THE

THE STUDENT VOICE OF WHITNEY HIGH

THE WATER ISSUE



CALIFORNIA DROUGHT STAYING HYDRATED WATER FOR WEIGHT LOSS CONSERVATION FLAVORED WATER & MORE

SPECIAL EDITION

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a note from the editors

After 60 winter days with no rain and hearing the governer's State of the State address, we decided to report a special edition on a topic we know affects every reader: water.

We felt it was important to thoroughly cover California's drought in a four page spread because we want our readers to have better knowledge of what the drought means for all the residents in California, mainly stressing how to get through it and why you shouldn't be wasting any water.

In that knowledge, the staff also felt that water in itself is an essential part of everyday life and involved in many ways we don't typically think of about.

So, we bring you The Water Issue. Through reading this issue you will learn how to conserve water, many benefits to water itself, effects of water bottles and much more.

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Students working to publish each issue strive to achieve accuracy by checking sources, spelling and quotes as well as obtaining a variety of credible sources. The staff regrets any errors or omissions.

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tapping through the problem

ith a quick twist of the faucet, water flows plentiful and clean. The possibility of a shortage does not occur to our privileged population; water simply exists for any and every purpose all the time. Water never has a break according to our standards, yet the break demanded itself in the form of a drought.

According to an online survey we conducted this month with 259 students, 57 percent of you have read or heard local media coverage about the drought in California. But that same survey revealed that only nine percent of you have done anything to conserve water or change your daily habits.

It is not enough to merely know that a drought is running its course. It's time to shut off your tap, turn off your hose and cut back on shower times. However, those tasks are difficult to accomplish when these luxuries are boundlessly presented to us on a daily basis. Turning off the tap is completely voluntary; it is up to you to determine optimum time to shut it off. Nobody will be there watching you. It's your decision, and you must use it wisely so you aren't responsible for additional waste.

We applaud the efforts of broadcasting students who produced water conservation PSAs to run on Unleashed during the morning announcements. And we congratulate baseball players and Coach Robert Dorchak for their efforts on campus to handle landscaping and maintenance without using sprinklers this spring as one way to make a difference.

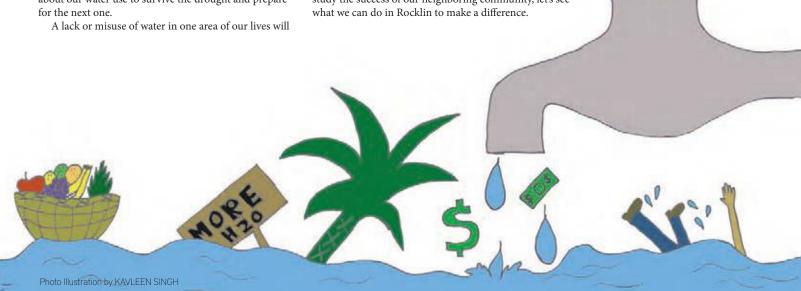
If you use Twitter, you can be more aware of the drought and how to help by following #californiadrought. Or you can look back at what Gov. Jerry Brown had to say in his State of the State speech, which called on all of us as Californians to get serious about our water use to survive the drought and prepare for the next one.

have major impacts in other areas as well. Leave your faucet on, and a farmer may not have that water to keep his crops alive, which drives prices through the roof, and him out of business. Take an extra few minutes in your morning shower, and the city is forced to ration, leaving your lawn unwatered, driving the value of your home and the homes around you down. If everyone is oblivious to the problem and refuses to play a role, soon we will be forced to face larger problems that could have been prevented. Every area of life is impacted by our decisions regarding this precious resource, and it is far too important to be brushed aside.

Getting informed on just how much water means to us, and all of the things that it does for us is the very first step. Knowing how much your individual actions can impact the bigger picture is invaluable in combating these issues. At a time when droughts can cause so much damage, an individual working to raise awareness and confront the shortage head on can bring about even more powerful change, even if it only seems like a drop in the bucket.

A simple step with a big impact is the most obvious: stop using so much water. Cut down on the amount of time you spend showering. Turn off the water while brushing your teeth or shaving. Go through a nearby car wash instead of doing it yourself in your driveway. But the most important way to help is to simply stay informed. New news comes out nearly every day relating to ways you can help preserve water and change your habits to better support the condition our state is in, and using this information is how we as a community will be able to fight back.

Just down the road, the City of Roseville mandatory 20 percent water reduction took effect this month. As we study the success of our neighboring community, let's see what we can do in Rocklin to make a difference.



BOTTLED

Differing viewpoints on the battle of the bottle



hile some people would argue that spending money on something you could get for free is a bad idea, bottled water is not as impractical as you may think.

Tap water can have a metallic iron or chlorine taste due to the purifying process that a water purifying plant may use. Some of these plants use chlorine and aluminum sulfate to purify water, causing it to taste metallic and though it is filtered some of the metallic chlorine taste still remains. Later in the process chemicals are added to tap water in a process called disinfectant which is supposed kill all the surviving germs in the water. Do you really want to drink chemical water?

It is recommended that each person in the us drinks 5-6 8-ounce servings of waters day, but who wants to measure that out every single day five times a day. With bottled water it's easy; the water is carefully measured in calculated servings, so there's no annoying measuring.

Bottled water is convenient. If you're in a rush or just don't feel like going through the trouble, you can easily throw a plastic water bottle in your backpack and go.

Another thing about bottled water is it has diversity; if you aren't feeling like normal water you could have something else. Many water many companies carry flavored versions of water that can be nutritionally enhanced with vitamins and minerals that are good for your body.

And while I do not think that a man will hike up to a spring and climb all the way back down and personally deliver a bottle of water to you like some bottled water commercials,bottled water is a convenient clean source of water for any time of day.

BECCA SPAHN

Pre-packaged bottled water is just ridiculous. Was there a board meeting where an intern lost all the reports for the presentation on 'the next big thing' so when the questions turned to them they just flew by the seat of their pants and went with: "We could bottle water. Claim it has all these cleansing effects then jack up the price?" Terrifyingly, it worked. It is such a harebrained idea, at least in America, where we can get free, clean drinking water from the tap.

Granted, bottles make sense in places where tap water is unsafe or unavailable, it is the only way to go, but here in California we are privileged enough that we need not worry about Montezuma's revenge. Yet, still people buy bottled.

We spend upwards of \$2 on water with electrolytes, which is just salt. All they did was add fancy salt! In reality, all we are paying for is the packaging and advertising done by the company. The actual water is nowhere near that expensive, coming in at about 90 cents a gallon.

Also there is that small issue of poisoning a planet scientists like to call Earth, maybe you have heard of it. Everyone hears they should recycle, but in reality not enough people actually do. Unfortunately, millions of bottles still end up in landfills, and the ocean. There are actual islands compiled from trash, and plastic bottles are a main contributor.

It is completely astonishing to me that anyone would continue to choose to purchase an unnecessary, overpriced and pollutive commodity such as bottled water.

EMILY MURBACH

Photo illustration by EMILY MURBACH

drip DROP the waste won't STOP

OPINION

The Roar staff explores both sides of what wastes more water: indoor or outdoor use?

INDOOR

OUTDOOR

a-dum. Ba-dum. Ba-dum. Every beat of the seemingly alive washing machine is more water wasted. Down the drain, without a use. Sure, it cleans clothes, but do we really need that much water to clean things? Drip. Drip. Drip. The water droplets hit the bottom of the sink every second, wasting water enough to fill several buckets full of water. Water waste indoors is all around us, and we have the ability to control how much we use! So, why waste so much inside?

Indoor water waste is the greatest contributor to the major water waste that surrounds us everyday. From an extended shower, to overwatering houseplants, to even letting the sink run while moving to gather more ingredients for a recipe in the kitchen, these small ways add up to a lot more than anyone truly thinks, and even more than outdoor water waste.

Just because water outdoors typically occurs in larger amounts in a single moment, does not mean that smaller amounts regularly don't add up to more than thought. Think about it; a car wash once every month or so, with a lot of water use, or one shower a day with less water use, but once a day every day for a month. I think that the shower tends to add up a lot faster! However, showers aren't the only way that water waste indoors needs to be taken as a serious issue. The daily grind of life requires certain levels of personal hygiene that are expected in society. To maintain these rigorous levels of expectation, people brush teeth, wash faces, and even splash some water on a stain in order to remove it. Every second the water is on, more water goes down the drain untouched than the water that is actually used by the person. This leads up to the everyday buildup of water that is wasted, and down the drains.

Ultimately, cumulative waste, even if in smaller amounts every time over the larger splurge of waste at one moment, adds up to a lot more. This means that we, as a community, nation, and entire world need to keep a closer watch on the time we are using waters indoors, and how much and for what.

JOEL TIMMS

here's no doubt that drops and streams of water are being wasted every day in California. And the water outside our homes that is being spilled, wasted, and polluted is impacting our lives every day. People might believe that indoors, a little stream goes a long way into a bad direction, but just imagine the buckets of water we uselessly use and waste outdoors. And our actions are impacting the world, and I have to say, isn't pairing up well with the drought here in California.

First of all, people need to turn off their timers on sprinklers. It's the start of an over watering cycle that doesn't end until people remember that the sprinklers actually exist. Maybe you don't know it, but your plants are being watered during rain or shine, dark or light. When the sun isn't soaking up the water, when the grass is fully watered, and when it doesn't need to be watered anymore. So turn off your sprinklers until you really need them.

The struggle for saving water is real, even at our school. The campus lawns are moved frequently, cutting the grass ridiculously short. This influences growth and therefore influences watering. And, the process continues. No offense to the Whitney lawn mower, but he's causing some major water wasting issues.

Don't even get me started on car washes. People want their cars shiny and sparkly for a ride to Safeway? That's great. Try to wash it when there's no water left in California. People at least need to stop running the hose on the concrete as they "clean their precious baby." Think about all that water streaming down into the sewers. And to think that 5 minutes more of a shower wastes as much as millions washing their cars, just for shine. Yeah,it doesn't.

I think it's obvious that people need to take showers. But do people really need to clean their cars? Unless your car has been in a sandstorm or a huge dirt puddle up in the mountains, you shouldn't necessarily need to wash it. Because as much as those car obsessors love their "babies," they're made of metal and steel. I'm pretty sure they can handle a ride to Safeway.

From sprinklers to fountains, to the common hose leak out in your backyard, outdoor water usage is a major problem. All it takes is a couple outdoor changes, to lead to water savings. And as much as the kitchen table water spills affect us, our outdoor water usage is spilling in buckets every day, for everyone, effecting everyone. And unless we change our outdoor habits, we'll keep spilling until the world's glass is empty.

RACHEL MARQUARDT

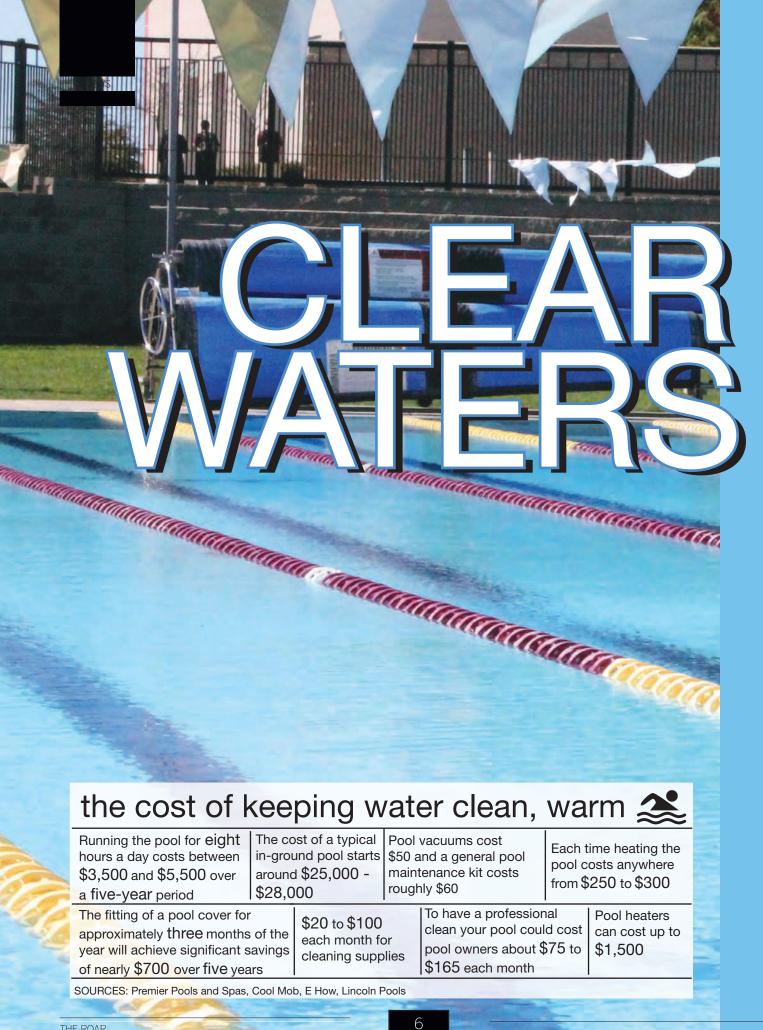
WHICH WASTES MORE?

Here's what YOU said:

showers vs. sprinklers

sinks vs. water parks water park sink vs. sewage factory vs. washing machine dishwasher vs car washes

factory car washes



Campus pool may be colder than most, but users agree it is one of the cleanest, too

the bottom of the

pool all the time."

- MARISA GUTIERREZ

tudents use the campus pool on a daily basis, but not many know of the cost and efforts behind keeping the pool up to par. The community has depended on the pool for water polo, swim and diving, as well as the physical education swim units, aquatics class and the City of Rocklin's WAVE program.

"This pool is the best one in the area because it's kept clean and looks really nice compared to any of the others," Marisa Gutierrez said.

Since the school's opening in
2005, the pool has endured mishaps
such as a broken scoreboard, a
main drain leakage, the
occasional burnout of
pool lights and some
overflowing.

Students with re
care and safety
constant remine

'Other schools have
stuff like debris at

"The pool has overflowed a few times. [When that happened], we just kept swimming and I contacted the

district to fix it," swim and water polo coach Mr. Shawn Robin said.

The pool is maintained by both the RUSD staff and Lincoln Pool Equipment, which involves checking chemical balances cleaning and other necessary upkeep. All of the necessities that come with having the pool cost the district approximately \$150,000 a year.

"Our pool is really clean and kept up compared to other schools. Other schools have stuff like debris at the bottom of the pool all the time. You can always tell when the pool has been cleaned, which is pretty often, because the fresh chlorine makes you skin really dry," Gutierrez said.

When in use the pool temperature is kept between 78 to 82 degrees, but swimmers complain that it feels cold.

"To put it in perspective, Rocklin's pool is half the size of ours and they have the same size heater. Our pool is freezing, even when it is 110 degrees outside in the summer," Megan Green said.

Swimmers are expected to do their part in pool maintenance, which includes tarping and untarping the pool to keep it covered when not in use. This can take from 10-30 minutes depending on the

method, Green said.

Coaches who have been part of the swimming and water programs since early in the school's history know how the pool compares to others in the league, including Coach Kari Ustaszewski.

"Our pool has more lanes, so we can have more swimmers. We also have the benefit of a top scoring system, so we can get immediate results," Ustaszewski said.

Coaches and P.E. teachers help students with reminders about pool care and safety precautions. One constant reminder is about not

running on the pool deck.

"It's incredibly slippery all around the pool and we always get reminded to walk. It's just inevitable at every meet

someone will face-plant. It's just a matter of time," Green said.

Although in constant use, the pool does not have a designated lifeguard because all coaches are certified lifeguards. Coaches must take the National Federation of High School Associations test, so even though there isn't a specific lifeguard, safety precautions are still taken anytime the pool is in use.

"All lifesaving devices [rings, poles, backboards] are located on site at the pool. Any time students are in the pool a staff member or lifeguards must be on site," Sue Wesselius, Senior Director of Facilities and Operations, said.

Even though the current drought has been a major concern regarding water use across the state, no measures have been taken to lessen water usage regarding the pool.

"We do not anticipate changing the use of the pool at this time. The district has taken several major steps with the drought regarding irrigation, which is the biggest user of water," Wesselius said.

SELENA CERVANTES & SIERRA YOUNG

Watching the water: A lifeguard's perspective





I turned 16 and I really needed a job that had a lot of hours so I could pay off my car.

That's the main reason I became a certified

That's the main reason I became a certified lifeguard. It's a really cool job because its flexible and you can get a lot of hours, and I was able to have another job at the same time.

It's really scary know that someone's life depends of you. When I first started, I was really paranoid, so I would always jump in the water for kids that I thought were drowning and they really weren't. It seemed like every minute I was blowing my whistle only to find that nothing was actually wrong.

At first I was like, "I can do this, no problem!" but then I found that it was actually a scary process. The things that they train you on are the really scary part. Management would jump in the water and pretend that they are drowning, and we would have to be ready and prepared to save them. They used to throw this doll in the water and hide it at the bottom of the pool and we would only have 10 seconds to find it. there was a lot of people who didn't get rehired because they weren't able to do these tasks.

I've done water polo and swim before so I have background when it comes to swimming. Sunsplash is the only place I know that is so strict when it come to training. If you wanted to work for the city of Rocklin or something like that it's a lot easier process because you just have to sit there and watch to make sure nothing goes wrong, and a lot of the time it is kids doing this that don't have a lot of medical experience, so if something really goes wrong they're not going to know what to do, and it's going to be a scary process."

ultimate source of LIFE

There are numerous benefits to water, making it a necessity to have in everyday life

he obvious truth is that water is our life-source; it makes up 72 percent of our bodies and 75 percent of the Earth's surface. Without an abundance of water, American lifestyles would be at a crisis.

Water alone keeps our bodies running. If a person neglects to give the water a normal body system needs, then our bodies hold onto what water it has, making it hard to lose weight. Signals indicating dehydration include urination being highly concentrated or lacking urination in general, feeling dizzy, confusion and having a dry mouth. Allergies, obesity and illnesses can all be treated with water, yet doctors continue to prescribe pharmaceuticals.

If you want water, commit to water. Coffees, tea, and soda do not give any intake of water. Caffeine acts as a diuretic in the body system, and will actually dehydrate an individual regardless of the drink being water based.

"Drinks such as Gatorade have too much potassium and extra vitamins that your body needs to process. As for soda, flavor-packs are recommended because soda makes you feel bloated and affects your bones density, eventually making them brittle," health aide Mrs. Sarah Leverenz said.

Leverenz also makes some recommendations regarding students and water.

"How much water you should drink per day depends on your size but I suggest you drink during all of your meals. Bring a water bottle to school and fill it up once during the day. You should drink water before you become thirsty because by the time you feel thirsty you are already dehydrated," Leverenz said.

If you become sick, the greatest thing you can do besides taking medicine is drinking water according to Leverenz. By not drinking water when you are ill your illness can increase to an intense fever, and lead up to more nausea. If you increase your intake of water, it will flush out toxins faster and your body will be able to fight the sickness easier.

"Drinking water is a way to cool a fever and replace the fluids you are losing while you are sick," Leverenz said.

But besides being the life-source of our bodies, there are many benefits to water that we do not typically think of. Such as healthy skin and maintaining weight. Leverenz cautions about simply soaking your skin in water to hydrate it.

"Just soaking does not hydrate your skin and in fact dehydrates it. Cold water is not as dehydrating as warm or hot water. You need to be drinking water," Leverenz said.

In terms of weight loss, water is important because if you are working out, you'll need more of it after you've sweat it out. It also does more.

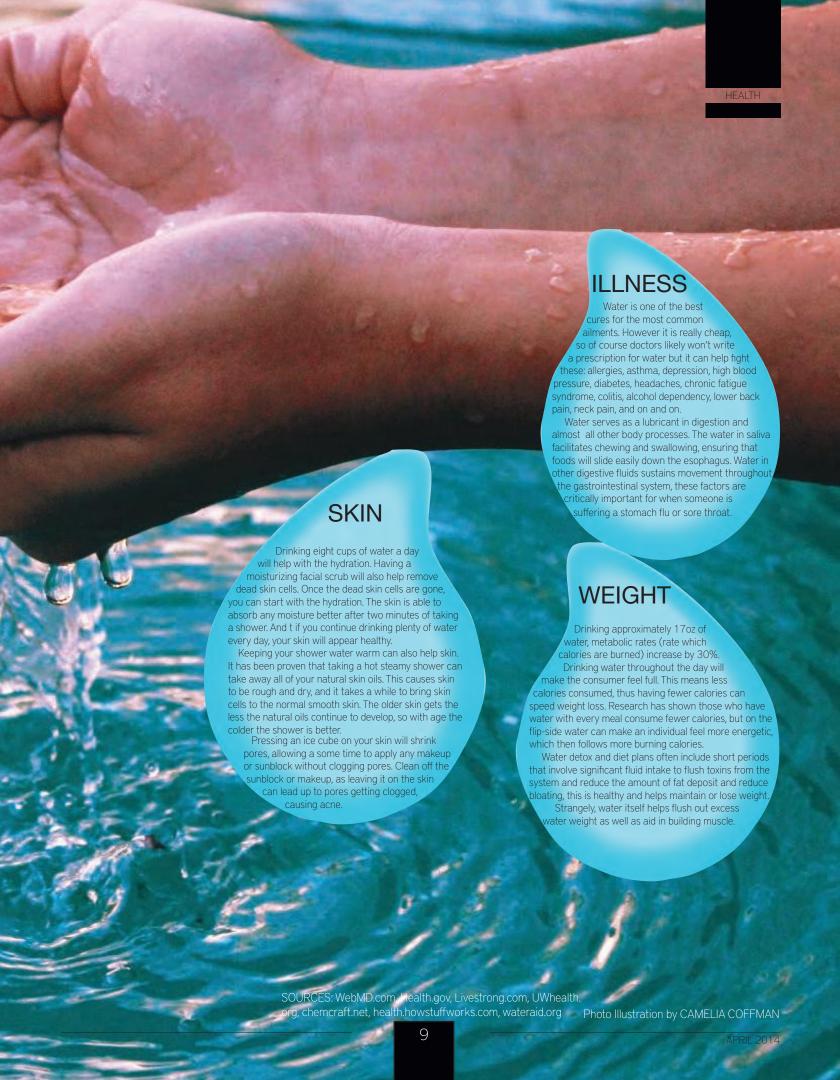
"When you go on a diet especially, they tell you to drink water before because it fills you up. Also, it makes you have to go to the bathroom more often which gets rid of everything faster," Leverenz said.

Overall, water helps essentially with the human body by being the main component of the human body, helping our skin and helping us lose weight. Water is recommended more than any other tea, soda or coffee because the chemicals within each drink cannot be absorbed into your system as easily as water, thus causing health problems along the way.

CAMELIA COFFMAN, CAILEE KING & KALEEN SINGH

a splash of facts

- *Every 21 seconds, a child dies from lack of water
- * 76% of people ages two and up drink an average of 3.9 cups
- *Hygienic practices such as washing hands with soap can reduce the risk of diarrhea by 50%
- *Diarrhea is the third biggest killer of children under five years old in Sub-Saharan Africa
- *768 million people in the world do not have access to safe water, this is roughly one tenth of the world's copulation
- * Half the hospital beds in developing countries are filled with people suffering from diseases caused by poor water, sanitation and hygiene
- * Around 700,000 children die every year from diarrhea caused by unsafe water and poor sanitation





Down the Drain

wasting water is no dry subject

alking into her room, tripping over a pile of half filled bottles of water that she will never drink, Leena Wilson shrugs and grabs a new water bottle out of the fridge before leaving for softball practice.

"I know I should probably keep reusing one bottle, but it's so much easier to grab another one and leave," Wilson said.

Wasting water is probably not something one would think about on a daily basis, or maybe you never think of it at all. But it is a problem. According to an article on the Huffington Post about wasting water, about 95 percent of the water that enters our homes goes down the drain

water that enters our homes goes down the drain.
"Things like leaving the water running while you're brushing your teeth is pointless; the water's

running down the drain. You could be drinking that water," Cierra Froidevaux said.

Wasting water during daily activities is easy, if a person is unaware of how much water is actually going down the drain. Flushing the toilet uses three gallons of water and showering can use between 10 and 20 gallons each five minutes. "I take about six or seven showers a week, because I'm an athlete. I sweat, get dirt and mud on me every day from practice, so I have to shower everyday," Froidevaux said.

It doesn't require radical life changes to conserve water. According to Waterwise's website, even small things, like turning the water off while you brush your teeth can save as much as a gallon and a half of water per minute.

"I try to save water when I can, because I know it's important to save water and not just waste it, but that doesn't mean I go weeks without showering," Angelina Bozhko said.

According to Waterwise, the average person uses 40 gallons of water a day, and we can cut that number in a third by simply purchasing water-saving devices that make showers use less water and that prevent toilets from literally flushing all that water down the drain.

It's easy for some to be under the impression that water wasting won't affect them, so it doesn't apply to them.

"I know I waste a lot of water but I don't really think it affects me personally," Ashley Stout said.

The problems with water wasting are that since some people don't see how it could possibly affect them, they get stuck with the mindset that it will be someone else's problem, or that since they always have clean water, it won't hurt them in the long run. So why does it matter if we use five gallons of water a day, or if we use 50? Well, according to the University of Aberdeen's Environmental office, when water levels in rivers fall, food sources for birds can be lost, and oxygen levels can fall dangerously low for fish. Using more water than necessary is not only harmful to you, it's harmful to our environment. It's important to protect the earth, because as of now, there's not another planet we can just jet off to.

"In my opinion, water is the most important thing we have. I mean, you can survive without sunlight for who knows how long, you can survive without food for a few weeks, but you can't survive without water for longer than three days. So I watch what I use water for, because I actually enjoy nature and don't want it to disappear," Bozhko said.

It might seem to you that because you don't pay the water bills, or the power bills that it doesn't matter, when it's the exact opposite. Heating water accounts for a lot of the energy used in homes, so the more water used, the more energy that is needed.

ABI BROOKS & HARMONY REILLY

three ways to save water

- While you wait for hot water, collect the running water and use it to water plants.
- Wash only full loads of laundry.
- Buy a low-flow shower head for your shower to save water and money on your water bill.

THE ROAR



a day without water as told by HARMONY REILLY

Why should I care about conserving water?

It's one thing to forget to drink water for a few hours, but it's an entirely different story to swear off water for an entire day. I started my day off as normal, but refused water at breakfast, eating a plate of eggs and ignoring the urge to drink. It sucked. It more than sucked. I drink water more than anything else, and now I was purposely depriving myself of an essential nutrient simply to moderate the effects of water deprivation. How wonderful.

I used hand sanitizer instead of soap and water, I refused water or any water-based drink. For the first few hours, I barely even noticed it. Then lunch came, and with it the sun. I love the sun, I'm all for hot weather and sunny Instagram pictures. But when I walked outside into the blazing sun, I wanted to cry. I'm pretty sure half the people I was walking past were drinking water simply to spite me.

I felt like I was in a boat in the middle of the ocean; there was water everywhere I looked, but I couldn't drink it. Again, I questioned myself and why on earth I would willingly volunteer to torture myself for an entire day. Was I insane? I continued throughout lunch, ignoring my dry throat and the fact that I was getting a raging headache. The only thing keeping me going was the fact that the next morning I would drink my weight in water.

My next class was math, which surprisingly enough, requires a fully focused brain. I spent the entire period feeling as though the devil himself was in my head, mocking me because I couldn't drink anything. It was barely half a day into the experiment and I was already thinking about quitting. I walked a mile and a half home in the blistering heat and sat on my couch, evaluating my choices. I could drink water and fail the challenge, or I could subject myself to more horrors and torture. It was no question -- I drank the water. Here's a brilliant idea: stop wasting water needlessly, because I can tell you from experience that a day without water freaking sucked.

35%

of students take a 10-15 minute shower

leave the water running while brushing their teeth

of students take a shower every day

FEATURE

13%

of students take a shower twice a day

amount of students who turn the water faucet off while brushing their teeth

79%

urvey taken by 267 people

how much water are you really using?



The average shower uses 20 gallons every five minutes.

About 95 percent of the water entering our homes goes down the drain.





Only 3% of the earth's water can be used as drinking water.

Brushing your teeth uses two gallons per minute.



Did you know? Many people in the world exist on three gallons of water per day or less. We use that amount in one flush of the toilet.

Source: chelseagreen.com

how to be water smart

Thirsty for more? Download these apps to become more aware of your water consumption.

WaterMinder



Get help with WaterMinder, an easy, intuitive app to track your water intake. Based on your body weight (or your personal goal), WaterMinder will remind you to drink water to reach your daily goals.



Waterprint

Waterprint is the ultimate source for information on how much water is imbedded beverages, foods, products and many daily activities. Waterprint easily tells you how much water it takes to grow a banana, manufacture a shirt, or brush your teeth.



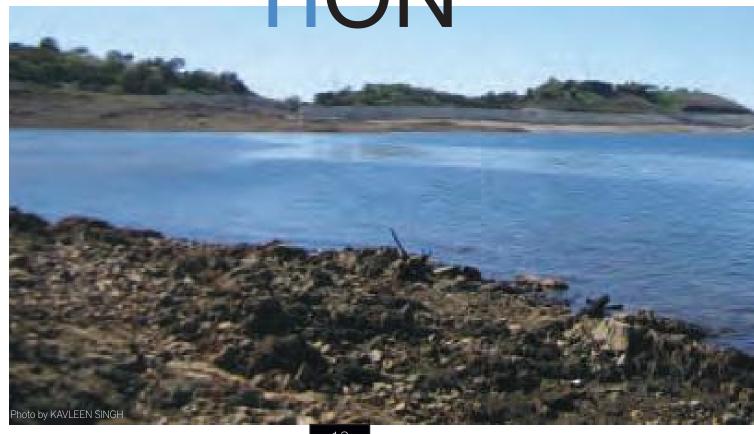
E-Water Footprint HD

E-Water Footprint HD will provide you with information, of how much each of your daily activity consumes water. helps you to calculate amount of water in your daily and suggest how you can help the earth by changing your behavior of water consumption.

11

DROUGHT

QUEN CHING THE QUES TION



12

California drought alarms experts, cautioning all to change lifestyle habits to facilitate water conservation

SOURCE: Bloomberg

alifornia stands at the edge of one of the most severe environmental crises of the decade. Residents of the Golden State are feeling the effects of the most damaging water shortage in recent years as state and local governments clamor for solutions. The problems caused by the drought of 2014 have hit the area full force, leaving in its path thousands of unemployed farmers, acres of dying crops, and has cost the state billions in revenue usually gained from water tourism. It will take years to fully understand the widespread impacts this dry year will have, and the public is preparing for the worst.

This recent dry spell has affected multiple different areas of California's economy, but the biggest issues lie in the agricultural industry. Half of the land in California's main agricultural region is in a state of extreme drought, most of which will be idled was the driest during this growing season. Unemployment in farming towns could rise to be as high as 50 percent. And because year on record California is the 10th largest economy in the world, there is a \$3.5 billion projected increase in international food prices as a direct result of the drought.

'The businesses and economies that rely on water, such as the agricultural industry, parks and recreation, golf courses, they all benefit from the flexibility of having pretty abundant water supplies. As those water supplies get thinner and thinner, their operations and the way they get to use the water becomes a little bit more difficult. It affects the way they do business and perhaps even cost them more money. We hear this all the time from farmers that they rely on water, which is essentially their business," Placer County Water Agency drought manager Mr. Tony Firenzi said.

Firenzi is just one of the many different experts responsible for monitoring and finding ways to deal with these types of very serious water problems in our county, problems he knew would become harder and harder to deal with as the drought approached.

"We've been watching dry weather patterns. We're in our third water year paying attention to this. In January of 2012, we realized that the water year was starting to show record-dry conditions," Firenzi said.

Gov. Jerry Brown's State of the State address laid out the general goals

that new organized efforts and legislation are attempting to achieve; goals that emphasize the need for immediate relief combined with long-term preparation for similar problems that may lie ahead.

'Right now, it is imperative that we do everything possible to mitigate the effects of the drought. I have convened an Interagency Drought Task Force and declared a State of Emergency. We need everyone in every part of the state to conserve water. We need regulators to rebalance water rules and enable voluntary transfers of water and we must prepare for forest fires. As the State Water Action Plan lays out, water recycling, expanded storage

and serious groundwater management must all be part of the mix. So too must be investments in safe drinking water, particularly in disadvantaged communities. We also need wetlands and watershed

restoration and further progress on the Bay Delta Conservation Plan," Gov. Brown said. "It is a tall order. But it is what we must do to get through this drought and prepare for the next."

The president has heard governor Jerry Brown's call for help, and has promised a total of \$175 million to help ranchers feed

livestock and compensate for losses, conservation aid for the worst hit drought regions in the state and for food banks that will help feed people in the agricultural regions affected by these extreme conditions. But the governor has created a \$687 million relief package to help relieve the pressure in many of these drought zones.

"Most of that funding, something around \$500 million of it, is dedicated to projects. In Placer County, most of the water managers are looking at implementing an emergency project to help boost reliability for 2014 and other drought years. So most of us are gonna be competing for some of that money," Firenzi said.

But it isn't just the rural regions of the state taking hits from the drought. On the local front, Folsom Lake has become nothing more than a puddle compared to its usual levels. Water only takes up enough space to fill 18 percent of its 977,000 acre-foot capacity (36 percent of historical average for this date.) Other lakes and reservoirs around the country are down to around 30 percent. This is a large problem for the local water supply and the supply across the state, as Felipe Castro Avila realizes.

"It sure is alarming knowing that a huge reservoir like Folsom Lake dried up like a bone," Avila said. "Water is so precious that just being gone is not something pleasant to think about."

But students like Danielle Blankenship are not quite as alarmed by the recent data concerning the shortage of water in Folsom Lake.

"I don't think it's a huge problem, because these things tend to happen in cycles and we happen to be at the lower end of that cycle. People can help by cutting down on water use, but it's not such a big deal," Blankenship said.

Firenzi, however, is optimistic about water levels increasing due to the recent rainstorms affecting the region.

"Folsom Lake has actually gotten substantially better. At the end of January, Folsom Lake was on a glidepath to what's called 'deadpool,' and 'deadpool' is when the lake goes down below the intake that serves the people that use water out of it. So Folsom Lake was going so low, that the water level was heading below the intake serving the entire city of Roseville and the entire city of Folsom," Firenzi said. "The storm that happened in February brought that water level up substantially higher, and now they believe it will not go below the intake."

The drought is also beginning to have major impacts on the environment as well, as biology teacher Mr. Erich Means is well aware of.

"The most noticeable impacts are going to be on organisms living in the water. Species like salmon and steelhead, which people tend to care more about because they eat them, are laying their eggs in their nests, called redds, and obviously need water to survive. Those eggs are now out of the water because of the lower levels, and that could potentially have a major impact on



— getting a lot more rain, that grass is going to dry up almost instantly. So the potential for large, wild land fires has grown exponentially."

Agricultural plant life also suffers from these dry conditions. Many of the staple crops grown in California's heartland, such as grapes, almonds, corn and rice, die due to extreme drought restricting our irrigation systems. It is for this reason that farmers and scientists alike have begun experimenting with new, genetically modified versions of these plants that are both resistant to heat and able to retain their water for longer periods of time. But Means doubts that these new experimental crops will be enough to alleviate the pressure farmers have experienced.

"We've only been able to go into [plants] and adjust the genes for the past few years. I don't know if there is going to be enough genetically modified seed that has drought-resistance built into it to be effective yet. Farmers can say they are going to use it, but I don't think that there will be enough to make a difference," Means said. "The science is still in its infancy stage. We're still trying to figure out exactly how to use it."

This drought is compared to the severity of the 1977 drought, where water levels reached record lows in California.

"Throughout January, it was substantially worse than it was in 1977. Because of February storms, this year's drought is looking to be not as bad as 1977," Firenzi said.

Often times, state and local governments will work with private corporations to provide water to the public and alleviate pressure caused by drought conditions.

"Most of our water that we use comes from the Yuba River, and that's from the contract with PG&E. They use the water for hydropower generation and then they sell it to us. In addition to that, we also get a good portion of our water from the American River," Firenzi said.

As to how water is used, there is a significant allocation of water towards the public benefit.

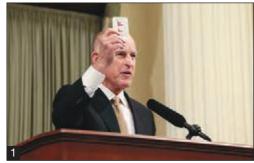
"The other side of things is that water, as it relates to public health and safety, that all gets taken for granted because we have so much water to water our lawns and do all these things with it. But as you get pushed harder and harder to cut back, the priority on public health and safety becomes higher, and people start to recognize and appreciate water as it relates to public health and safety. Pre-drought, nobody even thought of it as an issue, but we start to have to worry about being able to maintain fire protection and maintain pressure in the pipes so that water is always there for hospitals and schools and things like that," Firenzi said.

People can do their part to alleviate consequences from the drought by paying attention to the local water company.

Firenzi said, "Surprisingly, there are a few very simple things that we can all do to save an awful lot of water. Students should look at what their parents are doing outside — are they watering the lawn on a day that it doesn't need to be watered? Are they using a hose to water the driveway when you don't need to? On the inside of the house, it actually makes quite a difference if everyone in the city were to cut their shower times in half, which most people could do. These are all things students can have an impact on."

KAVLEEN SINGH, CARSEN VAN DER LINDEN & GREG ZHELEZNY

GOVERNOR URGES AWARENESS, ACTION





"Right now, it is imperative that we do everything possible to mitigate the effects of the drought. I have convened an Interagency Drought Task Force and declared a State of Emergency. We need everyone in every part of the state to conserve water," Brown said in his State of the State speech.

1. Governor Jerry Brown delivers 2014 State of the State Address. 2. Assembly Speaker John A. Pérez, Senate President pro Tempore Darrell Steinberg and Governor Jerry Brown. Photos by Justin Short, Office of the Governor.



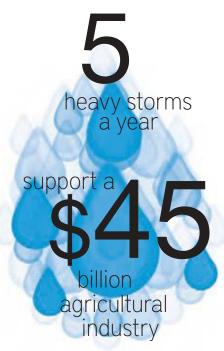




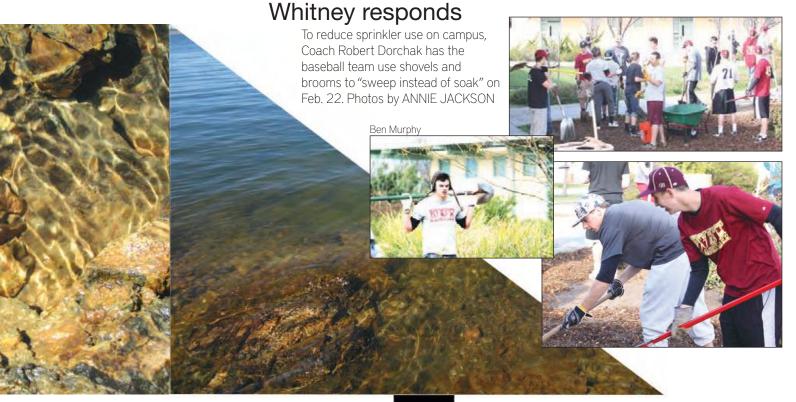
- ♥ @KCBSNews Contra Costa Water District asks nearly half a million users to cut water use 15% as #CaliforniaDrought continues cbsloc.al/1imhcZf
- @GrowerCitrusVeg Few farmers immune to California drought's impact. Even Harris Ranch of beef fame is idling ground sacb.ee/1iizBnQ #Californiadrought
- @OWCalifornia Conserve water. Drink California wine. #CaliforniaDrought
- @EnergyCollectiv Climatologist Who Predicted #CaliforniaDrought Says It May Soon Be 'Even More Dire' ow.ly/upnYq



Scan the QR code with your smartphone to pledge in SaveOurH2O.org's "Californians Don't Waste" PSA campaign. Contribute to the 140,270 gallons already pledged while surfing the website for updates on the drought and discovering additional ways to conserve water.



SOURCE: The New York Times



swimmers' COOLCE SPORTS

Standing at the pool's edge feels at right home for competitive swimmers, while others see it as a cliff of no return

Afraid of the deep

iving into a race provides some with a shock of addicting adrenaline. Leisurely swimming laps gives some a feeling of calm tranquility. But, the thought of plunging into the watery depths of a swimming pool can give some unsettling fear.

"I have a fear of drowning and I'm afraid that if I go into the water, no one will see me if I do drown. At Sunsplash one year, I went into the wave pool because my friends were in it. I was in the deep end and I almost drowned," Presley Valdivia said.

According to Slate, almost 54 percent of children between 12 and 18 can do no more than splash around the shallow end of a pool.

"I have asthma, which makes it really hard to hold my breath underwater. I tend to stay in the shallow end when I go swimming," Tyler Kim said.

Not knowing how to swim can create a disadvantage, especially during the summer months when pool parties and trips to Sunsplash are common social events.

"I've had to say no to someone asking me to swim, especially if the water is too

deep. I wish I could swim because it is inconvenient to not know how. I really like water sports, so it would be a helpful advantage to swim." Roop Bhangu said.

Some swimmers can swim but simply don't want to because they are afraid to actually get into the water itself.

"I'm afraid of the ocean. It's just so big that I don't want to get lost. I also don't like sharks. When I was little, I used to check the water for animals before I would get in," Kim said.

Swim is not only a fun activity for the summertime, but it can also save lives. According to U.S. Swimming, approximately 10 people drown in the US everyday from not knowing how to swim. Knowing how to swim can save a life, that is one of the reasons aquatics is offered as a class.

Aquatics coach Mrs. Kerianne Woods said, "There are varying levels of swim ability [in our aquatics class], from advanced to beginning. For some, this class takes the place of morning practice or serves as extra conditioning."

KRISTEN ELSAYEGH, OLIVIA GRAHL & AMANDA JOHNSON



A swimmer's story

AS TOLD BY LAUREN VOTAVA

// Competitive swimming definitely takes swim team to another level. I first started on a rec team in Chico, when I was about 5. I ended up really liking it, so when I moved to Rocklin I joined CCA [California Capital Aquatics].

CCA is much more difficult than regular swim team; we have to swim for three hours everyday. The sets are challenging, but they are designed to work on any weaknesses you might have.

I'm constantly busy, so keeping up with my schedule is always hard, especially when I have 4:30 a.m. practices on Tuesdays and Thursdays. At the end of the week, I end up doing about 25 hours

One of my favorite parts of swimming is the thrill of a race. I just love racing against my teammates and new people. [Before a competition] I hydrate the week of and during practice we start tapering, which means less yardage. [Being on a competitive team] gives me an advantage because I have a lot more training.

My swim inspiration is Missy Franklin because she's really young and has a lot of gold medals. I'm going to swim in college and hopefully make it to the Olympic trials."



"Dive is by far easier because swim is more monotonous. In diving, we take a lot of breaks and have a lot of fun." TAYLOR LARD



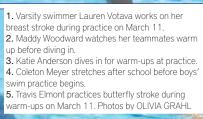
"I like being on the swim team because I like being a part of something. It's a good feeling to know that someone else has your back." **MELLANY WYNNE**



For sports coverage of the swim team and other spring sports news, visit www.whitneyupdate.com













SPORTS

for ATHLETES the thirst is

Hydration affects athletes' ability, agility

How do you hydrate?



6% of people don't drink more water on game day

54.3% drink the most water during their game





36% drink 1-2 glasses of water per day

20% drink more than 4 glasses of water per day.



SOURCE: 191 athletes responded to interviews and a Survey Monkey poll in March 2014

Signs of DEHYDRATION

feeling dizzy or light-headed

2 having a dry or sticky mouth

3 producing less and darker urine

* by the time you feel thirsty, you may already be dehydrated

In order to prevent dehydration, students should drink fluids every 20 minutes.

SOURCE: Teens Healt

he burning feeling in the back of his throat ached for water, while he sprinted as hard as he could for that extra lap to get extra credit. Suddenly, his legs became weak, he felt dizzy, and the world seemed like it was about to turn upside down. The next thing he knew, he was on the ground, his mouth begging for anything to drink. He was dehydrated.

"I think people — especially athletes — don't really know when they are really hydrated. People don't pay attention to their body as much when working out," sports medicine teacher Mr. Matt Laux said.

Laux said the usual symptoms of dehydration are dry mouth and dizziness, as many already know, but another dangerous symptom for the lack of water is also fatigue.

If one does not the body's natural water levels, physical activity can lead to dehydration. Even slight dehydration can affect performance of the mind and of the body.

According to Men's Fitness, the exact amount of water needed depends on an individuals metabolism, sweat rate, the climate and the level of exertion.

Some athletes are better than others at getting the water needed. Volleyball player Cavan Stewart has seen first-hand what happens when a player doesn't take the time to hydrate properly.

"During a practice, [my teammate] was playing, and he got really dehydrated, and he threw up. He had to go to the hospital, and it turned out that his urine was black, and his muscles were deteriorating. He wasn't able to do push-ups for the longest time, and he came back a month later, and he wasn't able to play again," Stewart said.

As for himself, Stewart usually tries to stay hydrated by drinking two 16-ounce tall water bottles during his practices.

His teammate David Parker said he can tell whether a person is dehydrated by how they walk.

"They are just really out of it, and you can kind of tell how they walk, and how they kind of present themselves. They aren't as confident in whatever they do."

Parker said he regularly drinks on average two liters, or about a gallon of water. During his

practices, he has quick water breaks every 30 minutes. He personally hasn't experienced any problems with dehydration. Parker said he always knows when he needs a water break.

Gatorade and other drinks are popular among athletes but do not offer the same health benefits.

Water is the best choice, since it does not add calories to one's diet and is great for overall health.

ARIELLA APPLEBY, ADAM ISMAIL & KENNETH VILLORENTE

PICTURED AT RIGHT:

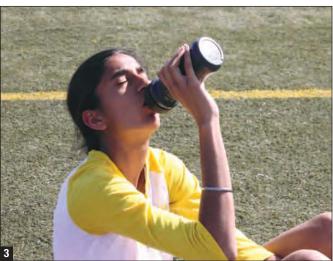
At track practice after school March 18, athletes take frequent water breaks to hydrate.

- 1. Auriana Adams 2. Levi Zumpano. 3. Nivret Nijjar.
- 4. Matthew Chaffin. Photos by THERESA KIM













TRAVIS CUTKOMP

JV BASEBALL PLAYER

Q: What does your coach tell you about being dehydrated?

A: He doesn't say anything specifically, but he tells us to take care of our bodies.

Q: How do you stay hydrated during games? **A:** Throughout the day I keep a water bottle with me, so I stay hydrated before the game.

Q: Is it your coach that pushes you to drink water or do you do it on your own and why? **A:** I drink water on my own, because if I don't drink water I feel terrible during the game.

Q: Do you stay as hydrated as you do in school at practices?

A: I stay more hydrated during school because I drink a lot during my classes. I drink about two water bottles for an hour of working out.

Q: Do you drink more water during practices or games?

A: More water during games, because during practice you have a lot [fewer] opportunities to get water





Classroom activities rely on water for projects, daily instruction

ottles and sprays keep pottery moist. Water shrouds marine animals, enabling unique life forms, creating incredible chemical bonds and reactions, flowing over dishware and glasses to clean, combining with paint to make it flow easily over the canvas — and more. Water plays a role in a variety of classes from core areas to electives.

In order to develop photos in Photo I class, Matthew Judy uses water to wash them in the darkroom.

"The last step of the developing process is you have to rinse it, so you rinse all the chemicals off [with water]," Judy said.

Even though water isn't the most important material they use, it still is a necessity.

"Obviously the chemicals are important since that is what develops the photo and brings the photos to life, but every project we do [we use water]," Judy said.

On the other side of the C building, art students use water, too. In order to make clay malleable, ceramics student Lindsey Yip uses water to keep the clay moist.

"We use water in pretty much everything we do. I don't think we would really be able to do anything without water because no matter what project we do it involves water somehow," Yip said. Both art classrooms have industrial-sized sinks to accommodate multiple students and daily use. The largest set of sinks, however,

is located in the culinary room. They use water not only in recipes for food labs but for washing dishes and cleaning each kitchen station.

In marine biology, on the other hand, students talk more about water than actually using it in class.

"Water in marine bio is very important because marine [life] is all about water, learning about the ocean about their daily lives they have to be in water," Christine Jaime said.

Because of the recent drought, water conservation is a topic of discussion more than it normally would be.

"I'm more conscious of how I use [water]. I try not to get more than I need and only use it when I need it instead of letting it just run," Yip said.

The morning announcements show from broadcasting aired water conservation public service announcements, and some graphic communications students designed infographics about water use.

"I've tried to pay attention to how much water I use and be careful about things, even in my daily life like not leaving the faucet running while I'm brushing my teeth, I've tried to become more aware of how much water I use at school and at home," Judy said.

ARIELLA APPLEBY & JIMMY AYALA

1. Tiphani Sach pours water in a glass for lab. 2. Marcus Tejeda rinses off a bowl after a lab 3. Swimmers race back to the block in aquatics. 4. Christina Daley swims in aquatics 5. Paint supplies get cleaned off in cermanics 6. Spencer Body works on his project during ceramics. 7. WHS swimmer swims freestyle during practice. 8. Alyssa Mann sprays her sculpture with water. 9. WHS swimmer practices breaststroke during swim. 10. Students clean palettes after glazing ceramics projects. 11. WHS swimmer practices freestyle swim. Photos by JIMMY AYALA, JILL HOLT & SARA MILLER



thirsty?

students give insight on the school's water fountains

How often do you use the drinking fountains on campus?

18.8%

more than once a day

never 16.9% a few times 33.8% once a week 14.2% once a day 16.2%

SOURCE: 260 student responses via Survey Monkey

Which water fountain is most popular*?

before school: D building
at break: D building during lunch: amphitheater
after school: F building
overall: amphitheater

*based on student use March 12

MISSIE CARACUT, RYLEA GILLIS & MIRANDA WOOLLEY



Photo by MIRANDA WOOLLEY

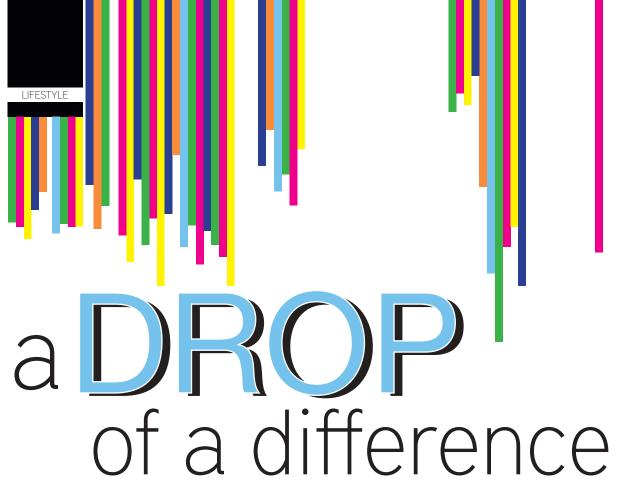
"I think that [the school] should filter the water to be healthier for the students and make them feel more comfortable when they are drinking it." – MADDIE ANDERSON

"I wouldn't drink directly from the water fountain] because it's gross. People spit their gum in it." – DANNY LIU

"People spit their gum in [the water fountains], stick bark in there. I've also seen bird poop on them."

– INDERPAUL DHALIWAL

"Sitting outside at a school with 2,000 people, of course [the water fountains] have germs." – RICKY BRUMLEY



■ THERESA KIM, KOLETTE KING, DESIREE STONE & AALIYAH WILKINSON

When it comes to bottled water, does the brand make it better?

we asked, you answered



CARSON ROSE "The Evian is kind of gross; it tastes like it has something in it other than water."



MAX SWERDLOW "The tap water tastes like a public pool."



ELLE HSU "The Deja Blue tastes like it has chlorine in it and it's warm."



ASHLEY FARIAS "The Aquafina water tastes really clean. Hike it."



favorite

21% like AQUAFINA

13% chose **CRYSTAL GEYSER** as their favorite

SOURCE: 258 student responses via Survey Monkey

4% said RALEY'S water tastes best 17% chose **ARROWHEAD**

as their favorite

students chose

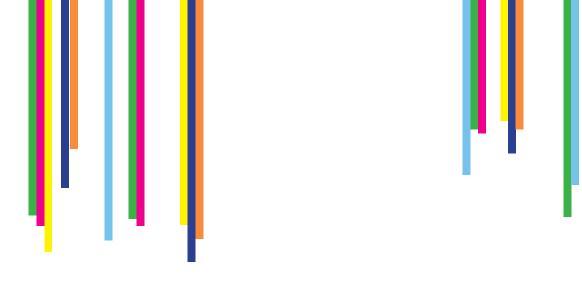
TAP

WATER

as their

10% said SAFEWAY water has the best taste

22



What's in your water?



CRYSTAL LIGHT LIQUID

Calories: 0 calories

Ingredients: Water, Citric Acid, Malic Acid, Propylene Glycol, Contains Less than 2% of Natural Flavor, Sucralose and Acesulfame Potassium, Potassium

Citrate, Red 40, Blue 1, Potassium Sorbate

Cost: \$3.48 a pack (Walmart)

Flavors: Strawberry Lemonade, Peach Bellini, Iced Tea, Pomtini, Blueberry

Raspberry, Mango Passionfruit



NESTEA LIQUID WATER ENHANCERS

Calories: 0 calories

Ingredients: acesulfame potassium, sucralose

Cost: \$3.99 for 1.76 oz

Flavors: Iced Tea with Lemon, Iced Tea with Peach, Half Lemonade/Half Iced

Tea, Green Tea with Citrus



MIO

Calories: 0 calories

Ingredients: citric acid, propylene glycel, malic acid, sucralose, acesulfame potassium, potassium citrate, Allura Red AC 40, Brilliant Blue FCF 1, potassium

sorbate

Cost: \$13.99 for 8 bottles

Flavors: Original: Cherry Blackberry, Orange Tangerine, Berry Pomegrante, Strawberry Watermelon, Blueberry Lemonade, Fruit Punch, Lemonade, Sweet

Tea, Peach Tea, Mango Peach, Cranberry Raspberry

Fit: Berry Blast, Arctic Grape

Energy: Black Cherry, Green Thunder



VITAMIN SQUEEZE WATER ENHANCER

Calories: 0 calories Ingredients: Sucralose

Cost: \$5.12

Flavors: Strawberry Watermelon, Tropical Citrus, Fruit Punch, Acai Grape Pomegranate

how do you bring yours?

LIFESTYLE



45%

of students bring some form of recyclable mug, bottle of cup from home to reuse every day



37%

of students who drink water said they bring a disposable water bottle and throw it away

SOURCE: 258 student responses via Survey Monkey (March 19-24)



over 80 percent of empty water bottles end up in landfills



every second 1,500 water bottles are consumed in the U.S.



the average American used 10 / disposable water bottles last year



190,000 homes can be powered with energy wasted using bottled water



bottled water costs \$0.90 a gallon in California



Scan the QR code with your smartphone to read the Business Insider article about bottled water

SOURCES: Ban the Bottle, Business Insider, Crystal Light official website, MiO official website, Nestea official website, Vitamin Squeeze official website



rized possessions are just that — prized. It's one thing to get a cellphone or headphones taken away by parents, broken or even stolen, there is a worse paranoia associated with these popular items. There is a fear these belongings might get wet. If any possibility of this happening exists, it's a good idea to take preventative measures.

Send headphones to

Cover

leather

balsam

shoes with

Waterproof

cameras aid taking

underwater

pictures

Protecting one's phone with a waterproof case ranked hightest among students' concerns. The popular tech blog Mashable recommends the EscapeCapsule for \$69.99 as the best option for this purpose.

> Headphones appear everywhere on campus. It's common sense to take out headphones when water is present to avoid damaging them. Now, there are many types of waterproof headphones. Most of the waterproof headphones are relatively cheap. Basic earbuds that range from \$20 - \$30 and then there are the Dr. Dre Beats headphones that go from \$100 - \$150. But if one wants to use the headphones, keep in mind it doesn't keep phones dry, so either get a waterproof case, or be

to protect. Even the most dependable shoes aren't completely waterproof, so in order to keep them impervious to rain, one should invest in a leather balsam like Journeys Leather Balsam. Just use the applicator

or jam in the tub.

and apply the wax all over shoes and whoever does so will be ready to step out in the rain while remaining well dressed. The balsam sells for \$26, so it's affordable and a good way to protect shoes.

Another popular item in dry form — and disastrous

Taking pictures is a common hobby, so why not do it

when wet - is makeup. Students who wear mascara

CoverGirl's Exact Eye Lights Waterproof Mascara or

underwater? There are countless brands of waterproof

cameras begin at \$100 for the lower-resolution cameras;

cameras on the market that are super high quality and not super expensive. The prices of the waterproof

higher resolution cameras are around \$200 or more

Footware is another top accessory teens want

may want to invest in waterproof types such as

Fantastic Lash Waterproof Volume Mascara.

depending on the quality wanted.

Waterproofing seems simple enough, but when items get wet students often turn to YouTube for home remedies on how to repair the damage. The QR code below offers one popular solution for dealing with a wet iPhone, unless it's already too late.

LILY JONES, HAVEN LAMBRITE & KAITLYN FRANKLIN



Ways to Waterproof

BACKPACKS

Line the inside of a backpack with a garbage on cloth shoes bag to prevent water damage of the contents. crawlingroad.com

SHOES

Use beeswax to waterproof. pinterest.com

ELECTRONICS

Liquipel is a phone skin that waterproofs phones, tablets, MP3 players and earphones. liquipel.com

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