

# STUDENT IMPACT PROJECT IDEAS

## Sustainability Ambassadors

*Rapidly advancing a more sustainable future*



## VIRTUAL WATER CONSERVATION

Take action at home, at school or in the community. Communicate your impact to peers, stakeholders, and policy makers to urge collective action. Post your actions [on the map](#).

**TOP TEN:** If you are especially proud of the impact of your project, and it meets our criteria, we invite you to submit your work to our Annual Top Ten Impact Projects.

### Two Ways to Think About How We Consume Water

**Director Water Use:** This is the water that comes into your home from a single  $\frac{3}{4}$  pipe and is distributed to each fixture, faucet, shower, or toilet, and outside, to your garden hose. The amount of water you **directly** consume for washing, cooking, cleaning, flushing and gardening is measured by a water meter which shows up on your water bill. You pay for what you use. If you use less you pay less, except for a flat rate that supports all of the big pipes and pumps and purification systems that water travels through to get to your house. We all pay for the infrastructure.

**Indirect or Virtual Water Use:** It takes a lot of water to [produce food](#), to [make energy](#) and to [manufacture consumer products](#). This is what's known as **virtual water**. Globally, virtual water use is increasing, as more people consume more water-intensive food, electricity and consumer goods, putting increasing pressure on water resources. [Water footprints](#) reveal water use patterns, from the individual level all the way to the national level. A water footprint is measured in terms of the volume of water consumed, evaporated and polluted. There are three corresponding categories:

1. **Blue Water Footprint:** The amount of surface water and groundwater required (evaporated or used directly) to produce an item.
2. **Green Water Footprint:** The amount of rainwater required (evaporated or used directly) to make an item.
3. **Grey Water Footprint:** The amount of freshwater required to dilute the wastewater generated in manufacturing, in order to maintain water quality, as determined by state and local standards.

Examples can be found in the Water Footprint Network's [Product Gallery](#).

### World Water Use Comparison

See how your water footprint compares to those in [other countries](#).

## PROJECT IDEAS

### Think About Your Diet

1. It takes a lot of water to grow, process and transport your food. When you eat lower on the food chain, eat more whole foods and waste less food, you also save water.
2. **Eat more vegetables.** It takes [an enormous amount of water](#) to produce animal products like meat and dairy, because livestock and poultry in the US eat large amounts of water-intensive feed – usually corn and soybeans. And you also reduce carbon emissions. Eating a plant-rich diet is one for the best (easiest and cheapest) actions each of us can take to reduce our carbon footprint. See [Project Drawdown - Plant-Rich Diet](#)
3. **Try going vegetarian one day a week.** It could significantly lower your water footprint.
4. **Choose pasture-raised products:** When you do eat meat, dairy and eggs, opt for pasture-raised products. It's better for you and the planet, and grass (as opposed to corn and soy feed) is less likely to be irrigated so is less reliant on blue water resources.
5. **Avoid processed foods:** A lot of water goes into processing foods. Opt for more fruits, vegetables, leafy greens (like spinach and kale) and whole grains.
6. **Drink one less cup of coffee per day**, or – if you really need your caffeine fix – go for tea instead, since coffee has one of the highest water footprints per pound.
7. **Don't go nuts.** They're a good, nutritious source of protein, but nuts are major water hogs.
8. **Regarding milk,** soy and oat milks have smaller water footprints compared to nut milks that have a relatively high water footprint. Cow's milk typically has the biggest water footprint.

### Reduce Processed Foods

1. **"Process" your own whole foods** for on-the-go snacks by chopping up fresh fruit and vegetables, making your own trail mix with dried fruit and nuts or mashing up (with a food processor) beans with olive oil and seasoning for hummus or dip.
2. **Eat less processed food** like chips, pre-made meals, candy and soda, because processing requires more water.

## Food Waste

1. **Waste less food.** In the US, we waste about 40 percent of our [total food supply](#) every year, which also wastes 25 percent of all [freshwater](#) consumed annually. Reducing food waste is also an easy and super important action that each of us can take to reduce our carbon footprint. See [Project Drawdown - Reduced Food Waste](#)
2. **Plan your meals** so you only buy what you need and not more.
3. **Cook and eat what you buy.** Food ingredients are not for looking but for cooking, so go ahead and make something delicious with even the most random assortment of ingredients lurking in your kitchen.
4. Eat leftovers! If you want a change of pace, learn how to cook smart and turn leftovers into a [new meal](#).
5. Compost, if you do end up with food scraps or unwanted leftovers. Learn how and where you can compost to keep it out of the landfills. Learn more about [composting](#).

## Grocery Shopping

1. Find out what sustainable food is, where to buy it and even how to [grow your own](#).
2. Explore the treasure trove of ingredients (some unusual), their histories and recipes for those ingredients with the [Real Food Right Now](#) encyclopedia.
3. Find what's in season near you with [Seasonal Food Guide](#).

## Pet Food Purchases

1. Make your own pet food to control the quality of ingredients, as well as the water footprint. Talk with your veterinarian or an animal nutritionist to determine your pet's specific needs before attempting this to avoid [nutritional deficiencies](#). [Learn more](#) about making your own dog food.

## Conserve Energy to Save Water

1. **Conserve energy.** Most people in the US get their electricity from power companies that use hydroelectric and thermoelectric power (from coal, natural gas, nuclear fuels, etc.), both of which have large water footprints. The portion of a person's water footprint attributed to power production in the US is, on average, 39 gallons per person per day.
2. **Conserve water.** It takes a lot of energy to pump, heat, treat and move water, so if you use less water, you'll use less energy, and that will lower your water footprint.

3. **Make your home** as energy efficient as possible to reduce the amount of electricity – and by extension water – it takes to run your household.
4. **Install on-site renewable electricity** from solar panels (or wind turbines) if you can. Renewable energy is not only cleaner, but it uses less water, too!
5. **Choose an [ENERGY STAR](#) model** if you're in the market for a new appliance. They perform like conventional appliances but use much less energy and water.
6. **Save water (and energy!)** with [WaterSense](#) low-flow products in your home and yard. These include everything from showerheads to sprinkler systems.
7. **Install power strips** and plug all of your electrical equipment into them. Turn off the power strips when the items aren't in use and you'll stop "vampire loads" from sucking up energy and increasing your water footprint.
8. **Use hot water only when** you really need to. After heating and cooling, water heating is the biggest energy user in the home. Water- and energy-efficient appliances conserve hot water in the kitchen, bathroom and laundry.

## Gasoline

1. **Drive less and use less gasoline.** You'll also save water. It takes about 3/4 of a gallon of water to extract, refine and transport the gas used to drive one mile. The average person in the US drives 37 miles per day.
2. **Keep your vehicle properly maintained** and your tires properly inflated. Your car will run more efficiently and use less fuel.
3. **Don't let your engine idle.** It wastes gasoline and therefore water.
4. **For your next vehicle**, consider getting a fuel-efficient hybrid or even electric vehicle. It could help lower your water footprint because you'll use less gasoline (or none at all!).
5. **Take public transportation or ride a bicycle** whenever you can. You could significantly reduce the part of your water footprint attributed to transportation.

## Smarter Shopping

1. **Think before you buy.** Americans shop a lot, and as a result, we have one of the highest water footprints in the world.
2. **Buy less and reuse or repurpose** what you already have.

3. **Recycle everything** that you can. See King County's [What do I Do With?](#)
4. **Donate whatever you can**, where it's appropriate.
5. **Buy quality, reusable products** such as non-disposable cameras, reusable or electric razors, reusable dishes and mugs and utensils and have your child carry lunch in a reusable lunch box.

## Recycled Paper

1. **Use less paper or recycle it** – there are lots of ways to do this. Think, “saving paper (or plastic, glass or aluminum for that matter) equals saving water.”
2. **Take advantage of your digital devices** and cut back on printing!
3. **For goodness sake, recycle your mail** once you've read it. Better yet, [get off of junk mail lists](#) and sign up for paperless billing.
4. **If you receive a lot of newspapers**, check with your local animal shelter or SPCA since they might need them. Better yet, go digital with your newspaper subscription.
5. **Compost those paper towels**. Some forms of composting will let you include paper. **Better yet, don't use paper towels**. Use rags that can be washed and reused.
6. **When you do buy paper products**, look for those made from recycled content.

## Recycled Plastics

1. **When you have other options, avoid plastic** because it's a bad deal for the environment. Plastic manufacturing takes a lot of water and energy and it often ends up polluting our waterways, especially the ocean.
2. **Don't add to the mountain of plastic** we already have on the planet. Unless it was melted and turned into something else, every single piece of plastic ever made is still around.
3. **Don't drink bottled water**. It's the ultimate form of wasteful convenience. It takes at least as much (and often much more) water to make the bottle as the drinking water it holds.
4. **Choose tap water** over bottled – it takes about 1.5 gallons of water to manufacture a single plastic bottle (how crazy is that?) and plastic bottles are always made from new plastic material.
5. **Get a reusable container**, fill it with your own beverage or water from a fountain and reduce the need for more packaging-intensive, single serving sizes. Recycled plastic bottles aren't

refilled with water. Most plastic water, juice and soda bottles are made from virgin plastic for various reasons.

6. **Carry a set of reusable tableware** with you if you eat takeout a lot. All those plastic spoons, forks, sporks and knives take water to make. Make it your thing and bring your own nice set with you or consider using chopsticks.
7. **Use cloth or reusable shopping bags.** Plastic bag recycling is still extremely limited.

## **Bottles and Cans**

1. **Fill a reusable water bottle** with the beverage of your choice so you don't have to buy packaging-intensive, single serving sizes.

## **Reuse or Recycle Clothes and Linens**

1. **Stop and ask yourself** whether or not you really need that new piece of clothing.
2. **If you do really need that new top**, consider thrift stores for a wardrobe update. Thrift is in! And you can often find really great items at your local thrift store for a lot less than you'd pay for new.
3. **Sell the clothes you're ready to part with** on eBay or at a consignment shop. If that's too involved, donate them to a charity like Goodwill, Salvation Army or Dress for Success.
4. **Have a clothing swap** with friends/co-workers/social networks and donate the leftover goods to a charity.
5. **Need to buy new clothes?** Choose organic cotton. Most cotton is grown in arid locations and with heavy pesticide use. It takes 1,320 gallons of water to produce one pound of cotton, so you can significantly lower your water footprint by shopping less.
6. **Recycle (or reuse) every bit of plastic** you can and only throw it in the trash as a last resort. Plastic bags and water bottles are top forms of pollution in beach and creek clean ups. Don't let their journeys start with you.
7. **Skip the compostable plastics** if a more sustainable option exists (like using washable plates and silverware). They might seem like a good idea, but most only compost under specific conditions that most recyclers and landfill operators aren't equipped to create.