

Phasing Out Plastic Bottled Water on City Property

San Francisco Board of Supervisors President David Chiu

- Background on Legislation-

OUR ADDICTION TO PLASTIC BOTTLED WATER

Prior to the 1990s, when the plastic bottled water industry experienced a huge growth surge, how did people stay hydrated? We forget that not very long ago plastic bottled water wasn't even an option.

In 1976, the average American drank 1.6 gallons of bottled water a year. In 2007, that number had increased to an average of 28.3 gallons per person. Today, Americans buy more than half a billion bottles of water every week - enough to circle the globe twice. Americans drink more bottled water than any other nation.

In San Francisco, Recology alone collects 10-15 million single-use plastic water bottles a year, and this does not include the bottles that go to redemption centers or landfill. It is likely that tens of millions of single use water bottles from San Francisco end up in our recycling stream or landfill on an annual basis.

San Francisco is extremely fortunate to have access to healthy pristine Hetch Hetchy water, some of the highest quality municipal tap water. Hetch Hetchy water costs less than half a penny per gallon, and its quality is tested over 100,000 times a year. We as a city have invested significantly in our water system. It is unfortunate that many people still choose to purchase expensive plastic bottled water when we have such a healthy and cheap resource coming out of our taps.

ENVIRONMENTAL AND HEALTH IMPACTS

The environmental costs of this massive consumption of bottled water are significant. Eight out of ten plastic water bottles end up in a landfill, and each one takes centuries to decompose. Hundreds of millions end up littering the world's streets, beaches, bay and ocean. If they are incinerated, toxic byproducts, such as chlorine gas and ash containing heavy metals, are released into the atmosphere.

Plastic is made from petroleum, and making all the plastic for the water bottles Americans consume uses 17 million barrels of crude oil annually. That is equivalent to the fuel needed for \$1.3 million vehicles for a year. If you were to fill one quarter of a plastic water bottle with oil, you would be looking at roughly the amount used to produce that bottle. It takes an estimated 2000 times more energy to produce bottled water than it does to produce an equivalent amount of tap water. But the energy needed for plastic bottles goes far beyond their manufacture. They also require significant energy to transport. Bottled water often takes a long journey to U.S. markets. The Earth Policy Institute estimates that the energy used to pump, process, transport and refrigerate bottled water is over 50 million barrels of oil annually.

Bottled water is often filled right from the tap. One third of all bottled water sold in the United States is repackaged tap water. Some companies that are filling their bottles from underwater sources are taking so much that there are nearby communities worried that their own wells will run dry. Many people drink bottled water because they believe it to be of a higher quality, cleaner and better-tasting, but that's not necessarily true. In the U.S., public water is regulated by the Environmental Protection Agency (EPA), which requires multiple daily tests for bacteria and makes results available to the public. The Food and Drug Administration, which regulates bottled water, only requires weekly testing and does not share its findings with the EPA or the public.

Many plastic water bottles contain chemicals called phthalates that it has been shown can leach into the water. Phthalates are known to disrupt testosterone and other hormones, which can lead to infertility, cancer, miscarriages and other health problems.

THE GROWING MOVEMENT TO REDUCE PLASTIC WATER BOTTLES

- ✓ In 2007, San Francisco became the first U.S. city to end municipal spending on bottled water, paving the way for cities, parks and universities around the country to think outside the bottle. Today dozens of universities have bottled-water-free policies that are in different stages of implementation. There are 14 bottled-water-free national parks, including large parks such as Grand Canyon National Park. There are efforts underway to add more national parks to this list.
- ✓ In 2008, San Francisco's California Academy of Sciences museum made a commitment to never sell or give away disposable bottled water.
- ✓ In 2012, Supervisor Chiu sponsored first-in-the nation legislation that requires that new buildings constructed must install bottle filling stations if they are already required to install drinking fountains. Through this and many other efforts, San Francisco has demonstrated a longstanding commitment to educating residents about the environmental, economic, and health benefits of drinking tap water.
- ✓ In 2012, the Port Commission of San Francisco passed the "Policy for Zero Waste Events and Activities," which among other things restricts plastic bottles on Port property at events with over 5,000 attendees.
- ✓ In 2013, Concord, MA became the first U.S. city to go entirely bottled-water-free. Their law prohibits the sale of non-sparkling, unflavored drinking water in single-serving plastic bottles of 1L or less. In 2008, the Toronto approved a measure prohibiting the sale and distribution of water bottles at most of the city's parks and park facilities. Numerous municipalities across Canada have similar bottle bans or restrictions in place.

LEGISLATIVE PROPOSAL

The first-in-the-nation legislation would gradually phase-out the sale and distribution of bottled water on City property. It would apply to events (over 100 people), permitted vendors and lessees on City property, as well as City departments themselves.

Beginning in late 2014, events that have access to adequate on-site water would be prohibited from selling or distributing bottled water. However, by late 2016, all events on city property would. Foot races and other participant sporting events are excluded. Beginning in late 2014, permits and leases on City property will have to include language prohibiting the sale of bottled water. So that it is fair and focused on the future, the legislation would not apply to existing lessees and permit holders, but only ones going forward. Departments will be able to grant waivers to events, permittees, lessees under certain circumstances.

In conjunction what is being asked of others, the legislation requires City government to act as well to increase access to public water. It requires that drinking fountains, filling stations, and/or event water hook-ups be installed when appropriate where there is a capital project in a heavily used public park or plaza. In the absence of capital projects, the proposal asks the City to investigate solutions that would allow events to hook up to the municipal water infrastructure. Finally, City departments would no longer be allowed to purchase plastic bottled water with city funds.

This proposal is a common-sense approach to begin tackling the enormous problem of excess plastic in the waste stream. It gives events, vendors, and permittees on City property adequate time to develop alternatives to selling disposable plastic water bottles. There are already a growing number of cost effective alternatives to bottled water that are available to events and permittees, and the number of these will only keep growing. (See "Alternatives to Plastic Bottled Water" section.)

ALTERNATIVES TO PLASTIC BOTTLED WATER

Today there are many water provision options available to event producers, and this number continues to grow. There are services that provide water tanks or trucks to events where potable water is not available at the site. Alternative water solutions also include devices that attach to municipal water lines. The rental cost for these can be as low as \$200 per unit.

The SFPUC already has a process for providing events direct access to water lines, although at this point it is not a common practice. Because the proposed legislation asks the SFPUC and other departments to develop more ways for events to access the municipal water infrastructure, there will be increasingly more hook-up options for events. (See “Additional Resources” section for examples.)

If event sponsors and vendors on city property do not wish to apply larger scale water solutions like these described, transitioning away from plastic water bottle sales is still possible. They could sell cups or reusable stainless steel water bottles and provide a water container from which to fill them.

EVENTS ALREADY REDUCING PLASTIC WATER BOTTLE WASTE

Many events in San Francisco have already made the transition to be entirely plastic bottled water-free. These include America’s Cup, SF Oysterfest, Earth Day, TEDx SF, SF Chronicle Winefest, SF Beer Week, the 75th Anniversary of the Golden Gate Bridge, Good Food Awards, and SF International Tea Festival.

Outside Lands: Very large events such as Outside Lands music festival, produced by Another Planet, have already proven that significant change is possible. Since Outside Lands implemented its refillable water program in 2009, plastic bottle consumption has decreased by two thirds. In 2012, the event went through 1680 reusable 5-gallon water jugs, which is the equivalent of 10,752 20oz plastic water bottles averted.

America’s Cup: The best recent example is the 34th America’s Cup event. All of their contracts with caterers, merchandisers, and others prohibited the sale of beverages in single-use bottles. In all contracts with teams, partners and vendors, staff were prohibited from bringing single-use bottles onsite, even for personal use. At the event sites, water filling stations were hooked up to fire hydrants so attendees could fill their reusable bottles at no cost. These stations poured over 38,000 liters of water to event spectators, *equivalent to avoiding over 76,000 single use plastic water bottles.* The event also provided reusable bottles for sale; merchandising shops were all required to offer a stock of reusable bottles.

ADDITIONAL RESOURCES

The Water Monster – Mobile water distribution system. For purchase only. Easily transportable when empty.
<http://thewatermonster.com>

US Pure Water – Mobile, filtered, stainless steel tap water distribution stations. Can truck in water with no on-site access.
<http://uspw.net/solutions/event-producers>

Flexi Fountain – Mobile, drinking fountain with 6 sipping stations.
<http://www.flexidrinkingfountain.com>
http://inhabitat.com/nyc/mobile-water-on-the-go-stations-keep-thirsty-crowds-quenched-with-delicious-nyc-tap-water/water_on_the_go-3/

Tap Minneapolis Prototype Drinking Fountain – Just a prototype but isn't it cool?
<http://www.facebook.com/photo.php?fbid=106223092290&set=a.106207377290.94801.86013327290&type=3&theater>

City of Toronto Owned Mobile Water Trailer – Provided for free to events in the City limits.
<http://www.toronto.ca/water/htotogo/index.htm>

Event Water Solutions – Stainless steel, filtered water refill stations, hooked up to municipal water source.
<http://www.eventwatersolutions.com/>

Green Mary – Zero waste event service provider in SF. Rental and set up of tap water distribution systems.
http://www.green-mary.com/index.php?option=com_content&view=category&layout=blog&id=65&Itemid=58

Bottled Water Alternatives Purchasing Guide
http://www.stopcorporateabuse.org/sites/default/files/resources/rpn_purchasing_guide_0.pdf

Denver's Fountain and Hydrant Connection Rules for Events
<http://www.denverwater.org/BillingRates/RatesCharges/SpecialCharges/ConnectionsSpecialEvents/>

Toronto Bottled Water Ban on City Property
http://www.toronto.ca/parks/permits/general-information/water_bottle_ban.htm

For more information, contact Catherine Rauschuber, legislative assistant to Supervisor David Chiu, at catherine.rauschuber@sfgov.org or (415) 554-7450.