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

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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:]

Protecting the Great Lakes

FROM MINES AND OVERUSE

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 profits 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

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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 hydrologist will explain, for every gallon of water pumped out of 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 "groundwater mining," which the U.S. Geological Service describes as "a prolonged and progressive decrease in the amount of water stored in a ground-water system." Moreover, high capacity bottled water extraction in headwater locations

can cause large percentage reductions in the flow of streams and rivers and depletion of watersheds.

Bottlers may seek out private landowners 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 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.

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common law, groundwater has largely been regarded as a resource that can be extracted by anyone who owns the land above an aquifer or a 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 worldview nature of the common law, it is not surprising that states have enacted more comprehensive regulatory systems governing 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 scrutiny for larger withdrawals. At worst, state laws are woefully inadequate.

Although groundwater management is mostly a state concern—and 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 Survey so that 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 an issue 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 aid the reform process at all levels of government.

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:]

[illegible]

redistribution of [illegible] water negotiations between NWNA and a few local politicians and public servants. The "negotiating committee" for the MCSD consisted of three supervisorially-elected officials, while NWNA had the best legal and business resources their money can buy on their team. It was not a fair match.

As the details of contract began to emerge, controversy concerning the terms of the deal increased. The contract is egregiously one sided. It gives NWNA access to both spring waters and groundwater. The MCSD is getting far below market rates for extracted quantities of some of the best fresh water on the planet (compare $24 per acre-foot vs. $80 per acre-foot average base price in California in 2006 dollars). The terms of the 10th 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 [illegible] are projected to be less that 1/10th of 1% of the projected bottling plants "achievable revenues." Our MCSD is left with all of the potential risks and NWNA with the benefits.

Concerns over the overdraft and proposed project gave Nestle and the MCSD bacterial a PR campaign around the premise 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 MWSD to have approved the contract — ruling it "void 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 hydrogeologically 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 foot site it would be the largest bottling plant in North America. The MWC is publicly opposed to this project as it is currently proposed.

In January 2007, I, along with other members of the MWC, CMC and the Siskiyou Hands Bicoastal Ecology Center was served with a subpoenas from Nestle-America. 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. Visit MWC comments at www.mcloudwatershedcouncil.org and California Trout and Trout Unlimited comments at www.protectmcloudwaters.org. A key area of concern is the lack of available baseline data on the area's hydrogeology upon which to make a credible

[illegible]

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

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

("MDEQ"), to which the citizens overwhelmingly supported the Nestlé operation. Nestlé expended a multi-million dollar ad campaign that appeared the project by a 2:1 margin. With the help of local environmental experts, Nestlé submitted comments to the MDEQ showing that Nestlé's assessment and modeling was flawed.

Nestlé pursued their recovery permit application in a two dimensional and reports under the Federal Water Resources Development Act ("WRDA"). After hearing arguments from Nestlé and Nestlé, Attorney General Granholm issued a letter of opinion to Governor Engler and the Legislature that the Nestlé proposed violated WRDA. Even after this, the MDEQ issued a water-drinking, water permit to Nestlé for pumping 400 gallons per minute in two counties of Mich.

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 11, 2003, after 14 days of trial spanning three months, Judge Lawrence Root issued a preliminary ruling. In his 49-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 was sinking between Chippewa Lake and Deep Blowout
- Withdrawal of groundwater would divert and diminish the flow of the stream by at least 25%
- The level of the stream and any lakes would be lowered by 3 to 6 inches
- The effects of sinking would impact the streams, 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 consumed from a watershed diminished the flow or level of a lake or stream, it was unlawful as 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 218 gpm during the appeal. In November 2005, the Court of Appeals affirmed the trial court's findings on unlawfully heavy 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 harmful consequences are minimal, water may be diverted or exported.

[redacted]

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 Removal from its previous denials of the Large Groundwater Permit for USA Springs, Inc.* on behalf of the Neighborhood Coalitions realizing 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 317,000 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 almost 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 11,806.

When the permit was denied in 2003 there were more than 25 scientific reasons 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 7, 2003. This record was prepared by William Ryle, 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

[illegible] meeting were 1 NH State Senators, 2 NH State Representatives, the Executive Director of the Strafford Regional Planning Commission, one of the Selectmen from the Town of Nottingham, 3 members of the Board of Directors of Save Our Groundwater, including myself, Anthony Giunta, Administrator Water 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 reality of the situation. For example, Mr. Giunta stated "There will be a pump test with both sites running before a permit is issued". [1] Mr. Giunta is referring to the USA Springs Inc. site and the former Harmon 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." 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. [2]

[illegible]

Are we to believe that after more than a year of NSDES inaction on the potential contamination that in September 2001 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 1, 2004 meeting when Mr. Cicotte 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 Cicotte 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, "Inflammation has come in at the last minute. If they walk out, ... These contaminants stay longer 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 Cicotte stated, "Contamination did migrate over to USA Springs".

last prior to the end of the meeting Gloeta said, "'never saw any other project move through DES as fast as this project has been going". "

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"

On October 3, 2001 NHDES issued a letter of Deficiency WET 2001-05 to Corriere Place Real Estate Investment Trust/ Francesco Rotondo, trustee, also d/b/a USA Springs Inc. This was followed up by Administrative Order WDHD 01 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 2002-01 regarding an illegal weir that was installed on the David Harvey property in Barrington during the Pump Test, showing 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 General 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 2005) remains open and apparently unresolved. You can see why citizens in Southeastern New Hampshire are upset with the State and Federal Governments utter failure to protect the natural resources of our region.

[1] Page 3 of party submission
[2] See Minutes of Select Meeting, NHDES to Gary Lynn and John Rogers, NHDES
[3] See page 3 of prior submission
[4] See pages A-1 + A-2 of prior submission
[5] Page 35 of Inside the Bubble 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 is now. Back then the nonalcoholic drink of choice was soda. Nationwide, 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. Are one and /or 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 8,000 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

[illegible]

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. BWNA 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 projects 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 sustainable Nestlé efforts. 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 0.03% of groundwater and 0.0017% 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 caring 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 scientifically 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 on 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, the company and other water bottlers...as you'll hear later from Alicia 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 one 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 2008 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 more 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 in 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 primarily 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 – a premium product 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 decommissioned 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 $100 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.

Jointly water source study completed — The company's team of scientists has identified a potential spring water source approximately 12 miles from the plant site. Nestlé negotiated an agreement with the landowners 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 was 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 2005 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 experiences 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, commitee 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 606
- Annual payroll of $16.6 million, creating an 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, 3,000 applicants applied for 50 positions, 1,900 applicants applied for 60 positions in 2006, and in 2007, 800 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 new $200 million facility has generated an estimated 1,200 contractor jobs.

It is common knowledge that Michigan continues to experience difficult economy 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 Nestlé.

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 rainscaping, low energy lighting and motion activated 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 account 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

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Support to others for the greater good and community involvement

[illegible]

[illegible]

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

- 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 2001, Nestlé started purchasing spring water from the City of Evart located approximately 20 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 2003 as a result of an invitation in 2001 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 Nestlé. 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 Nestlé 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 bottle 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 $250,000 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 aided in 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 enhances 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 near 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 areas;
- 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 Bohemian 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 worked aggressively to lay the best 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 hosting on a Midwest bottling plant in Evart. The investment would top $100 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 known 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 is below, 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 6 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) considered 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 sees 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.

Nestlé Waters was not looking to site a facility 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 the agreement, Nestlé 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 640 secondary jobs. The university's analysis also found that at full build out Nestlé's project will bring at least $21 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. These 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 catalyst for economic development not just in Mid-Cloud but throughout the region, providing as much as $1 million in annual property tax revenues. The communities in Siskiyou County, like many rural counties, are interdependent and so employment opportunities in Mid-Cloud 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 California 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 Mid-Cloud 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 build 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 review and recirculate its draft environmental impact studies to allow for additional public review and comment. This process is still ongoing.

LEED™ Certified Facility – The Mid-Cloud 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, efficient 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 Mid-Cloud project will include an extensive long-term spring, water and natural resource monitoring program to ensure the health of Mid-Cloud's spring sources and surrounding environment.

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

[illegible]


Corporate Citizenship
Vision And Commitment


Supporting A
Healthier Lifestyle


Ozarka
Lighter
Packaging
Green
Buildings


LEED® Green Building Site


Responding To Disasters


Being a Good Neighbor in Our Communities

A Response To Important Questions About Ice Mountain Bottled Water

Original Study Research Investigation Case

Public Dialogue Questions, Answers, and Key Perspectives


Just for Comparison...
How Much Water...

JUL 30 1965

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

ice Mountain continues to fulfill Evart commitment

ICE MOUNTAIN from 1

OCT 12 2009

Booher: Evart water station opening quenches economic thirst

McCloud Arrowhead Project
Rycki and Paola
(March 2001)

Abbreviations and Definitions Used

CEQA – California Environmental Quality Act
NEPA – National Environmental Policy Act
EIR – Environmental Impact Report
EA – Environmental Assessment
MMWD – Marin Municipal Water District
MCSD – McCloud Community Services District
USFS – United States Forest Service
DWR – California Department of Water Resources
MPC – McCloud Preservation Council

Mark 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 …they've also given our town to Nestlé, and we'll never get it back.

Paul MCSD owns and retains all water rights in McCloud's water basins and simply as a customer of the District.

Mark The contract with Nestlé puts no limit on the amount of water it can take from McCloud's aquifer. Drilling into this type aquifers is a gravely attempt to capture the "unlimited" groundwater that the contract entitles Nestlé to. This could result in significant damage to the Huterites and McCloud's tourist district.

Paul Through the contract, as subject to the completion of the review under CEQA, MCSD will have the authority to establish an enforceable water limit to [illegible] for all water bottle wishes to purchase from MCSD (saving water and/or well-water). MCSD also has the authority to require Nestlé to create all other rules and regulations that apply to all other businesses in McCloud.

Mark 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 share.

Fact [redacted]

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 wishes are respected.***

Fact [redacted]

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

Fact [redacted]

be thoroughly evaluated under CEQA before any water is sold to NMWA. 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 NMWA until the CEQA analysis of the "water draw" has been completed.

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

Fact Desalt will not drain the McCloud River; we will be a wastewater 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 NMWA; 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 NMWA.

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

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 NMWA 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

[illegible]. Subsequently, another public meeting was held on 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, Rialto appealed the Siskiyou County Superior Court ruling. Since Rialto 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 Rialto 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 awful aspects of its signed contracts.**

Fact The contract between Rialto and MCSD clearly contained a provision requiring CEQA review prior to project implementation. Rialto 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 Rialto. On January 2007, the California Court of Appeals, 3rd Appellate District, ruled in favor of MCSD and Nestlé, 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 Nestlé is contingent on the completion of the CEQA analysis.

Myth **This is a sweetheart deal for Nestlé. The town of McCloud will receive $200,000 annually for 99 years, with no hope of an increase, while the infrastructure costs generated by Nestlé would skyrocket.**

Fact No section in the contract forbids any increase to payment to MCSD over the term of the contract.

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 **Rexiid's low estimate is that 300 additional trucks will be traveling in 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 (generally 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 as needed. Rexiid 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 Rexiid 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 wood building plants and even larger than the Lakeside Wal-Mart distribution center southeast of Red Bluff. The Rexiid 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 Rexiid 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 Mestiti 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. Mestiti 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.

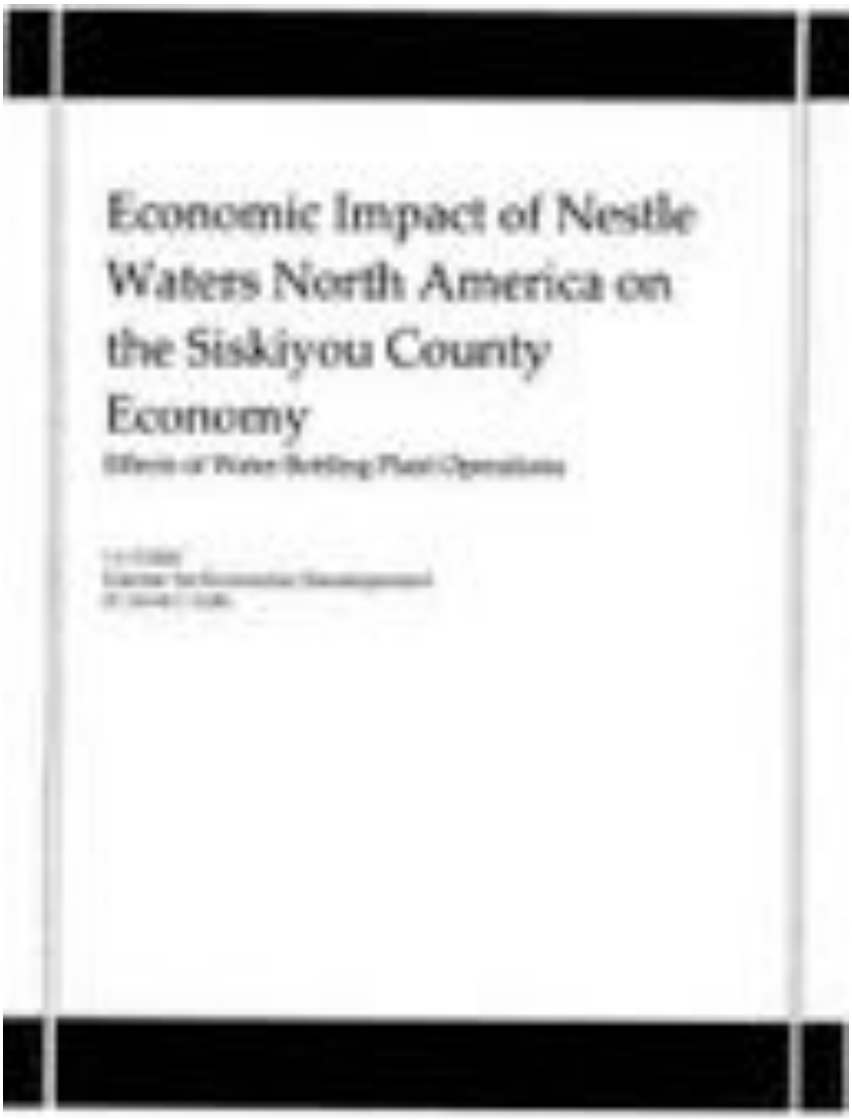
The MCSD/NWNA contract also requires NWNA to pay for the maintenance and upkeep of the infrastructure that serves the project. This provides MCSD with a mechanism to monitor NWNA's activities and helps you to keep district employees unnecessary. Additionally, NWNA's upgrades to the water system will 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 ***Mestiti 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 why

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

During depositions, Nestlé was informed of the link between Concerned McCloud Citizens, Mr. Chaska Bioregional Ecology Center and the McCloud Watershed Council. We worked within the legal system to request subpoenas for financial records of the RWC and the RSWC. The judge denied our requests when RWC and RSWC 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

Introduction

Report Purpose and Scope

Summary and Conclusions

Limitations of the Study

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 Sebastu 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, readers in weighing the information contained in this report, will aid in coming to a decision regarding whether or not to support its going forward. The 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 Hardie. Direct employment estimates (the jobs for the plant were based on their operations at their Mercedes plant and the provided jobs 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 $4.5 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. (IMPLAN)

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 vertical business activity and related 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

The key 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 totals for the local income and employment impacts.

3

Table 1: Direct, indirect, induced, and total impacts on

Valleyview County Income and Employment

	Direct	Indirect	Induced	Total
Income (Millions of 2024 dollars)				
Case 1	$11.70	$7.17	$6.32	$25.19
Case 2	**$14.62**	**$8.97**	**$7.91**	**$31.49**
Case 3	$7.31	$4.47	$3.93	$15.71
Employment				
Case 1	134	148	115	397
Case 2	**164**	**185**	**143**	**492**
Case 3	82	93	71	247

Conclusions

Economic Impact vs. Resident Benefits

It is important to put the reader into context the total economic impact of the facility with the economic benefit received by existing residents. Economic impact only indicates economic benefits and associated jobs in the state where all jobs exist and income is due to existing residents. In order to illustrate this point, assume 40 jobs (40 out of the 247 total jobs in Valleyview County) existing outside of the county. Then, for case 1, resident employment and income are increased by a combined total (direct, indirect, induced, wages/salary)

However, this does not include the added impact of the development activity required for new residents, including the effect to the [redacted] income/jobs that is lost. Assuming the effect is the [redacted] income/jobs that is lost and $1.1 billion in income. Thus, if all jobs were taken by non-residents, the Valleyview County employment and income impacts and resident economic benefits were estimated to be [redacted] and $36.42 million respectively.

Are New Water Softing Plant in Oaklawn County vs. the Kaolin Plant strike Mutual Ids

A multiple for understanding the county that has economic impacts assessed is not based on the estimates of the increased jobs and income that will be in turn building and operating a water softing plant. If the study proposed by Hardy within Oaklawn County. The impact estimates are not specific to the proposed site and would be the same for another location in the county. An plant was constructed and the county of

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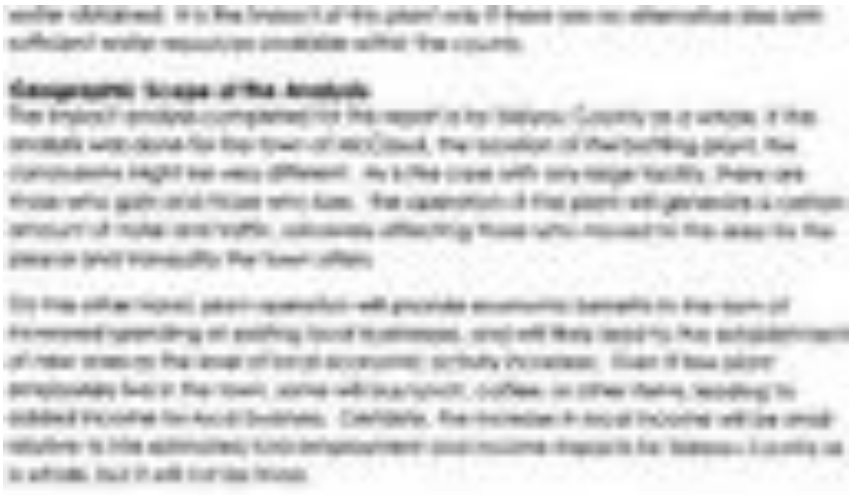
The model on employment and economy impact is based on the output (economic loss as indirect and induced) and economic impact of a resident (Hardy County resident).

5



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
		[illegible]	[illegible]
		[illegible]	[illegible]

Redding Record Searchlight Editorial: 'Industries' are the wrong path to prosperity

November 24, 2007

Dear dude: A study commissioned by opponents of a recent drafting plans on Bill Creek to argue the defense argument that the most valuable use of natural resources is in pure drive alone. The record of the timeline and high standard goals to transform [illegible] with that philosophy really.

If we could grow rich off of our coast trees and water, many world-class residents would make up a healthy share of the richest 400 individuals.

Alas, it doesn't happen to us.

And despite forecasts claims that economic could be the economic engine for the region, the future [illegible] — while valuable — has never reached the market [illegible] and homegrown.

But the fundamental argument that the most valuable use of natural resources is to leave them alone is being recycled, and the latest volume comes from a report commissioned by opponents of the proposed mass-trucking on Bill Creek.

The analysis from Cogent, Inc. raised $3.1[illegible] argues that "quality of life considerations" once held were [illegible] and are, [illegible], as well as natural resources for fishing and other recreational opportunities. "These [illegible] amenities are increasingly valuable assets," the report said.

And not just for Bill Creek. The study maintains: "If [illegible] agribusiness on Mineral Creek to [illegible] urban and agricultural uses in the Sacramento Basin and San Joaquin Valley, the water flowing from Bill Creek helps support the region's quality of life."

The methods in study to be that Trinity's fishing industries would [illegible] Trinity and nearly the orange groves of Tulare County. It wasn't. The point: I still can't [illegible] would be less than zero [illegible] of Lower Alaska's fishing. In any case, it wouldn't be [illegible] if [illegible] Trinity [illegible] more interested in maximizing there more prosperity. We also [illegible] in kingdom [illegible] of miles away.

As for the effect on Bill Creek and Trinity's trees, they are certainly worth preserving. Thinking more on a work the economy of the timber [illegible].

But there's no reason to believe the fishing [illegible] would dry [illegible]. Trinity comes down from 6,000 square miles, and only [illegible] that the land is publicly owned. The county, [illegible] of a

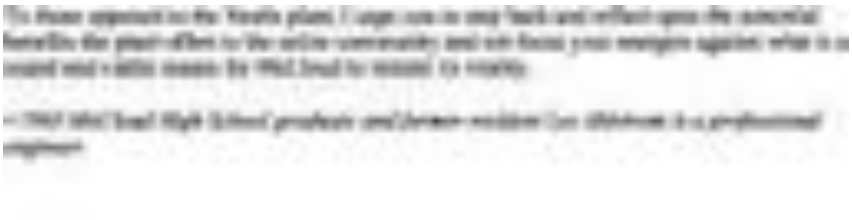
[illegible]

Mount Shasta Herald

Mount Shasta Herald

Mount Shasta Herald

[illegible]



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 House Office Building

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 our 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 expansion in rural communities.

The bottled water industry, including Nestlé, Pepsi, and other companies, has seen explosive growth over the past 30 years. These companies are enjoying hundreds of millions of dollars in profits annually from selling the myth that bottled water is

[illegible]

[illegible]

[illegible] to the garbage instead of being recycled.

[illegible] 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 [illegible] plastic bottles and containers is just over [illegible] percent in 2010. And at best, many plastic bottles of all types and colors will be [illegible], which releases toxic hydrocarbons, such as chlorine gas and ash laden with heavy metals.

Besides the cost to the environment of the plastic bottles, water rationing could have long-lasting effects on the rural communities where it is placed. Where the flows and levels of [illegible] springs, wetlands, lakes, streams, and rivers are materially altered because of connections for bottling, the entire local and even regional environment suffers, and this includes the communities that depend on the water—agriculture, individuals, businesses, tourism, and recreation.

Many communities across the country develop water management plans that also take account [illegible] and climate, including drought. The people and businesses living and operating there have no love [illegible] but bottling companies are often given 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 700 million gallons of water annually, concerned citizens have said that the proposed contract between city [illegible] water provider and the international beverage

[illegible]

[illegible]

[illegible]

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 13, 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** *. Firms 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 as surface water bodies.
2) The nature of the required hydraulic connection are for pumping encourages placement of these "spring water" extraction wells in areas where the environmental consequences of such extraction is likely the most significant.

[illegible]

[illegible]

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 like "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 DEA definition of spring water encourages placement of "spring water" extraction wells in environmentally sensitive headwaters of stream systems.

Additional research is needed by 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"

Written Statement of Noah G. Hall
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Testimony Before the United States 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 13, 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 the testimony describe "the existing state and federal regulatory schemes that apply to groundwater and spring water extractions by the water bottling industry" and evaluate "the adequacy of these regulatory regimes."

Pursuant to House Rule XI, 2(g)(4), I note that I am appearing in a non-governmental 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 reforms 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 six 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 contamination. The most important environmental concerns from a legal and regulatory perspective relate to the impact of water extraction on (a) the richness of aquifers 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 pressure on vulnerable spring resources. The FDA should immediately begin a process to correct 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 the relationship, 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. States 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 exercising 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. Most 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 alterations. 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 Water Resources Compact, which would protect and manage all withdrawals within the Great Lakes basin pursuant to minimum statewide environmental property under the authority of individual states and provinces. The proposed compact standards represent milestones advances in the development of water use law, including uniform treatment for ground and surface water withdrawals, water conservation, stream flow, and prevention of environmental impacts. Examples such as this should be developed and implemented at the state and regional level nationwide.

[illegible]

[illegible]

[illegible]

[illegible]

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 store tap water.[1] 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."[2]

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. Instead, the survey could find only four results where federal health standards were exceeded. Closer inspection reveals that the very results charged by the NRDC Report to exceed total coliform standards, were in fact quite likely false positives because they would 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 applications, as to be irrelevant to public health. In fact, the levels found in the bottled water are below the 2.0% health-based fluoride standard for public water systems.[3]

It should also be noted that NRDC has subsequently determined that many municipal water supplies also have exceedances of drinking water standards.[4] For purposes of this analysis, it is fair to conclude that concerns remain regarding drinking water quality standards (from both bottled and tap), and environmental groups such as NRDC would advocate stronger standards and more enforcement to protect public health from all drinking water sources.

1) Concerns regarding pollution and waste resulting from the manufacturing, shipping, and disposal of plastic water bottles.

If bottled water had no water to 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 14 million barrels of oil annually.[5]

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[1] Id., Executive Summary.

[2] Id.

[3] Drinking Water Research Foundation, Analysis of the February 1999 Natural Resources Defense Council Report on Bottled Water, available at http://www.dwrf.org/nrdc, visited September 2000.

[4] See generally Natural Resources Defense Council, [illegible], available at http://www.nrdc.org/water/drinking/tuttles/contents.asp.

[5] Earth Policy Institute, Water as an Economic Resource, available at http://www.earth-policy.org/Updates/Update1.htm.

[illegible] 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 addition to tap water, which is distributed through an energy-efficient infrastructure, transporting bottled water long distances involves burning massive quantities of fossil fuels."[27] 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[28]), 86% of plastic water bottles used in the United States become garbage or litter.[29]

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.[30] The Conference of Mayors resolution stated:

> 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 190,000 homes or fuel 100,000 cars for a year.[31]

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 unbalancing for retail grocery beverage bottles on the marketplace. "It's unfair to say bottled water is causing more plastic to landfills, and it's using energy transporting it. There's a substantial offset – it's eliminating the juices and sodas and drinks."[32]

The substitution arguments 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 "[w]hen they carry containers act as if you just killed their puppy. If you dare dispose a bottle in the garbage."[33] Yet despite the attention, people still buy bottled water. While many consumers probably don't consider the

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[27] Id.

[28] See International Bottled Water Association Recycling Resource Center, available at http://www.bottledwater.org/public/RR_Home.htm.

[29] Earth Policy Institute, supra note 21.

[30] United States Conference of Mayors, Resolution regarding Implications of Municipal Water (2007), available at http://www.usmayors.org/resolutions/75th_conference/environment_02.asp.

[31] Id.

[32] See Feldman, supra note 4 (quoting John Mackey, CEO of Whole Foods Market).

[33] Alex Williams, Plain, Plain Environment, But Could Go the Distance, The New York Times (August 31, 2007).

environmental impacts of energy and waste, a fourth citizen selected by the same New York Times article that she will buy bottled water as a "guilty pleasure."[17]

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 forces 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.[18] The bottling and sale of water is often seen as a clear example of water privatization and commoditization, with other examples including private control of water distribution systems and schemes for the bulk export and trade of water as a global asset.[19] A story can be told 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 ascertain these impacts, it is important to first explain the applicable sources 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 basin-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 0.02%) of the total groundwater

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[17] Id.

[18] Sierra Club, Water Commodification and Corporate Privatization of Municipal Water/Sewer Services Policy, available at http://www.sierraclub.org/policy/conservation/commodification.asp

[19] 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 fresh water production is approaching 400 billion gallons (over all of which comes from groundwater). The United States Geological Survey estimates that total annual groundwater withdrawals in the United States in 2000 were 79,600 billion gallons.[9] Of this total, agricultural use of groundwater for irrigation comprises over 68% (54,769 billion gallons) of the total groundwater withdrawals.[10] 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%),[11] so this 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 aquifers. 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 effect when groundwater users whose wells go dry or stop producing potable water.[12]

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 in steps. The water may either be decreased groundwater discharge to the stream or increased recharge to the groundwater system from the stream. In other cases, 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.[13]

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[9] 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

[10] Id.

[11] See, e.g., Water Resources Engineering, Ray K. Linsley, Joseph B. Franzini, David L. Freyberg, George Tchobanoglous, 4th Edition, McGraw-Hill (1991), available at http://www.gfi.org/resources/waterfootprint.pdf (70% consumptive use); Water Footprint, Arjen Y. Hoekstra, Ashok K. Chapagain, Maite M. Aldaya, Mesfin M. Mekonnen, Earthscan (2011) (90% consumptive use).

[12] For a more thorough discussion of these impacts, see Robert Glennon, Water Follies: Groundwater Pumping and the Fate of America's Fresh Waters (2002).

[13] Groundwater Investigation Technical Report, Public Service Commission, Report to the Legislature, Pursuant to P.A. 34 of 2001, Section 10 (Senate Bill 213), March 4, 2004, available at http://www.dnr.state.mi.us/documents/Groundwater_legislation.pdf

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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 Banking

While water withdrawal and extraction are not generally regulated under federal law, for an urban toll to water law, several federal environmental laws may incidentally apply to a specific water banking project.

1. The Federal Water Pollution Control Act (Clean Water Act)

Section 404 of the Federal Water Pollution Control Act[87] (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."[88] Section 404 is a "modern supplement"[89] to section 10 of the Rivers and Harbors Act of 1899,[90] 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."[91] The scope of this definition was the subject of a recent Supreme Court opinion, *Rapanos v. United States*.[92] 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. §328.3(a)(7). 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."[93]

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[87] 33 U.S.C. § 1344.
[88] 33 U.S.C. § 1344(a).
[89] Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, 531 U.S. 159, 167 (2001).
[90] 33 U.S.C. § 403.
[91] 33 U.S.C. § 1362(7).
[92] 126 S.Ct. 2208 (2006).
[93] *Rapanos v. United States*, 126 S.Ct. 2208, 2248 (Kennedy, J., concurring) (2006).

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> chapter to the extent that such jurisdiction may be exercised without impairing the purposes of this chapter or its administration.[92]

However, section 10 of the Act seems to provide authority to limit non-water withdrawals that impair 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 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.[93]

3. The National Environmental Policy Act

The National Environmental Policy Act (NEPA) of 1969[94] was intended to "promote environmentally sensitive decision-making without prescribing any substantive standards."[95] 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."[96] 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.[97] Again, however, the major limitation of NEPA is that it only applies to federal actions. Any water withdrawals are made pursuant to state law, NEPA does not generally apply. In some instances, such as where 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)[98] 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 ensure that their actions are not likely to jeopardize the listed species' continued existence or harm their critical

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[92] 16 U.S.C. § 1278(a)(3).
[93] 16 U.S.C. § 1281(a).
[94] Pub. L. No. 91-190, 83 Stat. 852 (codified as amended at 42 U.S.C. §§ 4321-4347 (2006)).
[95] Andersen v. Evans, 314 F.3d 1006, 1014 (9th Cir. 2002).
[96] Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989).
[97] Sierra Club v. Peterson, 717 F.2d 1409, 1413 (D.C. Cir. 1983); see also 42 U.S.C. § 4332(2)(C).
[98] 16 U.S.C. §§ 1531-1544.

habitat.[82] The ESA also prohibits any person from "take[ing]" a listed species, which includes destruction of habitat.[83]

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 transfer, although it has affected other private water users with considerable controversy.

1. 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).[84] 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.[85]

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 Commerce Clause.[86]

It is still not a settled question whether the ban on diversions applies to bottlers 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.[87] Further, 1986 WRDA lacks any standards for the governors' collective approval and may not apply to groundwater.[88] Thus, it does not provide a solid basis for addressing bottled water withdrawals.

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[82] 16 U.S.C. § 1538(a).

[83] See 16 U.S.C. § 1538(a)(1)(B); Babbitt v. Sweet Home Chapter, 515 U.S. 687 (1995).

[84] Pub. L. No. 99-662, § 1109, 100 Stat. 4082, 4136 (codified as amended at 42 U.S.C. § 1962d-20 (2000)).

[85] 42 U.S.C. § 1962d-20(a) (2000). This section only applies to new withdrawals; withdrawals authorized before 1986 are not covered by the ban. Id. § 1962d-20(f).

[86] 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.

[87] See Lake Carrizo Dev. Assoc. of Citizens United v. Great Spring Waters of Am., Inc., 332 F. Supp. 2d 873, 878 (N.D. Tex. 2003). For additional commentary on the lack of a private right of action under 1986 WRDA, see Charles F. Wilson, Jr., Note, Enforcing Great Lakes Water Export Restrictions Under the Water Resources Development Act of 1986, 103 Colum. L. Rev. 1461 (2003).

[88] See Noah D. Hall, Toward a New Horizontal Federalism: Interstate Water Management in the Great Lakes Region, 77 U. Colo. L. Rev. 405, 429 n.111 (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 limited water supplies.[77] 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 beyond undertaking and is beyond the scope of this analysis. Instead, this section will provide a general overview of groundwater withdrawal law in some select 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.[78] The issue came to the Supreme Court of Ohio as a certified question from the United States Sixth Circuit Court of Appeals,[79] so the facts are not particularly important and the case provides an excellent summary of the law (until the case did not involve bottled water). The certified question asked the Supreme Court of Ohio: "Does an Ohio landowner have a property interest in an aquifer of the groundwater located beneath the land owner's property as is necessary to the use and enjoyment of the owner's home?"[80]

The Supreme Court of Ohio first reviewed its prior decisions on groundwater rights and liability for groundwater withdrawals. 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."[81]

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[77] For examples of this work see USGS, *Water Supply Publications*, http://water.usgs.gov/pubs/ (last visited Sept. 15, 2014).

[78] Northeast Ohio Regional Sewer District v. City of Wadsworth, 2014 Ohio 2, 2014 WL 29 (Ohio 2014).

[79] Wadsworth v. City of Columbus, 2013 U.S. App. LEXIS 25 (6th Cir. 2013).

[80] Wadsworth v. Columbus, 2014 Ohio 2, 2014 WL 29 (Ohio).

[81] Frazier v. Brown, 12 Ohio St. 294, 1861 Ohio LEXIS 1 (Ohio 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 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.[11]
>
> 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.[12]

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.[13] 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 the 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."[14] The court further stated: "[Groundwater] rights are appurtenant to title to real property. . . . By way of analogy, a riparian landowner does not own the water as it passes 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."[15] The court concluded:

> The well-being of Ohio landowners, the stability of Ohio's economy, and the reliability of real estate transfers require the protection of groundwater

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[11] *Id.* at 111.
[12] *Id.*
[13] Ohio v. Am. Aggregates Corp., 979 N.E.2d 1214 (Ohio 2012).
[14] Restatement, 858 § (2) at 447.
[15] *Id.*

> rights. We therefore hold that Ohio landowners have a property interest in the groundwater underlying their land ...."[3]

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 reasonableness with their neighbors' rights. The decision provides a clear rebuke of the outdated rule of capture (as done 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 reminiscing the notable exception of Texas. In *Edwards v. Great Springs Waters of America, Inc.*,[4] the Texas Supreme Court heeded the trend displayed by Ohio and many 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 Ruby Springs in Big Bend, Texas.[5] Only four days after the pumping started, Barton Springs and several other local homeowners experienced decreases in their well water supply and brought suit against the water bottler.[6] 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."[7] 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.[8]

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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[3] *Hay/Hamann*, 2018-Ohio-[illegible]
[4] [illegible] (Tex. 1999).
[5] *Edwards v. Great Springs Waters of America, Inc.*, [illegible] at *73-74.
[6] *Id.*
[7] *Id.* at *73.
[8] *Id.* at [illegible].

In *Michigan Citizens for Water Conservation v. Nestlé Waters North America Inc.*,[8] defendant Nestlé sought to pump approximately 400 gallons per minute (gpm) of groundwater from four wells located on a site called Hackney Springs in northern Michigan. The wells would supply Nestlé's "Ice Mountain" bottled water production facility twelve miles from the Hackney Springs site. Nestlé selected the Hackney 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)(ii) (discussed above).

The plaintiffs were riparians along several nearby waterbodies, notably the unfortunately named Chain Lakes. 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 Chain Lakes), violating plaintiffs' riparian rights to the recreational use and enjoyment of such surface waters. Second, the plaintiffs claimed that the groundwater pumping violated the Michigan Environmental Protection Act (MEPA),[9] 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 Chain Lakes by 24%. Because Nestlé was pumping the groundwater for bottling off-site, 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),[10] which prohibits "establishment" 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 not 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 Chain Lakes 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, so 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 unreasonably affecting a hydrologically connected surface water.

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[8] Mich. Citizens for Water Conservation v. Nestlé Waters North America Inc., 709 N.W.2d 174 (Mich. Ct. App. 2005), rev'd, 737 N.W.2d 447 (Mich. 2007).
[9] Mich. Comp. Laws § 324.1701 et seq.
[10] Mich. Comp. Laws § 324.30301 et seq.

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E. The Proposed Great Lakes Compact: A Major Advance in Water Protection

The eight Great Lakes states[74] have recently proposed and begun adopting the Great Lakes-St. Lawrence River Basin Water Resources Compact.[75] 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.[76] 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 rights and environmental protection standards into a proactive public law regime. The standards represent substantive 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. Excluding an 1984 Wisconsin diversion 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.[77]

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 labeling regulations which have inadvertently caused some bottlers to seek exemptions from various state and local restrictions on their withdrawals of water resources. Second, the federal government should increase funding for data collection, research, and investigative monitoring groundwater resources and withdrawals, a role that is critically important to both water users and managers.

At the state level, the continued evolution towards protective regulatory laws is an 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 ample 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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[74] Minnesota, Wisconsin, Michigan, Illinois, Indiana, Ohio, Pennsylvania, New York, Ontario, and Quebec.

[75] 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].

[76] See Great Lakes Commission, Information on Water Resources Management in the Great Lakes-St. Lawrence River Basin (2005), available at http://www.glc.org/waterman/publications/pdf/WRMbasin.pdf.

[77] 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 U. Colo. L. Rev. 405 (2006) (an discussion of the compact's treatment of bottled water at pages 447-48).

Appendix 6 – C.V.

Noah D. Hall

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Academic Appointments

[redacted]

Education

[redacted]

Publications – Books

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Publications – Articles

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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
Economic 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 on IBWA's website: http://www.bottledwater.org/public/protocol_main.htm), which establishes standards to bottled water producers, quantity and determines that must be met by IBWA members. In certain cases, the IBWA Code of Practice is 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 assure 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 implementing parts of Title 21 of the Code of Federal Regulations (CFR). A cited source 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.

[redacted]

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IBWA

International Bottled Water Association

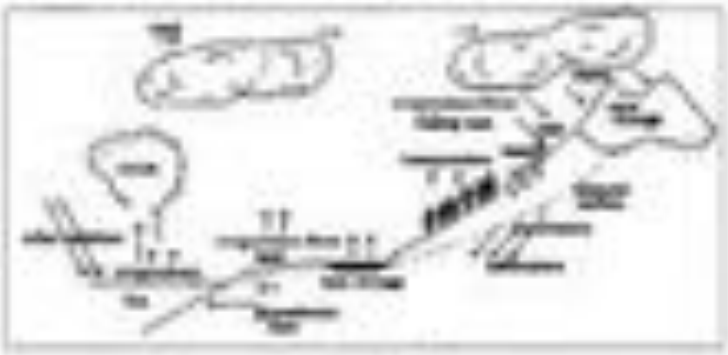
Groundwater Resource Management

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 area 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.

[illegible] whether all groundwater withdrawals should be managed in a sustainable and compatible manner. A study concluded that concerns about the [illegible] water industry's use of groundwater are not science-based or serious. [illegible] maintains 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. Use from groundwater withdrawals in the U.S. in 1995 (the latest year for which published data were available) were 21.4 million gallons. In 2001, total annual groundwater withdrawals for bottled water production were determined to be 5.15 billion gallons. Thus, groundwater withdrawals for bottled water production represent only 0.03 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 20 states east of the Mississippi River and Minnesota.
2. Under the prior appropriation doctrine, water rights exist when the water is taken from the source and is used (appropriated) for a beneficial use defined by law and which (landowner) purpose. This system applies in 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 reformed 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 inconsistently. The 'dual system' as used in (1) 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

[illegible] 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.

[illegible] Study by Dr. Alain Dubreuil

[illegible] offers the following guiding principles as the foundation for executing a comprehensive groundwater resource management policy and plan:

- **Scientific groundwaterbasin.** The primary effort of protecting and managing groundwater resources must be based on a solid foundation of appropriate and reasonably applied science. The flow, recharge rate, surface water influences 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 closely 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.

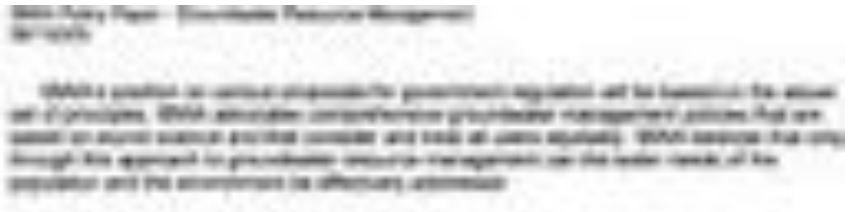
- **The plan shall be comprehensive and multi-jurisdictional.** Effective management of a groundwater resource must be multi-jurisdictional by the very nature. Watersheds, streams, basins and aquifers are not contained by local political boundaries only. Municipal, county, city or [illegible] control 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.

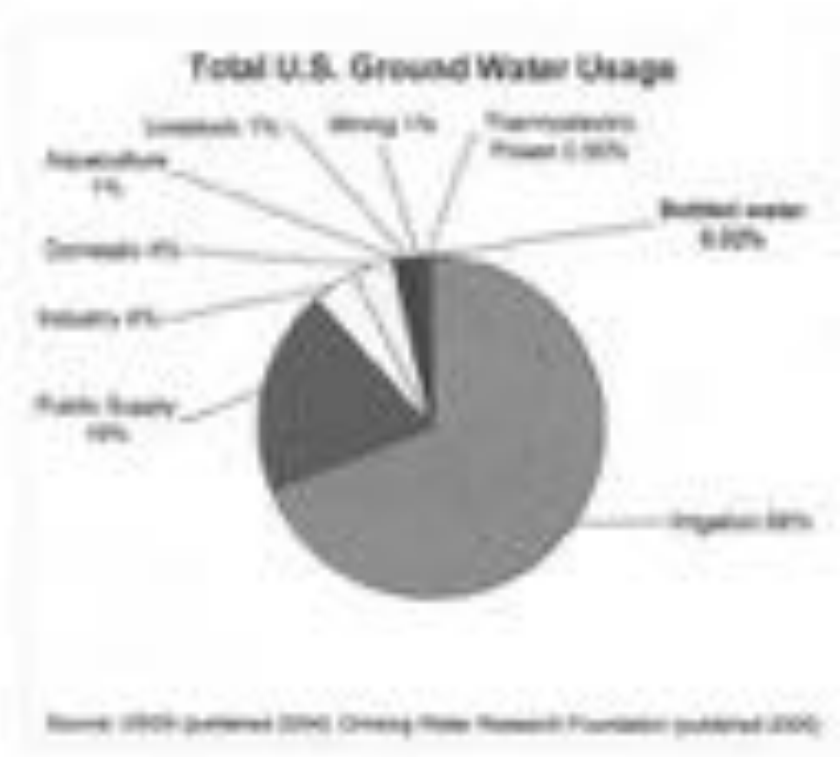
- **Consider all users in an equitable manner.** Allocations for water withdrawals must be reviewed under objective criteria that are based on science. Allocation of water resources should not be subject to circumstances escalating those applied to users of similar quantities and quality, such as monitoring 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 an 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




U.S. Beverage Market
Shares by Volume, 2006


Total U.S. Ground Water Usage
Livestock 1%
Mining 1%
Thermoelectric
Power 0.95%
Aquaculture
1%
Bottled water
0.02%
Domestic 4%
Industry 4%
Public Supply
19%
Irrigation 68%
Source: USGS (published 2004) Ohmeng Water Research Foundation (published 2004)

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:]

[illegible]

[redacted]

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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