Written Testimony of
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Oversight and Government Reform Committee
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Bottling Industry’s Extraction of Groundwater”
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Chairman Kucinich, Ranking Member Issa, and Members of the Subcommittee, my name is Joseph K. Doss. I am President and CEO of the International Bottled Water Association (IBWA) in Alexandria, Virginia. Thank you for the opportunity to present this written testimony.

IBWA is the trade association representing all segments of the bottled water industry, including spring, artesian, mineral, sparkling, well, groundwater and purified bottled waters. Founded in 1958, IBWA member companies include United States and international bottlers, distributors and suppliers. Bottled water companies produce a packaged food product that is comprehensively and stringently regulated by the United States Food and Drug Administration (FDA). IBWA is committed to working with state and federal governments to establish and implement stringent standards for assuring the production and sale of safe, high-quality bottled water products. In furtherance of this objective, IBWA has developed and published a Code of Practice (available at IBWA’s website: http://www.bottledwater.org/public/policies_main.html), which establishes standards of bottled water production, quality, and distribution that must be met by IBWA members. In several cases, the IBWA Code of Practice is even more stringent than state and federal regulations. As a condition of membership, IBWA bottlers must submit to an annual, unannounced plant inspection by an independent third party to determine compliance with the Code of Practice and all applicable FDA regulations.

Background

Bottled Water is a Comprehensively Regulated Food Product

Bottled water is comprehensively and stringently regulated in the United States at both the federal and state levels, which helps ensure its safety and quality. At the federal level, bottled water is regulated as a processed food product by the FDA under the Federal Food, Drug, and Cosmetic Act (FFDCA), 21 U.S.C. §§ 301 et seq., and several parts of Title 21 of the Code of Federal Regulations (CFR). It must meet FDA’s general food regulations as well as standards of identity, standards of quality, good manufacturing practices and labeling requirements specifically promulgated for bottled water.
The FFDCA defines "food" as "articles used for food or drink for man or other animals ...."\(^1\) The FFDCA further defines a "processed food" as "any food other than a raw agricultural commodity and includes any raw agricultural commodity that has been subject to processing, such as canning, cooking, freezing, dehydration, or milling."\(^2\) As a result, bottled water is subject to the general Good Manufacturing Practices (GMP) and labeling regulations for all food products,\(^3\) as well as the specific bottled water GMPs in 21 CFR 129, and the FDA-established Standards of Quality and Identity in 21 CFR Part 165. Bottled water is one of only a few food products that must follow additional, product-specific GMPs in addition to the general food GMPs.

Additionally, Section 410 of FFDCA requires FDA to review all U.S. Environmental Protection Agency (EPA) National Primary Drinking Water Standards (NPDWS) for public water systems to determine their applicability to bottled water. If FDA determines that the NPDWS is applicable to bottled water, it must establish standards of quality for bottled water that are as stringent and protective of public health as the EPA’s standards for public drinking water. If FDA fails to act within 180 days of the effective date of any new EPA NPDWS for public water systems, FDA must then apply the new NPDWS to bottled water.

Under 21 CFR Part 165.110 (a), strict standards of identity are established for bottled water. Standards of identity define what a given food product is, particularly its name and the ingredients that may or must be used in the production of the food. The standards of identity for bottled water are divided into two fundamentally distinct classes of product: natural waters and processed waters. Numerous brands and companies produce bottled water in these two product categories. Natural waters include: artesian water, groundwater, mineral water, sparkling water, spring water, and well water. Processed waters must meet the United States Pharmacopoeia 23rd Revision standards for purified water or sterile water, and the following processes may be used to achieve compliance with the standard: distillation, deionization, de-mineralization, or reverse osmosis. These bottled waters are usually from municipal water sources.

**Bottled Water Consumption and Sales Figures**

The United States bottled water industry is the second largest commercial beverage category by volume in the United States. According to the Beverage Marketing Corporation, in 2006, the total volume of bottled water consumed in the United States surpassed 8.25 billion gallons, a 9.5% advance over the 2005 volume level. That translates into an average of 27.6 gallons per person, which means U.S. residents now drink more bottled water annually than any other beverage besides carbonated soft drinks (CSDs). Sales revenues for the United States bottled water market in 2006 were approximately $11 billion (in wholesale dollars), a 9.7% advance over the previous year.

Bottled water is a safe, convenient, healthful and refreshing beverage that lacks calories, caffeine, or other ingredients that some consumers wish to eliminate or moderate in their diets.

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\(^1\) 21 U.S.C. § 321(f) (emphasis added).
\(^3\) 21 C.F.R. § 110.3 et seq.
Although bottled water is currently the second most consumed beverage in the United States, its consumption volume is about half that of carbonated soft drinks (CSDs) and only slightly ahead of milk and beer. The 2006 bottled water advertising expenses totaled only $52 million.\textsuperscript{4} For comparison purposes, $637 million was spent on advertising for carbonated soft drinks and advertising expenses for beer totaled $1 billion. Based on this data, it is apparent that consumers are choosing bottled water in greater numbers for various reasons. As an interesting side note, 75% of bottled water consumers also drink water from their public water system.

**Bottled Water Business Models – Retail and Home and Office**

The bottled water industry can be divided into two primary business models. The first model is the home and office delivery (HOD) of the three and five gallon bottles used with water coolers, which accounts for about 20% of the bottled water market. The second model is retail sales of bottled water to consumers in 2 ½ gallon, 1 gallon, and smaller sized bottles (e.g., half liter and liter), generally through convenience and grocery stores, as well as vending machines. Retail business accounts for about 80% of the bottled water market and is the largest and fastest growing segment of the United States bottled water industry.

**Groundwater Use by the Bottled Water Industry**

**Bottled Water Companies are Good Stewards of the Environment**

Groundwater is the primary water source for bottled water products sold in the United States. However, public water systems, utilizing both surface and groundwater, are the water source for nearly 50% of the retail bottled water market. Because a long-term sustainable supply of high-quality water is literally the foundation and “lifeblood” of bottled water companies, IBWA member bottlers recognize the critical importance of environmental conservation and stewardship of all water resources. In particular, many bottled water companies perform hydrogeological assessments, monitor the quality and quantity at source wells and participate in local and regional water stewardship partnerships on aquifer protection.

Groundwater is a renewable natural resource that is replenished through the hydrologic cycle. The duration of the replenishment cycle is influenced by weather patterns, recharge areas and characteristics, geologic settings and other site-specific factors. When developing and using water resources, it is essential that use is balanced with the replenishment cycle and the requirements of the regional demand for the resource. IBWA supports groundwater management policies, laws and regulations that are comprehensive, science-based, multi-jurisdictional, treat all users equitably, and balance the rights of current users against the future needs to provide a sustainable resource.

**Bottled Water Companies Use Minimal Amounts of Groundwater**

The bottled water industry uses minimal amounts of groundwater to produce an important consumer product—and does so with great efficiency. According to a 2005 study by the

\textsuperscript{4} Beverage Marketing Corp.
Drinking Water Research Foundation (DWRF), annual bottled water production accounts for less than 2/100 of one percent (0.02%) of the total groundwater withdrawn in the United States each year.\(^5\) Additionally, based on information gathered in the DWRF study, in 2001, 87% of the water withdrawn by bottled water companies, on average, was actually bottled for consumption by humans, so the bottling process is a very efficient one.\(^6\)

The two largest uses of groundwater in the United States are for public water systems and irrigation. According to a United States Geological Survey (USGS) report published in 2004, irrigation accounts for 68% of the total groundwater withdrawn, while public water systems are the second largest user at 20%.\(^7\) When comparing the amount of groundwater used by other industries with the 0.02% that is used by bottled water companies, it becomes very clear that any attempt to manage groundwater resources must focus on all users and not target any one industry.

Criticism of the bottled water industry in groundwater management debates is not based on the science or hydrology of groundwater withdrawals by the bottled water industry. The key fact is that bottled water is a beverage product intended for human consumption – just like soft drinks, milk products, beer and other beverages. All such beverage products fundamentally have a high water content. Bottled water is just one of countless products and enterprises that use water, and to single out any one product or industry is misguided and will not be effective in sustaining water resources.

In 2006, total bottled water consumption (including both groundwater and municipal source waters) was about 8.2 billion gallons. Although this may sound like a significant quantity of water, it is approximately the same amount used annually by the public water systems in cities the size of Albany, New York; Springfield, Massachusetts; or Canton, Ohio, which have a population of approximately 100,000. It is important to recognize that the sustainability of the aquifers and other water resources is not determined by who uses the water, but by how much is being withdrawn.

The Bottled Water Industry Supports Comprehensive Groundwater Legislation

The states have primary jurisdiction over their water resources and must effectively manage them to ensure that this important resource will be sustainable. IBWA believes that in order to ensure sustainable water resources, a comprehensive management approach must be taken. To this end, the bottled water industry has been a strong and vocal supporter of comprehensive state groundwater management legislation enacted in recent years in Maine, Michigan, New Hampshire, Pennsylvania, Vermont, and Wisconsin. In these states, the bottled water industry actively supported a system that required permitting of large quantity groundwater withdrawals and ensured a science-based approach to evaluating potential impacts by all withdrawals.

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\(^6\) Id.

\(^7\) USGS *Estimated Use of Water in the United States in 2000; USGS Circular 1268, 2004*
In several states, IBWA has supported the permitting and reporting of groundwater user withdrawals. We have also supported establishing a regulatory framework to evaluate the environmental and water resource impact of all commercial or industrial withdrawals. It is vital for water resource managers to have quality data on current withdrawals and available water resources. Some of the comprehensive state groundwater management statutes the bottled water industry has supported require a higher standard of approval for bottled water sources than for other users of the same resource. The bottled water industry has accepted these standards in order to provide a foundation for a predictable future for the industry.

Federal Legislation Needed to Ensure Comprehensive Water Resource Management

Based on our experiences in the states, it is very clear that there is a need for more and better data on the aquifers throughout the United States in order to assist states in managing available water resources. We think that this is an area where the federal government can play an important role. To that end, IBWA supports the enactment of HR 135, which would establish the 21st Century Water Commission to make recommendations on how to ensure a comprehensive water resource strategy in the United States. Every member of the current Domestic Policy Subcommittee who served in the 109th Congress voted for HR 135 when it passed the House of Representatives in 2005. The Commission would be authorized to: 1) project U.S. future water supply and demand; (2) study current water management programs of federal, interstate, state and local agencies and private sector entities directed at increasing water supplies and improving the availability, reliability and quality of freshwater resources; and (3) consult with representatives of such agencies and entities to develop recommendations for a comprehensive water strategy.

All Groundwater Users Should Be Treated Equally

All groundwater use, whether for bottling purposes or micro-chip production, must be based on the science of the particular site. IBWA supports the development of comprehensive groundwater management legislation to assist in making those decisions. However, such a framework must treat all groundwater withdrawals equitably. IBWA believes there is a need for more and better data at the state level on groundwater resources. A number of federal agencies, such as the United States Geological Survey, the United States Environmental Protection Agency, the Bureau of Land Management, the Bureau of Reclamation, and others, maintain water data on both quality and quantity, and it would be helpful for states to have this information when managing their groundwater resources. However, this data is not easily accessible and is not as complete as needed. Additional federal assistance in developing useful data for evaluation of proposed large withdrawals would enable state water management officials to better evaluate their resources and withdrawals.

From the perspective of water management programs, the bottled water industry should be treated no differently than other beverage, food processing or other manufacturing operations. If bottled water is produced according to FDA regulations, it is without question a food product, and all food products should be treated equally. To single out bottled water from other food products – not to mention thousands of other consumer products that use water as an ingredient...
or in production — will not further the sustainability of water resources and is not in the best interest of consumers.

**Bottled Water is a Safe, Healthy, Convenient Product**

Bottled water is a safe, healthy, convenient, food product that consumers use because of its refreshing taste and because it is an excellent way to stay hydrated. Bottled water continues to grow in popularity because people appreciate its consistent quality, taste, and convenience. Consumers also choose bottled water over other beverages because it does not contain calories, caffeine, sugar, artificial flavors or colors, alcohol and other ingredients.

Reports on America's declining health are in the headlines almost daily. Obesity, diabetes and heart disease are all on the rise. Bottled water is a very healthy beverage choice, and any actions by legislators or activist groups that would discourage the use of this product are not in the public’s best interest.

**Bottled Water Emergency Relief Efforts**

The bottled water industry has always been at the forefront of relief efforts during natural disasters and other catastrophic events. Throughout the years, bottled water companies have immediately responded to the need for clean water after natural disasters, such as Hurricanes Andrew, Charlie, and Katrina, California wildfires, or the terrorist attacks on the Pentagon and World Trade Center. Bottled water companies have donated millions of bottles of water in response to these types of catastrophes. Clean, safe water is a critical need for citizens and first responders immediately following a natural disaster or other catastrophic event. Unfortunately, the availability of water from public water systems is often compromised in the aftermath of such an event. During these times, bottled water is the often best option to deliver clean safe drinking water quickly into affected areas. Some bottled water opponents believe bottled water should only exist to satisfy emergency and relief effort needs, but the bottled water industry could not exist and sustain itself if this were its only purpose.

**Conclusion**

Bottled water is a de minimus user of groundwater when compared with all other groundwater users within the United States. The bottled water industry is a conscientious and dedicated conservator and steward of groundwater resources, which has been demonstrated by its active pursuit of responsible groundwater management policies at both the federal and state level. IBWA supports groundwater management policies, laws and regulations that are comprehensive, science-based, multi-jurisdictional, treats all users equally, and balances the rights of current users against the future needs to provide a sustainable resource. As defined by federal law, bottled water is a food product. For that reason alone it should be afforded the same equitable treatment as all other food products. Any efforts or actions that limit or discourage the bottled water industry's ability to offer consumers use of this beneficial product are not in the public's best interest.
IBWA respectfully recommends that a measure such as HR 135 should be enacted to help chart the course for better water management to meet our nation's future needs. A Commission should identify the projected future water supply and demand. In order to accomplish this goal, additional data on groundwater resources, both use and quantity, will be needed. This data would also be helpful to the states in better managing their groundwater resources.

Thank you for considering our thoughts. IBWA stands ready to assist the Subcommittee as it considers this very important issue.

Attachments:

IBWA Groundwater Resource Management Policy Paper
US Beverage Market Pie Chart – Shares by Volume
Total US Groundwater Usage Chart