

# How Your Organization Can Promote Tap Water

foodswater watch

The Take Back the Tap guide to healthy, environmentally friendly water for your campus, office or public place

A program of food&water watch



# **About Food & Water Watch**

Food & Water Watch is a non-profit organization working with grassroots organizations around the world to create an economically and environmentally viable future. Through research, public and policymaker education, media and lobbying, we advocate policies that guarantee safe, wholesome food produced in a humane and sustainable manner and public, rather than private, control of water resources including oceans, rivers and groundwater. For more information, visit www.foodandwaterwatch.org.

#### Food & Water Watch

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Introduction	1
Convenient, Affordable and Environmentally Friendly Sources of Water	2
Disappearing Water Fountains: Disaster at the University of Central Florida	2
Why Is Drinking Tap Water Better?	3
Factors to Consider for Successful Filling Station Installation	4
Where Do Plastic Water Bottles Ultimately End Up?	4
"Be Seen with Your Canteen" at Berkeley	7
Safety First: Students Check Water Fountains	7
Conclusion	7
Case Studies:	
Chico State University	8
Unity College	9
Penn State University	10
University of California, Berkeley	11
Friends Committee on National Legislation	12
California Academy of Sciences	13
Endnotes	14
What Is Food & Water Watch?	15

"These bottled water companies say they're just meeting consumer demand, but who would demand a less sustainable, less tasty, way more expensive product, especially when you can get it for almost free from your kitchen?"

-Annie Leonard, The Story of Bottled Water



From a campus educational display made by students at Portland State University in Portland, Oregon. Photo courtesy Lisa Meersman.

# Introduction

All around the country, students, businesses and local governments are joining the movement to Take Back the Tap by choosing tap water over bottled water. The industry requires energy to produce and transport the product, creates plastic that ends up in landfills and oceans, and can damage local watersheds where some bottled water is sourced.

Students on many college campuses have realized the benefits of switching to tap water and are working to spread the word to their classmates about why bottled water is a bad choice and to remove bottled water from their schools. Cities are limiting bottled water purchases or banning using tax dollars to buy bottled water. The City Council of New York City decided to stop buying bottled water for its offices in 2008, following in the footsteps of the mayor of San Francisco, who prohibited using city money to buy bottled water a year before.<sup>1</sup> Restaurants around the country are signing pledges not to sell bottled water. And it is making a difference: U.S. bottled water consumption declined in both 2008 and

2009, for the first time in many years. Now many people are looking for alternatives to bottled water.

When drinking water out of plastic singleserve bottles became a trend, many sources of public drinking water were neglected. Now, as more and more people are looking for easy ways to refill their reusable water bottles, forward-thinking institutions, from schools to offices to libraries, are anticipating the demand for better access to tap water and coming up with ways to provide it to thirsty people on the go.

This guide is for organizations, businesses and institutions that want to provide their visitors, employees and customers with safe, affordable, environmentally friendly water. It describes two easy ways to increase access to tap water — installing water filling stations and retrofitting drinking water fountains. It then details the experiences of institutions that have used such programs and offers tips for how to follow successfully in their footsteps.



# **Convenient, Affordable and Environmentally Friendly Sources of Water**

Water fountains and filling stations provide people with a convenient and affordable source of water that is local, sustainable and environmentally friendly. It's time to bring them back.

# **Disappearing Water Fountains: Disaster** at the University of Central Florida

When public drinking water is not readily available, dehydration disasters can strike. One example of this occurred at the University of Central Florida, which decided not to install water fountains in its new stadium. The stadium was designed in 2001, when the state building code was amended to allow the sale of bottled water to substitute for water fountains. Although the state code was changed in 2004 to make water fountains a requirement again, the plans for the stadium were not adjusted.<sup>2</sup> When the stadium opened in 2007, thousands of fans arrived to find that their only access to water was expensive bottled water from concession stands and overcrowded first aid stations. The bottled water quickly ran out, and many fans became dehydrated and sick — more than a dozen were taken to the hospital. The university apologized and promised to install drinking fountains immediately.<sup>3</sup>

#### Water Fountains

Public drinking water fountains have long been a convenient source of water. Many new fountains on the market come with filters and/or bottle-filling spouts. These fountains are sleek and high-tech in appearance.

Older fountains can be retrofitted with bottle-filling spouts and filters. Easy-fill spouts or bottle fillers are a great addition to older fountains. These enable people to fill up reusable water bottles quickly and conveniently. They are sanitary and hands-free, and operate either by sensor or by pressing a bottle against them. Bottle fillers dispense water at a much faster rate than drinking spouts and prevent lines from forming at drinking fountains.

Filters can be installed in older fountains if people prefer filtered water. Filters can improve taste by removing disinfectants like chlorine used to treat water. They can also remove many other substances that affect water quality.<sup>4</sup>

#### Water Filling Stations

Many schools and offices have installed hydration stations or filling stations for their students, employees and customers. Unlike water coolers that dispense water from a large plastic bottle, these stations use tap water. They provide free chilled water and may come with filters or a bottle-filling spout for reusable water bottles. Some also dispense hot and room-temperature water. They hook directly into plumbing, and most require electricity.

Countertop models that do not need to be installed into plumbing are also available. Tap water is poured into them manually and may be filtered or distilled. They usually offer hot and chilled water. These are ideal for smaller offices interested in providing tap water — they have no installation cost and require little maintenance.

#### Why Should Institutions Provide Tap Water?

Providing tap water can benefit institutions and offices through reducing waste and cutting costs associated with bottled water, and also by promoting a green image.

**Waste reduction:** Promoting tap over bottled water means far fewer plastic bottles jamming up waste bins and littering the ground, since about three out of every four water bottles end up in the trash. A senior at Chico State University who worked as a recycling coordinator commented that



much of the plastic waste on her campus was water bottles.<sup>13</sup>

**Cost Savings:** In June 2008, New York City banned the use of municipal funds to buy bottled water. The city government went through at least 6,000 water bottles in 2007.<sup>14</sup> A little math shows that could have cost taxpayers up to \$8,000. How much does your institution spend to provide bottled water at meetings or events? Providing filtered tap water instead could save a great deal of money. Water filling stations may end up paying for themselves in no time.

A greener image: Many people are aware of the environmental impacts of bottled water. Consciously promoting tap water makes sense for an organization or institution that is environmentally friendly, and in buildings that are certified as green or sustainable. In fact, providing tap water goes one step further than the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) certification, which does not address access to tap water instead of bottled water.

## Why Is Drinking Tap Water Better?

**Saves Money**: Bottled water is thousands of times more expensive than tap water. Tap water ranges from \$0.002 to \$0.003 per gallon compared to up to \$7.00 per gallon for bottled water (purchased in single-serving 16- or 23-ounce bottles).<sup>5</sup>

**Saves Energy and Landfill Space:** Bottled water production and distribution is energy-intensive. In fact, plastic bottle production, water extraction, bottling and distribution uses up to 2000 times the energy costs of producing tap water. American bottled water consumption used the energy equivalent of 32 to 54 million barrels of oil in 2007<sup>6</sup> enough gasoline to run about 1.5 million cars in the United States over the course of a year.<sup>7</sup>

Plastic water bottles are filling up our landfills. More than three out of four PET plastic water bottles are thrown in the trash instead of recycled.<sup>8</sup> That amounts to about 765,000 tons of PET plastic bottles piling up in U.S. landfills each year.<sup>9</sup>

**Consumer Safety**: Although the bottled water industry spends millions of dollars marketing its product as safer than tap water, the U.S. Government Accountability Office found that bottled water regulations are less stringent than those for tap water.<sup>10</sup> Recent independent testing of bottled water found chemicals ranging from fertilizers to industrial solvents to chemicals such as pthalates that leach from the plastic bottles themselves into the water.<sup>11</sup> Pthalates are known hormone disruptors.

In an 18-month study, the Environmental Working Group found that only two out of 188 bottled water brands tested offer full information on water sources, treatment methods or contaminants remaining in the water, while municipal drinking water treatment plants are required to distribute detailed consumer confidence reports annually to customers.<sup>12</sup>

An Investment in Public Water Infrastructure: When we drink tap water, we're saying yes to our municipal water systems and to a national water infrastructure that has protected the public health for more than 100 years. Our country has one of the finest public water systems in the world — and if we don't invest in it and hold water authorities accountable, we will lose it to private companies.

# Factors to Consider for Successful Filling Station Installation

Successful water fountain or filling station programs should consider several factors to best provide safe, affordable tap water to large numbers of people. These include:

### Facility and Maintenance Staff Involvement

Facility and maintenance staff at large institutions know the buildings, have plumbing expertise and are responsible for maintaining whatever equipment they install. They should be contacted early in any retrofit program for their advice on what is best and feasible for a particular building, since installation is always site-specific. Meetings between facility managers and companies that sell the proper equipment will help facilitate a successful program.

## Where Do Plastic Water Bottles Ultimately End Up?

There is a good chance they are floating in the ocean or filling the stomachs of birds and fish throughout the world. The Great Pacific Garbage Patch is a 3.5-million-square-kilometer area in the North Pacific — twice the size of Alaska — that contains more than 20,000 bits of floating plastic per square kilometer.<sup>15</sup> It is located in the North Pacific Gyre, a slow-moving vortex where currents from the four oceans meet and plastic garbage collects due to lack of wind or ocean currents.<sup>16</sup> The final result is described as a "plastic soup" up to 20 meters below the surface of the ocean.<sup>17,18</sup> The dangers of this situation in the ocean are far-reaching.

The plastic used for single use water bottles is not biodegradable, so once it enters the ocean, it remains in the ocean. There, it photodegrades, or is broken into small pieces by the sun.<sup>19</sup> Plastic is now a primary component of the diet of fish and birds in the region, resulting in the suffering and even death of marine life.<sup>20</sup> Additionally, research has shown that the bits of plastic in the ocean absorb a wide variety of pollutants.<sup>21</sup> Smaller fish eat the highly toxic pieces of plastic and are then eaten by larger fish that, in turn, are often eaten by humans.

#### Number of users

Most people drink from one to one-anda-half liters per day. The total amount of water a station must be able to provide will depend on how many people will use the water filling station each day. This will affect which type of equipment is most appropriate. For large institutions or ones open to the public, devices that are installed directly into the plumbing make more sense. For smaller settings, a countertop water station may be sufficient.

#### Filtering

Tap water systems in the United States are among the safest and cleanest in the world. Still, some people prefer filtered water because they prefer the taste or have concerns about chemicals in their water or aging pipes within the facility. Filters can improve the taste of water by removing treatment chemicals like chlorine, and many people use them in their homes.

Municipal water systems provide an annual water quality report to the public that details chemical testing results of the local water system. This gives consumers information to decide whether their tap water contains chemicals that they would prefer to remove with additional filtration. Since different filters are designed to remove different substances, this information also helps indicate which filter is best for the given situation. Before purchasing a filter, conduct a water quality test using a statecertified lab (these can be found on the U.S. Environmental Protection Agency's website). You can speak with the technician there about your concerns and what the water should be tested for. Water testing can cost between \$60 to \$300 depending on what substances you want to check for. Filters do require maintenance to deliver optimal and healthy water and need to be changed on a regular schedule.

Carbon filters (granular activated carbon) are the most common type of water filters on the market. Particles in water are removed because they stick to the surface of an "adsorptive" carbon material. They reduce levels of chlorine, chlorine by-products, volatile organic compounds (such as pesticides and herbicides) and lead. These filters tend to be affordable and less wasteful of water than other models, and the filters can even be recycled in some places.

Reverse osmosis is another type of filter that could be used in institutional settings. Reverse osmosis is a process where water is forced through a membrane that filters out molecules physically larger than the water molecules. Although reverse osmosis works well for reducing minerals, arsenic and nitrates, among other contaminants, it is not effective for chlorine and volatile organic compounds. However, many reverse osmosis units are combined with carbon filters to address this concern. Reverse osmosis filters are more expensive and they waste from one to three gallons of water for every gallon that they filter, so it is best to use them for drinking water purposes only.

More information about on water quality and water filtration is located at www. foodandwaterwatch.org.

### Independent Certification

Due to increasing demand, many companies offer devices that chill, filter and dispense tap water. It can be difficult to sort through all of the options. Many useful websites contain reviews of products. However, many review sites are biased toward selling their own products. Any site that claims the "best" products all come from the same company and includes links to purchase the products is not likely to be an objective source of information. The best sources of reviews and ratings come from organizations that do not sell the products.



A public water filling station at Zion National Park. Photo by Ben Bowman.

Independent certifying agencies that test and certify drinking water products can provide unbiased product information. The American National Standards Institute, the National Sanitation Foundation and the Water Quality Association are organizations that provide such services.

For more information on products and certification guidelines, visit:

- American National Standards Institute at www.ansi.org.
- National Sanitation Foundation International at www.nsf.org. This site will allow you to search for specific suppliers and product codes to see if they are NSF certified.
- Water Quality Association: www.wqa. org. This site allows you to search by manufacturer, model or brand, product type, or type of certification.

#### Location

Any fountain or filling station that connects directly to a pipe must be located where plumbing is available. This type of filling station will need access to electricity as well. Areas without carpeting make better locations than those with carpeting, because they are easier to clean in the case of spills, and less likely to have moisture problems from leaked or spilled water.<sup>22</sup>



Food & Water Watch staff and volunteers provide tap water and sell reusable bottles at a festival in Vermont in 2009. Photo by Food & Water Watch.

Central or noticeable locations make good spots for stations. If funding is only available for a few, water fountains in a hightraffic area make the best candidates for retrofitting. Lobbies, student union buildings and areas near restrooms are great spots. This will make it easy for people to notice them, use them and spread the word.

An easy-to-read map can also help by showing where water can be obtained in the building or campus. Some institutions develop a filling station guide that can be downloaded from a website. Mapping can also be done electronically so that public access to tap water can be read on smartphones. Organizations such as Tap It! in New York City pioneered this approach.

#### Appearance

A professional or catchy appearance can encourage the use of a new drinking water or filling station. Plaques or posters installed on or above new stations or newly retrofitted fountains can let people know the water is chilled or filtered. A list of facts about the benefits of drinking tap water over bottled water or facts about the local tap water can also catch the attention of people passing by and provide useful information about their water choices.

#### Containers

Consumers who want to Take Back the Tap use reusable containers to carry their water rather than single-serve plastic bottles that wind up in the trash or recycling. Institutions can encourage this trend by selling or distributing reusable, stainless steel water bottles for refilling. Revenues from reusable bottles can help recover the cost of any lost revenue from bottled water sales. Local nonprofits also sell water bottles. In a smaller setting such as an office, mugs or glasses can be provided. Readily available biodegradable cups may provide an alternative for people without a reusable bottle.

### Cleanliness

If a water fountain is dirty in appearance, people will not want to use it. To ensure cleanliness, there must be channels for communication between people using the fountains and facility staff. It is recommended that water fountains be cleaned and sanitized daily. Water pressure should be sufficient to keep the water stream a few inches from the spout.<sup>23</sup> Fountains should be flushed each morning to get rid of water that sat in the pipes overnight. This is a good time to check that each fountain is in good working order and to report any needed maintenance.



## Promotion and Advertising

There are many fun, creative ways to promote new filling stations and get people excited to use them! Here are just a few:

- Talk about the filling stations in newsletters, email alerts or school newspapers.
- Contact students involved with campus Take Back The Tap campaigns, who may have access to an email list of people interested in the campaign or people who have signed a pledge to drink tap water. Send out an email about the stations, or tell people about them when they are tabling.
- Do a blind taste test bottled water versus your filtered tap water. See who can tell the difference, or who prefers the filtered tap water over bottled.
- Reusable bottles are very popular, and can be an excellent promotional tool for organizations, businesses and events. Instead of just selling bottles, use games, lotteries and giveaways to make it fun.

## Funding

An institution's ability to pay for a filling station and the type of funding available may depend on the type of institution. At universities or schools, student money may already be earmarked for green or sustainable projects. Due to the amount of waste plastic water bottles generate and the environmental impacts associated with their production, many student groups at universities have been successful in getting student money for projects that promote tap water.

Grants are also an excellent source of funding. Also, local companies that produce filling stations or retrofits may be willing to give free or discounted products in return

## "Be Seen With Your Canteen" at Berkeley

Reusable bottles play an important role in any campus Take Back The Tap campaign. People need something to fill up at tap water station. Unfortunately, bottles can be too expensive for many institutions to simply give away for free. But there are many ways to encourage using reusable bottles.

At Berkeley, the I ♥ Tap Water program enters students into a lottery when they sign a pledge to give up bottled water. Every month, a name is drawn and the winner receives a free reusable bottle. Berkeley's Dining Services had another idea for making sure students were carrying and using their bottles — a photography contest. The "Be Seen With Your Canteen!" contest encouraged students to take their bottles with them on spring break and photograph themselves using them. The most creative photos received prizes. "People want canteens, and they want to be a part of these campaigns — we just have to make sure tap water is there, and it's convenient," said a spokesperson for Dining Services.<sup>24</sup>

### Safety First: Students Check Water Fountains

Where water fountains are provided, it's important to make sure they are being properly maintained and checked daily, so that people will want to use them. University Health Services and Environment, Health & Safety at University of California at Berkeley coordinated a water fountain assessment by training a class of students to assess campus water fountains for visual appeal, water pressure and water color, odor and taste. Health Services communicated the results of the assessment to campus maintenance staff for repair or replacement and as a reminder to clean and flush all fountains daily.<sup>25</sup>

for advertising or promotion – especially if their products will be displayed in a public setting where many people will see them.

# Conclusion

Providing drinking water fountains and water filling stations is just one way to join the movement towards safe, accessible, environmentally friendly public water for everyone. For more opportunities to Take Back the Tap, contact Food & Water Watch at www.foodandwaterwatch.org.



# Chico State's Successful Student-Led Retrofit Campaign

California State University, popularly known as Chico State, has a progressive student body ready to take on environmental problems. So it was no surprise that a class called "Environmental Thought and Action" decided to talk about bottled water on campus. After a semester of working to spread the word about this issue, the class issued an "advisory measure" — a non-binding vote of the student body — on whether to ban the sale of bottled water on campus. A record 80 percent of students said "Yes!"



Retrofitted water fountains and educational signage at Chico State University. Photo by Noelle Ferdon/Food & Water Watch.

Although the advisory measure was mainly an effort to calibrate the opinion of the student body, university officials noticed. Chico State already had a Take Back The Tap (TBTT) campaign, and the students involved were looking for a way to afford retrofitting campus water fountains with filters and filling spouts.

"When the TBTT campaign started, people were not well aware of the issues associated with bottled water. It started out as an educational campaign. Then, with all the support we got from the campus community, we decided to take it further, and see if we could get fountains retrofitted," said Corie Lopez, a Food & Water Watch staff member and Chico graduate who worked with Associated Students Recycling when she was a student.

After Lopez graduated, two students, Deanna Dottai and Desi Hatton, continued to organize the TBTT campaign. Dottai and Hatton applied for and received a \$10,000 grant to complete the retrofit project. But in response to demand from the student body, the university agreed to pay for installing filling spouts on four fountains in the Bell Memorial Union, covering part of the expense of the project. With the help of the facilities staff at Chico, Dottai and Hatton also found a company to provide filters for the water fountains. In exchange for advertising, the distributor donated the filters to the school. Students were then able to put all of the grant money into helping as many students as possible get their hands on reusable bottles and into raising awareness about the TBTT campaign.

Through games and drawings, Dottai and Hatton gave out coupons for discounts on stainless steel water bottles to people who signed the TBTT pledge. Some participants even got a free bottle. Students partnered with the campus bookstore, which sold the KleenKanteen brand bottles. The students reimbursed the store with grant money for the value of the coupons. Sales soared, increasing 13-fold during the campaign. The bookstore reported that about 70 percent of the 370 coupons distributed were redeemed.

Due to the popularity of the project, students were successful in getting retrofitted fountains installed in a new building on campus, the Student Recreational Center. "The retrofits in our Student Union building and new Rec Center have been *very* successful and are frequently used and praised by students, staff and faculty. The TBTT signage above the fountains helps to draw attention to them, as well as educate the user," said Dottai. Currently, students are working to get more retrofitted fountains into the code for all new buildings on campus.

Dottai's advice to institutions considering retrofits: "Before approaching stakeholders, do background research on the inner workings of your institution. Who owns or manages the drinking fountains? Would a third party plumber need to be hired? Who would be responsible for maintenance? The more prepared you are, the smoother the project will go and the faster it will be completed."<sup>26</sup>

# Unity College, Maine

At Unity College in central Maine, students are aware of the problems with bottled water. This small college's curriculum is focused on the environment, and this commitment led Unity to give all of its incoming freshmen stainless steel reusable water bottles. "Instead of getting a backpack or travel mugs, the dean of students wanted to make a statement," said Jesse Pyles, the sustainability coordinator at Unity College.

The water bottles were so popular with the incoming students that they gave each of the other students, faculty and staff a free reusable water bottle, too. Paid for by the president's discretionary budget and the human resources office, the bottles were part of a broader campaign by students and the administration to highlight the importance of drinking tap water over bottled water. With so many identical bottles on campus, community members were encouraged to decorate theirs to distinguish them from one another.

As students and administrators searched for more ways to promote tap water at Unity, they decided to retrofit several highvolume water fountains with filling spouts. The easy-fill spouts enabled people to fill up their new bottles quickly and conveniently. The spouts were paid for by the maintenance budget from the facilities office. The inexpensive nature of the devices meant that no special funding or permission was needed, and a facility employee was able to retrofit the fountains, keeping costs low.

The refillable water bottles and retrofitted water fountains all contributed to curbing bottled water sales on campus and making Unity College

more tap-water-friendly. Students, faculty and staff were all able to make a positive impact. Pyles is extremely happy about the program. "It started a huge conversation on campus about bottled water," he said. "Every person got a refillable water bottle and heard about why they should use it. To me, that is a pretty impressive feat."<sup>27</sup>

Take Back The Tap

Unity College's specially branded resuable bottles. Photo courtesy Jesse Pyles.

"The retrofits in our Student Union building and new Rec Center have been very successful and are frequently used and praised by students, staff and faculty." –Deanna Dottai





# Penn State University

Located in University Park, Pennsylvania, Penn State University gets high quality tap water from the numerous wells in the surrounding area. "It's such a beautiful natural place with lots of deer and other wildlife in the area," said Paul Ruskin, the Communications Coordinator at PSU's Office of Physical Plant (OPP). "The water is so healthy. Why would people waste money on bottled water?"



Working together with Eco-Action and 3E-COE, two student environmental groups, the OPP decided to bring water filling stations to Penn State. It was these two organizations that spearheaded the campaign to Take Back the Tap. "The student groups were really the ones who pressured the university to be more water-friendly. They approached the university's president and asked initially for a bottled water ban," Ruskin said. "The administration listened to the students' concerns about bottled water and decided to investigate hydration stations as a first step."

To test the program out, the OPP installed four pilot filling stations in areas highly trafficked by students. One of the buildings selected was the Hubb Student Union, "The water is so healthy. Why would people waste money on bottled water?" –Paul Ruskin

which is used by 40,000 people daily. Additionally, two classroom buildings and the main recreational facility were outfitted with hydration machines. The OPP used several different vendors to install the pilot stations in order to gauge which vendor would be the best fit for PSU.

Although the test phase is still going on, the popularity of the hydration stations is unquestionable. As soon as the first hydration stations were installed, several organizations requested their own. Students in dorms, library staff members and even different PSU campuses contacted 3E-COE to find out how they could get a hydration station installed.

The filling stations have also been successful in reducing bottled water use. In one of the classroom buildings an electronic counter logs how many disposable bottles were not used because of the filling station. This one station prevented the use of several thousand plastic bottles. As soon as Penn State completes the testing phase and introduces more filling stations, which Ruskin says he expects will happen by the end of the year, the number of saved bottles should skyrocket. Even without banning bottled water, Penn State was able to encourage tap water use and do its part in taking back the tap.<sup>28</sup>

# University of California, Berkeley

When Mike Weinberger, Director of Recreational Sports at Berkeley, noticed tired, thirsty students at the gym waiting in long lines to fill their bottles at water fountains, he decided his department needed an upgrade. So he went shopping for the perfect filling station.

When he didn't find exactly what he was looking for, he contacted the Haws Corporation, which makes water fountains. They designed a custom model for Berkeley — one that filtered and chilled the water, was fast at filling bottles, and was sensor-operated to promote good hygiene.

"We wanted something that would dispense water at a high volume. Regular water fountains dispense at a rate of .4 gallons per minute, while our hydration stations double that with a rate of .8 gallons per minute."

Recreational Sports purchased two stations at \$1,500 a piece — about the price of a high-quality drinking fountain — using money from Berkeley's Green Initiatives fund. "These require electricity and plumbing to be present. Installation is site-specific. We wanted a model that was very tough and durable, and wouldn't need to be repaired all the time." The stations were installed in a high-traffic area close to the old fountains and were immediately wellreceived by students and visitors. "People are visibly impressed when they first see the station due to its sleek appearance, and they are as impressed by the technology and convenience," said Weinberger.

Patrons of the gym aren't the only ones impressed. The Dining Services, Housing and Student Union employees at Berkeley have all contacted Weinberger to see how they can get hydration stations in dining and residence halls. Other universities are also contacting Berkeley to ask about the stations.

Berkeley has very highquality tap water from the Sierra mountains snowmelt, but Weinberger realizes that tap water has negative connotations to some people. In an effort to combat this, Recreational Sports has publicized the stations though its newsletter, and Weinberger is considering getting plaques proclaiming that the water is filtered and chilled. He suggests that future hydration stations include counters on the front to show the a visual representation of how much bottled water was saved.

Weinberger feels confident that filling stations will become part of LEED and other green certifications. He is currently working to get the stations written into the

code for all future buildings on campus. He is pleased with the overwhelmingly positive response to his stations, joking, "We are a service institute, and every time we change something, someone complains. This is the first thing that no one has complained about!"<sup>29</sup>

> "...every time we change something, someone complains. This is the first thing that no one has complained about!" –Mike Weinberg



Berkeley's super-fast hydration station. Photo courtesy Mike Weinberg.

Fake Back the Tap! How Your Organization Can Promote Tap Water



# A Small Office Model: Friends Committee on National Legislation

In 2005, the Friends Committee on National Legislation (FCNL), a prominent Quaker organization with 30 staff members, realized that its historic headquarters in Washington, DC, was in serious need of renovation. Since it lobbies on many environmental issues, FCNL decided to show its commitment to the environment by going for a LEED certification and creating a sustainable, friendly workspace. The office is now fitted with such features as geothermal wells for heating and cooling and low-flow toilets.



A simple carbon-filter pitcher system may be all a small office needs to provide tap water. Photo by Food & Water Watch.

Despite the environmental impacts of bottled water, LEED certification does not require buildings to provide fountains or promote tap water. Fortunately, FCNL took the initiative to encourage employees and visitors to drink from the tap. In the small kitchen area, a water filling station sits on the counter. It produces distilled tap water, hot and cold, with plenty of space to fill a cup, glass or bottle beneath.

FCNL's simple, inexpensive countertop device showcases a great way for small offices and businesses to provide tap water to their employees. It does not need to be installed into plumbing — water from the tap is poured in manually, resulting in an adequate amount of water to meet office needs. Most employees have their own bottles and enjoy using the filling station.<sup>30</sup>

# **California Academy of Sciences**

The California Academy of Sciences provides a model for other museums around the country on how to promote tap water over bottled water. This San Francisco museum's grand opening event, which attracted more than 10,000 people, was completely bottled-water-free, and the museum has prohibited the sale of still bottled water ever since. Their café has self-service water filling stations and their restaurant serves patrons tap water from pitchers. All meetings held at the museum serve only tap water and the kitchenettes for employees have water dispensers that provide hot and cold tap water. Even the museum's special event rental agreement has a clause that strictly prohibits the use of plastic bottled water at events in the building. Instead they provide water filling stations in the caterer prep areas to fill pitchers or carafes with tap water for events. The museum also educates visitors about the importance of drinking tap water with posters displayed next to drinking fountains.

To make it even easier for museum visitors to refill their reusable bottles with tap water, the museum has recently partnered with the San Francisco Public Utilities Commission, the San Francisco Department of the Environment and Global Tap to install a prototype water refilling station designed by Global Tap. The design allows reusable water bottles to be easily refilled. As Scott Moran, Director of Exhibit Development at the California Academy of Sciences, said, "With our current water fountains, visitors can only fill their bottles halfway before water starts spilling out." The California Academy of Sciences is planning to have their filling station installed in the summer of 2010. The city's first unit was installed in Yerba Buena Gardens in December 2009, and it will be replicated in up to 30 other locations around San Francisco.



An example of the high-tech drinking fountains planned for the California Academy of Sciences. Photo courtesy Global Tap.



One of the educational posters used near the water stations at the academy. Photo courtesy Scott Moran.

# Endnotes

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- 3 "UCF To Install Water Fountains In New Stadium." Wesh TV/DT. Orlando, Florida, September 18, 2007. Accessed on July 27, 2009
- 4 Office of Water, United States Environmental Protection Agency. "Water on Tap – What You Need To Know." (EPA 816-K-03-007). October 2003.
- 5 Office of Water, United States Environmental Protection Agency. "Water on Tap – What You Need To Know." (EPA 816-K-03-007). October 2003; NUS Consulting Group. "2007-2008 International Water Report & Cost Survey." July 2008; Food & Water Watch purchased five single-serve bottles of water in August/September 2009 from a Washington, D.C. 7-Eleven, CVS Pharmacy, Giant, Safeway and Whole Foods Market. The cost, excluding sales tax, totaled \$5.77 for 97.4 ounces, which works out to \$7.58 per gallon.
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- 7 Gleick, PH and HS Cooley. "Energy implications of bottled water." Environmental Research Letters, 4, 014009. 2009 at 6; U.S. Environmental Protection Agency, Office of Transportation and Air Quality. FWW Calculation based on data from "Emission Facts: Average Annual Emissions and Fuel Consumption for Passenger Cars and Light Trucks." EPA420-F-00-013. April 2000; "Frequently Asked Questions Conversion Equivalents." U.S. Department of Energy. Energy Information Administration. Calculation: Avg barrels of oil used for bottled water = 54 million + 32 million divided by 2 = 43 million; 1 barrel of i = 20 gallons of gasoline; 1 car uses 581 gallons of gasoline per year. 43 million barrels used by bottled water per year x 20 gallons of gasoline per barrel divided by 581 gallons per car per year = about 1.5 million cars per year.
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- 11 Environmental Working Group. "Bottled Water Quality Investigation: 10 Major Brands, 38 Pollutants: Bottled water contains disinfection byproducts, fertilizer residue, and pain medication." October 15, 2008 at 1.
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- 20 Berton, Justin. "Continent-size toxic stew of plastic trash fouling swath of Pacific Ocean." San Francisco Chronicle. October 19, 2007.
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- 23 St. Clair, Stacy; Jenny E. Beeh; Kelli Anderson. "Keep Drinking Fountains Sanitary." How-to Guide – Handy Solutions to Common Problems. *Recreation Management*, 2005.
- 24 Personal Interview. Patrice Thomas, CalDining, University of California, Berkeley, May 1, 2009.
- 25 Personal Interview. Trish Ratto, University Health Services, University of California, Berkeley, May 1, 2009.
- 26 Personal Interview. Corie Lopez and Deanna Dottai. Chico State University.
- 27 Personal Interview. Jesse Pyles, Sustainability Coordinator, Unity College, Maine. March 9, 2010.
- 28 Personal Interview. Paul Ruskin, Communications Director, Penn State University March 16, 2010.
- 29 Personal Interview. Mike Weinberger, Director of Recreational Sports, University of California, Berkeley, May 1, 2009.
- 30 Personal Interview. Maggie Porter, Communications Program Intern, Friends Committee on National Legislation, June 24, 2009.

# What Is Food & Water Watch?

Food & Water Watch is a non-profit advocacy organization in Washington, DC, with offices around the country. We protect our essential resources by transforming the public consciousness about what we eat and drink and by mobilizing people to take action to make a difference.

Food & Water Watch works with grassroots organizations around the world to create an economically and environmentally viable future. Through research, public and policymaker education, media, and lobbying, we advocate policies that guarantee safe, wholesome food produced in a humane and sustainable manner and public, rather than private, control of water resources including oceans, rivers and groundwater.

# Further Reading

You can read more about community experiences with water bottling and related issues in Food & Water Watch's water publications at www.foodandwaterwatch.org/water.

#### **Bottled Water**

- All Bottled Up: Nestlé's Pursuit of Community Water
- Unmeasured Danger: America's Hidden Groundwater Crisis
- Take Back the Tap: Why Choosing Tap Water Over Bottled Water Is Better for Your Health, Your Pocketbook and the Environment
- Unbottled Truth About Bottled Water Jobs
- Why Water Bottlers Are Bad for Your Community (Fact Sheet)
- Nestlé's Move to Bottle Community Water (Fact Sheet)

#### **Funding Clean Water**

- Clear Waters: Why America Needs a Clean Water Trust Fund
- Why the Country Needs Federal Funding for Water Infrastructure (Fact Sheet)
- Why Your State Needs Federal Funding for Water Infrastructure (Series of Fact Sheets)
- Water Protection and Reinvestment Act (Fact Sheet)

#### Privatization

- Money Down the Drain: How Private Control of Water Wastes Public Resources
- Costly Returns: How Corporations Could Profit from Inflating the Already High Cost of Repairing the Nation's Crumbling Water and Sewer Infrastructure
- Faulty Pipes: Why Public Funding Not Privatization Is the Answer for U.S. Water Systems
- Top 10: Why Water Privatization Fails (Fact Sheet)





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