Hydration Stations 101

I. Resources to Prepare a Lesson Plan

A. Hydration and You: Why it Matters - https://britahydrationstation.com/pages/hydration-and-you-why-it-matters
B. Signs of Dehydration - http://clarkebenefits.com/hydration-station/
C. Educational Opportunities for Classroom Activities - http://www.uspw.net/curriculum-for-school-classes.html
D. Plastic Water Bottles, BPA & The Environment - http://www.ecolife.com/recycling/plastic/plastic-bpa-water-bottles-health-hazard.html

II. Hydration Stations

A. Haws - https://www.hawsco.com/hydration-station/; https://www.hawsco.com/downloads/dl/file/id/7454/product/0/brita_hydration_station_brochure.pdf
B. Brita - https://britahydrationstation.com/collections/frontpage/wall-mount
C. Elkay - http://www.elkay.com/drinking-solutions/bottle-filling-stations#q=|15|0|1|ads_f27001_ntk_cs%3A%22Single+Station%22,ads_f27001_ntk_cs%3A%22Two+Station%22

III. Budget Range - $1,000 - $2000

A. Haws 2000S Brita Hydration Station Touch-Free Recessed-Mounted Hygienic Water Dispenser – $1750.00
https://www.amazon.com/Haws-2000S-Hydration-Touch-Free-Recessed-Mounted/dp/B003U1QQ2W/ref=sr_1_8/134-7060163-5106764?ie=UTF8&qid=1500324759&sr=8-8&keywords=hydration+station
B. Haws 2000SMS Brita Hydration Station Touch-Free Surface-Mounted Hygienic Water Dispenser $1800.00
https://www.amazon.com/Haws-2000SMS-Hydration-Touch-Free-Surface-Mounted/dp/B00CFQDQDK/ref=sr_1_12/134-7060163-5106764?ie=UTF8&qid=1500324759&sr=8-12&keywords=hydration+station
C. LZS8WSSK EzH2O Wall Mount Drinking Fountain with Bottle Filler Station, Stainless Steel $1000.00
https://www.amazon.com/LZS8WSSK-Drinking-Fountain-Station-Stainless/dp/B004KGXOLW/ref=sr_1_13/134-7060163-5106764?ie=UTF8&qid=1500324759&sr=8-13&keywords=hydration+station
D. Elkay - $1599.00
http://www.elkay.com/drinking-solutions/bottle-filling-stations/lzs8wslp
E. Filters –
1. Haws $90.00
2. EzH2O $89.00
3. Elkay $125.00

IV. Example Project – Southwestern High School Pulaski County

A. Source: Below are excerpts from a 2016-17 PRIDE Environmental Education Grant application submitted by Mr. Judah Short, Southwestern High School, Somerset, KY. This explains the need for a hydration station, even though buying and installing a hydration station were beyond the scope of that grant application.

B. The Problem: Excessive plastic pollution in fresh waterways.

Many students across the world know of the dangers of pollution and have heard of the long-term effects it can have. Many students have also grown up in a society that reminds them of the importance of drinking enough water, yet students find themselves struggling to stay hydrated. In a country with an abundance of access to clean water, students make an effort to stay hydrated, and in the process produce an abundance of plastic waste. These two issues – environmental responsibility and hydration for health – actually work against each other, because in many western nations, higher incidences of drinking water equal higher quantities of plastic waste. According to the U.S. National Park Service's Mote Marine Lab in Sarasota, Florida, a typical plastic beverage bottle can take upwards of 450 years to fully decompose, and a monofilament fishing line can take as long as 600 years. This slow process of decomposition can be especially concerning with communities of vast freshwater systems.

Somerset is a city nestled in between the many waterways spanning out of Lake Cumberland in Pulaski County, Kentucky. Because of this geographic location we have many fresh water ecosystems that can be disturbed by plastic pollution. We also have a lot to gain from reducing that pollution.

C. The Solution: Reduce the amount of disposable, plastic bottles by use of a hydration station.

Our school team organized and produced a three-part community outreach program through our school and into the city and county that puts recycling of solid wastes at the forefront. Through this initiative and alongside local leaders and the local nonprofit organization Eastern Kentucky PRIDE, we turned community focus onto reducing current plastic waste pollution; we increased access to community recycling receptacles in and around waterways throughout the county; and we increased local education about the dangers of pollution and the benefits of staying hydrated and doing so safely and responsibly.

The first component will be the initial outreach into the community and will serve as a head start into the second component of the work. The reduction of the current amount of plastic solid waste in our water ways through community cleanups and education of the population would be a primary focus. Alongside Eastern Kentucky PRIDE and local leaders we will focus on communicating with marina owners and organizations that are in charge of local freshwater entry points and frequent fishing areas. We will work with these groups to organize community cleanups and hold local, community presentations about our mission.

As a secondary – yet almost more important – focus we want to reduce the amount of new plastic solid waste and thus prevent this new waste from ever entering our precious waterways. Students felt that one of the best ways to reduce plastic pollution is to reduce dependency on plastic in our day to day life. With this initial cooperation with businesses, students will design and organize the most cost and labor effective areas to install recycling receptacles. Along with the receptacles, we will include reminders to those in the area about the importance of our focus on reduction of freshwater pollution and the impact on those ecosystems.

To further the impact of our second component, students will launch an outreach that begins in the school and will work to increase the availability of affordable, reusable water containers. Along with availability of reusable water containers an effort would be mounted to increase access to easy fill fountains, designed to quickly and efficiently fill these water bottles throughout the school and the local community. Access to reusable bottles and easy-fill fountains would reduce the necessity of individuals to frequently use typical 16.9 fluid ounce water bottles which can add up to an inordinate amount of plastic solid. These water fountains are designed with vertical dispersion to help defer individuals from drinking directly from them, reducing transfer of germs and for increasing ease of filling of bottles.

V. Complementary Projects

A. Reusable Water Bottles