves to add unnecessary pressures to an already struggling environment.

Groundwater plays an integral part in replenishing our Great Lakes. According to a recent study on Great Lakes water, the lakes replenish themselves by less than 1% per year. We consume 3%-5% per year, resulting in an average net loss of as much as 4% per year. We cannot afford to lose any water that helps to replenish the lakes.

Mr. Chairman, thank you again for holding today's hearing on this critical issue.

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